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**Oral Presentation**

QUANTIFICATION OF THE PLASTIC LOADS INGESTED BY TRISTRAM'S STORM-PETREL NESTLINGS FROM TERN ISLAND, NORTHWESTERN HAWAIIAN ISLANDS: TOWARDS MEASURING IMPACTS IN THE FIELD

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The listing of the Tristram's storm-petrel (*Oceanodroma tristrami*, TRSP) as near-threatened due to ambiguous population trends and a limited breeding range, has stimulated research on their population status and trends. Despite limited evidence of historical plastic ingestion (1990s), it is not known whether plastic pollution impacts chick survivorship in this species. This study provides the first documentation of marine plastic ingestion in TRSP in over 20 years. We found 100% plastic incidence in 57 nestlings collected over four breeding season (200, 2010-2012), with the mass of ingested plastic ranging from 0.1 to 2.8 g (up to 2.8% of adult mass). Furthermore, plastic occurred in every stomach chamber (proventriculus, gizzard). Yet, when considering individual variability, we found a higher plastic mass, more fragments, and larger fragments in the proventriculus. Most (97.5%) of the ingested plastic consisted of hard 'fragments' with the 11,851 ingested items ranging in longest length from 0.4 to 10.1 mm. Digital color analysis of the fragments using the HSB color model documented a diverse color range, including shades of white, yellow, orange, red, blue, green, and black. The impacts of this pervasive plastic ingestion on chick growth and survival are poorly understood. While TRSP do not produce a bolus prior to fledging, the fragments are broken down and passed into the intestine. Ongoing exploratory analyses are addressing the correlations between plastic loads and body condition, growth and survivorship of field-monitored chicks with the complexity of disentangling effects of plastic from oceanographic effects and in colony factors.