

Thesis Abstract

Ethnozoology, environmental education and community management of chelonians in Riozinho da Liberdade Extractive Reserve Acre, Brazil

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The chelonians have historically played an important role as a natural resource, the Indians being the first consumers of their meat, eggs, fat and viscera. These animals have been hunted, fished and their eggs harvested for many generations in the Amazon. Currently, 60% of the species are considered threatened by trafficking of wild animals, predatory hunting and loss of natural habitats. Conservation actions by the Riozinho da Liberdade Extractive Reserve in the state of Acre include participative management and environmental education, associated with the management of eggs and hatchlings. Traditional communities maintain a close relationship with nature. However, since chelonians are a traditional source of protein, their consumption contributes to population decline of the species in this region. As Amazonians migrate to urban environments, traditional consumption practices are maintained through the acquisition of animals that are illegally captured from the forest. We analyzed the commercialization and consumption of chelonians in the Riozinho da Liberdade Extractive Reserve and developed a conservation program, aiming at reducing predation and maintaining chelonians in the area. To this end, semi-structured questionnaires were applied to 65 residents of the Reserve, in order to obtain information about turtle and tortoise consumption and community perspectives in the group. Subsequently, workshops on biology and management of chelonians were run in five communities, facilitating the effective participation of riparians in participatory management, including egg collection and transfer to hatching trays, thus increasing hatching rates, keeping the young safe when necessary and guidelines for the cleaning and

care of the egg laying areas during the Amazonian summer, a period that corresponds to the months of July until the first half of September. In addition, environmental education activities were carried out in the schools of the reserve and conservation centers established with members of the community being responsible for the monitoring of the turtle and tortoise nest areas, avoiding the predation of eggs and females. Five community meetings took place between February and September 2016, with about 64 participants, from eight communities: Esperança (17); Passo da Pátria (14); Oito Praias (9); Guarani (5); Nova Olinda (2); Novo Acre (1); Bom Futuro (1); Itajubá (2); unidentified communities (13); with ages ranging from 5 to 74 years. It was pointed out by participants that, decades ago, the Giant Amazon Turtle (*Podocnemis expansa*) existed in large numbers in the reserve; however, due to anthropic advance and subsequent predation this number was drastically reduced, reaching local extinction. The yellow-spotted Amazon River Turtle (*Podocnemis unifilis*) and the yellow-footed tortoise (*Chelonoidis denticulatus*) are the most popular chelonians for consumption in the reserve, following the same history as the Giant Amazon Turtle. As a result of this study, it was possible to identify that 85% (n = 55) of the community use chelonians for consumption and 45% (n = 29) commercialize these animals. In addition, 15 environmental agents were assigned and 61 participants were trained to monitor the natural egg-laying areas and the transfer of eggs to hatching trays. In addition, environmental education activities were carried out in schools, which promoted the involvement of students in the project. The results helped to sensitize the local community, making them multipliers of the know-how associated with the conservation of chelonians and favoring sustainable practices in relation to the local fauna. These actions contribute to active citizen training for resolving environmental problems, strengthening the socio-environmental role of the community in solving such problems and enabling a better man-nature relationship.

Key words: Testudines; Sustainability; Evaluation; Predation of chelonians.