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Propositions

Avian life in a seasonally arid tropical environment: adaptations and mechanisms in breeding, molt and immune function

Nwaogu Chima Josiah

1. The usefulness of self-maintenance in the annual cycle of birds is undervalued because annual adult survival is low for small temperate passerines, causing a bias towards annual reproduction as the key fitness trait of birds, but the timing of breeding has little fitness consequence for a tropical bird like the Common Bulbul. This thesis
2. In ecology, the costs of immune function are ‘exaggerated’ to the extent that the benefit of immune defence is underappreciated. Tieleman 2018, this thesis.
3. The costs or benefits of immune function can only be determined if the environment and life history circumstance under which variations in immune function occur are considered. This thesis Chapter 4 & 8.
4. The environment affects immune function, but every assumption of variation in disease risk or resource limitation due to environmental variation requires an empirical test because variation in immune function does not follow simple environmental productivity patterns. Contra Horrocks 2012, this thesis Chapter 4 & 7.
5. Life history trade-offs do not always appear as negative correlations between the traits we manipulate or measure. van Noordwijk & de Jong 1986, this thesis Chapter 4 & 8.
6. Dietary proteins are not the main limiting nutrients for innate immune function in birds. Contra Lochmiller 1996, contra Klasing 1996, contra Mabuchi & Frankel, 2016, this thesis Chapter 8.
7. Studying a rare species is a delight but engaging with a common species shifts the focus from searching for the study species to investigating its ecology. This thesis
8. A ringed Common Bulbul in the wild is an ‘uncommon’ asset.