

## **MEASURING THE SOMETIMES SUBTLE EFFECTS OF PARASITES AND COLONIAL SEABIRDS**

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The parasites of birds are fairly well-documented, yet the cost of these parasites to the host has rarely been recorded except in extreme cases of mass host death. Experimental work removing parasites from hosts, mostly on passerines, has indicated sub-lethal effects may be common but not uniformly expressed across host species. A meta-analysis of the costs of parasites (ms submitted) to their hosts has highlighted the lack of experimental parasite work on non-passerine hosts. A pilot medicated study using silver gulls *Larus novaehollandiae* and crested terns *Thalasseus bergii* was undertaken during the 2008-2009 breeding season on Montague Island NSW and Phillip Island VIC, Australia. Rather than relying solely on traditional measures of the cost of parasites (morphometric responses, survival, reproductive success), novel measures incorporating ptilochronology (growth bands in feathers) and haematocrit as a proxy for metabolic rate were used. While it is expected that there will be significant negative effects of parasites, it is hoped that this method will elucidate the more subtle costs of parasites to the host as well as defining the quality of the host that the parasite chooses to parasitise (host quality hypothesis).