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stress of large gulls; predation by gulls on tern eggs increased following warming and the decline of the herring fishery. These relationships illustrate the interconnectedness of this ecosystem, where herring and its productivity are strongly affected by top-down and bottom-up forcing, and have cascading effects on gulls and terns. Both tern species have potential as bioindicators, especially using diet data associated with specific ecosystem states. Top-down forcing reduces the indicator potential of most reproductive data except asymptotic mass of chicks.

L – Physiology

2A-L-52: Effect of urbanization on the individual condition of the regionally threatened Olrog´ gull

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Extinction of species and population declines are occurring globally as a consequence of human activities, including the occurrence of urbanization processes transforming the structure of natural habitats and exposing organisms to novel environmental challenges. That is the current scenario in the northern coasts of Argentina, as well as Uruguay and Southern Brazil, regularly used as winter quarters by the Olrog's gull (Larus atlanticus). This regionally threatened species was formerly known to be specialized in crabs but now to have incorporated a range of anthropogenic items in its diet. As part of an ongoing long-term study on the foraging ecology and health status of the Olrog's gull we investigated the impact of urbanization on the body condition of free-living individuals, measuring a range of blood parameters as indicators of body condition. Eighty-two gulls (46 juveniles and 36 adults) were captured at two sites with radically different levels of urbanization. Body weight, and levels of hematocrit, red and white blood cells, mean cell volume, heterophils, lymphocytes, eosinophils, monocytes, basophils, heterophils-lymphocytes ratio, glucose, uric acid, total protein, cholesterol, and triglyceride were determined. Most of parameters didn't show significant differences between the two populations. However, independently of sex and age, individuals from areas with low urbanization showed higher values of uric acid (1052.53±452.35 µmol/l), and lower levels of cholesterol (6.47±1.76 mmol/l) than individuals from highly impacted areas (455.08±305.69 µmol/l and 8.35±3.07 mmol/l, respectively). Adults from areas with low urbanization showed lower values of hematocrit than adults from impacted areas (39.14±7.47% and 44.00±4.68%, respectively). These differences in blood parameters could be considered as proxy indicators of health condition in Olrog's gulls exposed to urbanization in winter quarters. Further studies should focus on the effect of individual condition on the species recruitment and breeding success, taking into account the endemism, reduced population size and fragile conservation status of the species.

2A-L-53: Health status assessed by physiological parameters and pathogen tests in kelp gulls (Larus dominicanus) feeding on an urban sanitary landfill

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Kelp gulls (*Larus dominicanus*) are marine seabirds with generalist and opportunistic feeding habits, which allow them to take advantage of the urban waste. However, this food usually contains toxic substances and contaminated food that could influence their health condition. To assess the health of kelp gulls that feed of these types of food, we obtained values of diverse biochemical parameters, plasmatic enzymes and pathogenic bacteria of kelp gulls on an urban landfill in Patagonia, Argentina.

Values of glucose obtained were similar than those previously reported for this species when using fishery discards at a closer site in Patagonia and for other species of gulls in the literature. However, the average of total proteins, triglycerides and cholesterol showed lower values than those reported for kelp gulls in general and other species of gulls, which could indicate a diet with a low supply of protein and fat resulting of the ingest of urban domestic food. Except for alanine transaminase that showed lower values, the lactate dehydrogenase, alkaline phosphatase, and aspartate transaminase were higher than those previously reported for other gull species. All the enzymes are involved in the cellular metabolism, and taken together, plus other physiological parameters, they can inform about the correct function of organs and tissues and their variations reflect hepatic, myocardium and tissue diseases, damage or trauma. Although, we expected that gulls feeding on urban waste showed presence of enteropathogenic bacteria that are commonly associated to the human, except for *Escherichia coli* that were present in 7 gulls out of the 35 sampled, the rest of bacteria tested *Salmonella sp.*, *Shigella sp.*, and *Corynebacterium sp.* were absent. These data constitute the first physiological report for the species at urban sanitary landfills of Patagonia Argentina.

M – Pollution

2A-M-57: Plastic ingestion in albatrosses and petrels off the shores of Argentina and Brazil

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Through a collaborative network, we evaluated plastic ingestion (items >1 mm) in 16 Procellariiform species along the coast of Brazil and Argentina. Plastic items were found in 30.2% of carcasses examined (n=161), with White-chinned Petrel (*Procellaria aequinoctialis), Southern Giant Petrel (Macronectes giganteus) Atlantic Yellow-nosed Albatross (Thalassarche chlororhynchos), and Manx Shearwater (Pufinus puffinus) being the most susceptible species. Our results showed a high frequency of occurrence (FO) of plastic ingestion in birds bycaught offshore in southern Brazil (FO=42.8%, n=21) but not in birds bycaught offshore in southern Argentina (FO=0%, n=46). Plastic ingestion was frequently recorded in beach-wrecked carcasses, being highest in Chubut, Argentina (FO=100%, n=3), followed by Espírito Santo, Brazil (FO=61%, n=23), Santa Catarina, Brazil (FO=23%, n=13), and Buenos Aires, Argentina (FO=20%, n=5). In birds that died at rehabilitation facilities, plastic ingestion was similarly frequent in Espírito Santo (FO=27%, n=11) and Santa Catarina (FO=29%, n=14). A high FO of plastic ingestion was also noted in Southern Giant Petrel carcasses collected at breeding colonies in Chubut, Argentina (FO=54%, n=24). The most common plastic items found in the bird's gut were fragments (71% of recovered items; including film and rigid fragments), followed by foam (i.e. polystyrene/polyurethane; 12%), pellets (10%), nylon line (4%) and other types of plastic (3%). Our findings confirm that plastic ingestion is a common problem for Procellariiforms in the Southwest Atlantic Ocean and highlight the need for mitigation and at-source reduction. The use of standardized protocols for sample collection and analysis along with comparable metrics and terminology will allow comparisons between investigations, as well as the detection of large-scale spatiotemporal patterns.*