

Evaluation of the level of self-recognition in individuals of Broad-Snouted caiman (*Caiman latirostris*) using the Mirror Test

Malena Torres^{1,2}, Samuel Hilevski^{1,2} and Pablo Siroski^{*1,2}

¹Proyecto Yacaré- Laboratorio Zoología Aplicada: Anexo Vertebrados (FHUC-UNL/MMA), 3000, Santa Fe, Argentina; Laboratorio de Ecología Molecular Aplicada (LEMA/MMA)

²Laboratorio de Ecología Molecular Aplicada. Instituto de Ciencias Veterinarias del Litoral (LEMA/ICiVet Litoral-CONICET/UNL), S3080HOF, Esperanza, Santa Fe, Argentina
(pablo.siroski@icivet.unl.edu.ar)

Abstract: Our aim is to find evidence on the level of self-consciousness and the ability of self-recognition in juveniles of *Caiman latirostris* using the “Mirror test” first designed by Gallup in 1970. Captive caimans inside a plastic tank (60 cm long, 40 cm wide and 30 cm high) are exposed to a mirror with a paint mark on a part of their body that cannot be seen by them directly but is visible in the mirror. Their behavior and interactions with the mark (touching the mark, trying to take it off) were registered by a digital camera. The test is considered “positive” if one subject has one of these mirror-directed interactions at least once. Each animal was exposed to five different treatments: no mark and no mirror; no mark and mirror; sham mark and mirror; orange mark and no mirror; orange mark and mirror. The results showed that none of the individuals touched the mark on their jaw while exposed to a mirror. Nonetheless, in every mirror tests, there was some type of interaction with the mark when compared to the control tests. The behavior of touching the surface of the mirror with the snout when looking at the mirror, in some cases accompanied by head movements or walking from one end of the mirror to the other, always with the snout touching it, only occurred in the tests with the mirror and these behaviors that have not been previously described in the literature. However, this does not constitute strong enough evidence to establish whether it is due to self-recognition, so we consider that further studies are required to investigate it.

Keywords: Ethology, Self-recognition

Type of presentation: Poster

Thematic area: Research and Knowledge (Miscellaneous)