

COMMUNICATION: CAPTURE-INDUCED PARTURITION IN THREE RAY SPECIES: MATERNAL AND PUP SURVIVAL, AND PRACTICAL IMPLICATIONS FOR HANDLING

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INTRODUCTION

Elasmobranchs are particularly susceptible to handling-related impacts, so careful management is essential to avoid excessive physical trauma and stress. In pregnant females, capture may trigger induced parturition, generally considered abortion because survival rates have not been evaluated.

OBJECTIVE

To document and describe capture-induced parturition events in rays and their implications for the protocols used in monitoring efforts.

METHODS

In 2022 and 2024, three cases of capture-induced parturition involving three ray species were documented in El Jobo, Pacific of Costa Rica. Pregnant females were captured with hand nets while snorkeling and transported to shore to record morphological data, and were subsequently released.

AFFILIATION

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Illustrative image: [keesgroenendijk](#), Wikimedia Commons

CAPTURE-INDUCED PARTURITION IN THREE RAY SPECIES



Traditional Handling

May cause stress and abortion



Rapid Release

May improve survival rates

RESULTS

Three capture-induced parturition events were recorded, in *Urobatis pardalis*, *Urotrygon rogersi* and *Gymnura crebripunctata*. Pup size suggested that all females were in the final stage of gestation. Unlike most previous reports, all females and pups were released in apparently good condition. These are rarely documented cases in which both mothers and premature pups survived stress-related parturition.

CONCLUSION

Rapid release combined with minimal handling may improve the survival of premature pups at certain stages of gestational development.

Image: Napkin.ai