Plastic ingestion by Black-footed and Laysan albatross at Kure Atoll, Hawaii.

Poster Presentation, Marine Debris Session

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North Pacific albatrosses ingest large amounts of plastic at sea, which they deliver to their chicks on breeding colonies. In 2008, we characterized the amounts and types of ingested plastic and the foraging grounds of Black-footed albatross (*Phoebastria nigripes*) during the rearing season. The analysis of boluses regurgitated by chicks yielded information on the volume and mass of N plastic categories and natural food items. In addition, 4 breeding adults were satellite tracked in May–June, for a total of 39 days and 8 complete foraging trips. Adults foraged in deep water (median: 4300–5000m) and relatively close to their colony (maximum range: 1103 km). To place these results in context, we compared the 2008 data with boluses regurgitated in 2009 by Black-footed and Laysan (*Phoebastria immutabilis*) albatross chicks. Proportions of plastic and natural food in Black-footed albatross boluses were not significantly different between years. During 2009, boluses were significantly larger for black-footed albatross than for Laysan albatross. The proportions of all plastic categories were also significantly higher in the Black-footed albatross, highlighting the distinct patterns of plastic ingestion in these two sympatrically breeding species. Additional bolus collections in 2010 will allow us to investigate interannual variability during an El Niño year. By combining data on the amount and type of ingested plastic with information of adult foraging grounds from satellite tracking, managers will be able to understand the oceanographic processed influencing the ingestion of plastic at sea.