

**Evidence of capture-induced dystocia in a free-ranging Cownose ray,
Rhinoptera bonasus (Mitchill, 1815)**

Eloísa Pinheiro Giaretta¹, Renata Daldin Leite¹, Aline Prado¹, Natascha Wosnick¹

¹ Programa de Pós-Graduação em Zoologia. Universidade Federal do Paraná.
elopinheirog@gmail.com

Capture and handling may impose sub-lethal consequences to elasmobranchs, even those that are quickly released to comply with regulations or voluntary conservation ethic. Dystocia is characterized by the physical inability to deliver the fetus even when ready for birth. So far, it has been reported only in captive cownose rays. Here we present data compatible with capture-induced dystocia in a free-ranging cownose ray. The pregnant female was incidentally caught by artisanal fisherman and landed already dead; by its dimensions the estimated age was around 17 years. The fetus was a male and was held in expected birth position. Both female and fetus had no *rigor-mortis* and blood was not coagulated, indicating a recent death. We believe that the dystocia was related to the stress caused by capture, indicating that his death was probably related to the lack of oxygenation caused by maternal death. In elasmobranchs, capture-induced abortion and premature birth are commonly observed in stressful situations. Here, probably due to advanced maternal age and fetus size, the female was not able to abort/release the fetus prematurely, leading both to death. Taken together, abortion and dystocia pose an extra challenge to conservation and species recruitment, with older females being even more vulnerable. That said, the assessment of sub-lethal effects of capture are necessary, since the efficiency of conservation measures such as compensatory release may be reduced.

Financial support: This study received financial support from Petrobras, through REBIMAR program.

Keywords: Capture stress; population recruitment; difficult birth; Myliobatiformes.