Seasonal modulation of the adrenocortical stress responses in Chilean populations of Zonotrichia capensis

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 To persist in a landscape, organisms are often faced with evolutionary tradeoffs between individual survival and reproduction. In environments where breeding opportunities are brief, it has been hypothesized that individuals will decrease investments in self-preservation in favor of reproductive success. Many avian species in the Northern Hemisphere have been shown to diminish their physiological response to perturbations of the environment by decreasing the adrenocortical response to acute stress during the parental care phase of reproduction. We present results from three populations of Rufous-collared Sparrow (Zonotrichia capensis) in the Southern Hemisphere in which we compared the dynamics of changes in plasma levels of corticosterone after capture, handling and restraint in pre-breeding and nesting phases. The results suggest that the degree of seasonal reduction of the adrenocortical stress response in parental birds is different from t