

**Fragments or Fishing Line? Variation in Plastic Types Ingested by *Phoebastria nigripes* and *Phoebastria immutabilis* from Three Northwest Hawaiian Island Colonies: Tern, Midway, and Kure Atoll**

Melissa Jung

Laysan albatross (*Phoebastria nigripes*) and black-footed albatross (*Phoebastria immutabilis*) share common breeding colonies in the Pacific Ocean but utilize different areas for foraging. Differences in body size also affects the types of diets consumed by both species. Plastics were collected from 150 boluses and sorted based on type to identify differences in plastic type ingested between and within both species from Tern, Midway, and Kure Atoll breeding colonies. Line and fragments were focused on specifically with percent mass of line being used for statistical analyses. Laysan albatross ate significantly more line as their colonies moved from Kure to Midway to Tern Island. Black-footed albatross showed significantly more line ingestion at Midway Atoll only, with no significant difference between the mass of line ingested at Tern and Kure Atoll. Between species, black-footed albatross ate significantly more line at Midway and Kure Atoll while Laysan albatross ate more line than black-footed albatross at Tern Island. These results suggest that size and foraging range of seabird species affect the type of plastic ingested. Laysan albatross foraging at higher latitudes encounter and ingest more fragments as colonies move northwest. As foraging ranges become more southern, body size influences ingestion and clear patterns of line and fragment ingestion become less obvious. Future research needs to focus on a broader range of species and geographical locations along with the use of other plastic measurements to investigate ingested plastic amount. The transfer of plastics to chicks and potential threats also needs to be addressed.