

Swift swimming reef fish as hosts of small juvenile sharksuckers

Received: 21 March 2010 / Accepted: 17 June 2010 / Published online: 15 July 2010
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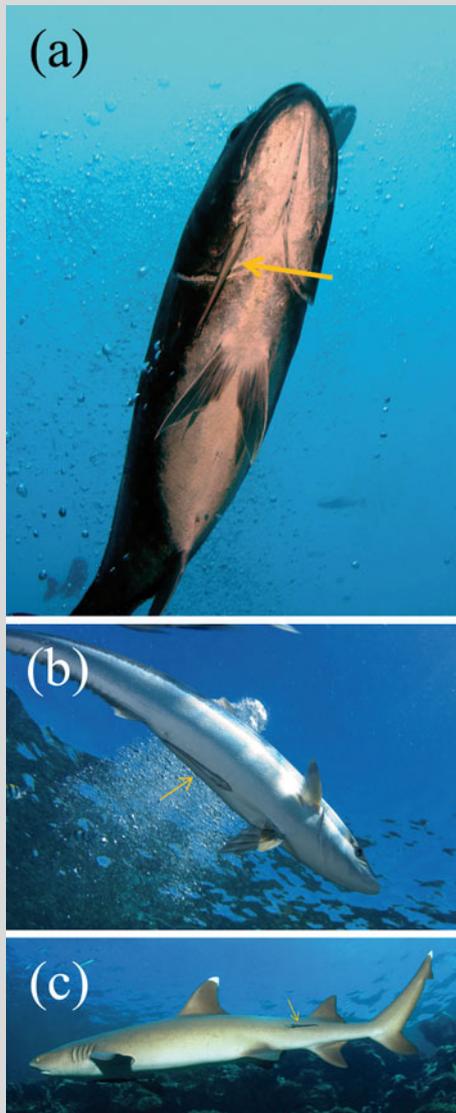


Fig. 1 Juvenile *Echeneis naucrates* (<10 cm) attached to *Caranx ignobilis* (a), *Elagatis bipinnulata* (b), and *Triaenodon obesus* (c). Sharksucker size was visually estimated against the host size

Sharksuckers, *Echeneis naucrates*, attach to a wide variety of hosts (O'Toole 2002; Brunnschweiler and Sazima 2008). Small juvenile sharksuckers are thought to first attach to relatively small and sluggish hosts before they switch to larger, faster moving fish. Here, we report that also larger and fast swimming reef fish such as jacks and sharks serve as hosts for small juvenile *E. naucrates*, as recorded in the Shark Reef Marine Reserve, Fiji (Brunnschweiler and Earle 2006). Between January and March 2008 and in February 2009 and 2010, small (<10 cm) sharksuckers were observed attached to the carangids *Caranx ignobilis* (Fig. 1a) and *Elagatis bipinnulata* (Fig. 1b) on 77 and 19.7% of sampling days ($n = 61$), respectively (video footage of shark-suckers attached to a variety of host species including *C. ignobilis* and *E. bipinnulata* can be found at <http://www.explorers-log.com/> by typing in *E. naucrates* in the search box). Small *E. naucrates* were also recorded on the snapper *Lutjanus bohar* (26.2%) and occasionally on the shark *Triaenodon obesus* (Fig. 1c). These records indicate that small juvenile sharksuckers use a much broader variety of reef associated fish as hosts, including the swift swimming carangids. We attribute the fact that so far juvenile individuals have only been recorded on relatively sluggish fish species—which have been termed 'trial vehicles' (Strasburg 1964; Brunnschweiler and Sazima 2008)—to the general problem of detecting small remoras, in particular attached on fast-moving hosts. To our knowledge, no definition or concept of trial vehicle for remoras exists and we thus suggest avoiding this term in the future.

Acknowledgments We are grateful to L. Haugen and K. Jost for providing the photographs. We thank the Save Our Seas Foundation, the Shark Foundation Switzerland and Beqa Adventure Divers for financial and logistical support. Three anonymous referees helped to improve the text.

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Reef sites

Coral Reefs (2010) 29:843
DOI 10.1007/s00338-010-0655-9