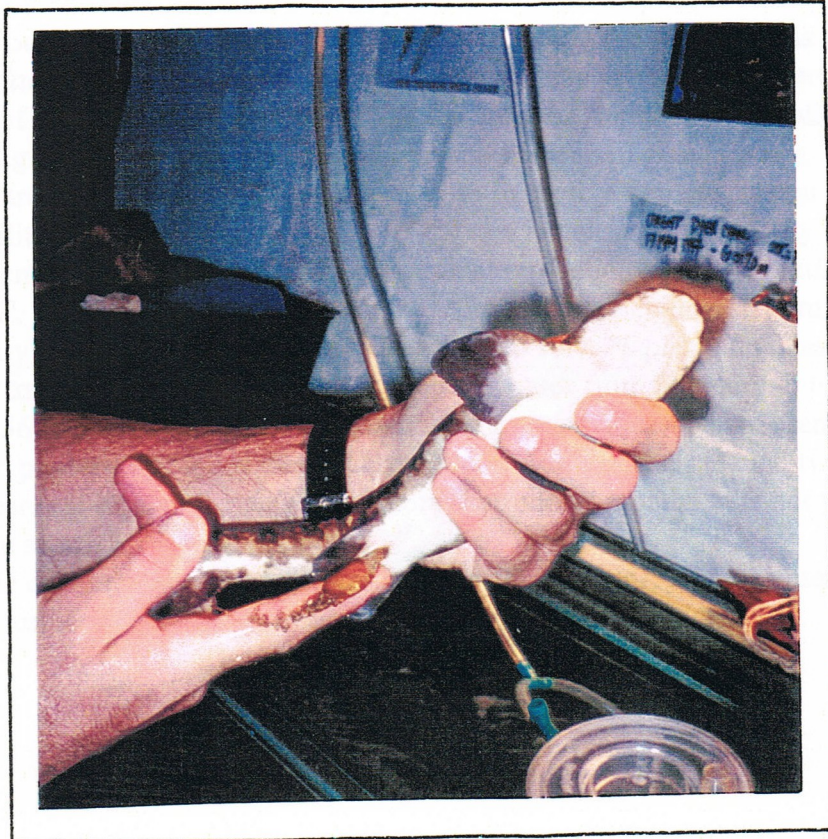


# ARE YOU READY

reproduction in four south African catshark species



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Subfase 2 course  
May-August 1997  
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## ABSTRACT

Rather little is known about cartilaginous fishes, because they are of less economic importance than teleosts and are often difficult to obtain and demanding as experimental animals. Since their economic importance is increasing nowadays it is urgent to learn more about them. In this respect more knowledge about their reproductive site is particularly of vital importance, so it can be predicted how sensitive these animals are to commercial fisheries. The species dealt with in this study; *Poroderma africanum*, *Poroderma pantherinum*, *Haploblepharus pictus* and *Haploblepharus edwardsii*, belong to the family *Scyliorhinidae* and the dominant order among the cartilaginous fishes *Carcharhinidae*. The species are endemic to South African waters. They were caught with the use of SCUBA diving equipment off the coast of Kleinbaai, Republic of South Africa. Through examination of the reproductive system: shell gland, ovary, ova size, oviduct and stretch marks, production of egg cases in captive females, sperm storage and egg case fertility it was determined that *P. africanum* females reach maturity at a total length of 91 cm. Unfortunately though, no seasonal reproductive activity could be determined. *P. pantherinum* females reach maturity at a total length of 57 cm and with great certainty produce egg cases from February up to July. *H. pictus* females reach maturity at a total length of 57 cm and can drop egg cases from February up to July. They can produce 56 young per year. *H. edwardsii* females are mature at a total length of 34 cm. They can produce egg cases from February up to August. Their fecundity is also 56 young per year. All captive females could store sperm for 4 months, it is not yet known if they can store sperm for a longer period. Regarding the development of the egg cases, it was found that firstly the anterior tendrils develop, the further course of development is not known yet.

S! = Styl Engels!