



Audubon

Hog Island
Audubon Camp

Threats to Seabirds: Invasive Mammals, Entanglement, Plastics

Dr. Annette Fayet

A recent review of threats to seabirds globally

Dias, M. P., Martin, R., Pearmain, E. J., Burfield, I. J., Small, C., Phillips, R. A., ... Croxall, J. P. (2019). Threats to seabirds: A global assessment. *Biological Conservation*, 237, 525–537. doi: 10.1016/j.biocon.2019.06.033 [PDF](#)

A review of effects of rats on tropical islands (on seabirds but also land birds and other fauna) (Open Access)

Harper, G. A., & Bunbury, N. (2015). Invasive rats on tropical islands: Their population biology and impacts on native species. *Global Ecology and Conservation*, 3, 607–627. doi: 10.1016/j.gecco.2015.02.010 [PDF](#)

The previous review of threats to seabirds before the Dias et al 2019 paper (Open Access)

Croxall, J. P., Butchart, S. H. M., Lascelles, B., Stattersfield, A. J., Sullivan, B., Symes, A., & Taylor, P. (2012). Seabird conservation status, threats and priority actions: A global assessment. *Bird Conservation International*, 22(1), 1–34. doi: 10.1017/S0959270912000020 [PDF](#)

A world review of invasive mammal control and the conservation gains for seabirds on islands.

Jones et. Al. 2016. Invasive mammal eradication on islands results in substantial conservation gains. *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 113, No.15, pp 4033-4038 [PDF](#)

A review of the effect of bycatch on seabirds (Open Access)

Anderson, O. R. J., Small, C. J., Croxall, J. P., Dunn, E. K., Sullivan, B. J., Yates, O., & Black, A. (2011). Global seabird bycatch in longline fisheries. *Endangered Species Research*, 14(2), 91–106. doi: 10.3354/esr00347 [PDF](#)

A recent grim but interesting paper on the harm caused to seabirds caught in nets (PDF attached to email)

Gianuca, D., Bugoni, L., Jiménez, S., Daudt, N. W., Miller, P., Canani, G., ... Bond, A. L. (2020). Intentional killing and extensive aggressive handling of albatrosses and petrels at sea in the southwestern Atlantic Ocean. *Biological Conservation*, 252, 108817. doi: 10.1016/j.biocon.2020.108817 [PDF](#)

A paper showing the Balearic shearwater could be extinct in 60 years

Genovart, M., Arcos, J. M., Álvarez, D., McMinn, M., Meier, R., Wynn, R. B., ... Oro, D. (2016). Demography of the critically endangered Balearic shearwater: The impact of fisheries and time to extinction. *Journal of Applied Ecology*, 53(4), 1158–1168. doi: 10.1111/1365-2664.12622 [PDF](#)

A new paper showing the effectiveness of night setting lines and tori lines on reducing seabird bycatch

Jiménez, S., Domingo, A., Winker, H., Parker, D., Gianuca, D., Neves, T., ... Kerwath, S. (2020). Towards mitigation of seabird bycatch: Large-scale effectiveness of night setting and Tori lines across multiple pelagic longline fleets. *Biological Conservation*, 247, 108642. doi: 10.1016/j.biocon.2020.108642 [PDF](#)

A paper reporting huge amounts of plastic accumulating on a remote tropical island (PDF attached)

Lavers, J. L., & Bond, A. L. (2017). Exceptional and rapid accumulation of anthropogenic debris on one of the world's most remote and pristine islands. *Proceedings of the National Academy of Sciences*, 114(23), 6052–6055. doi: 10.1073/pnas.1619818114 [PDF](#)

A paper summarising the plastic collection on Aldabra Atoll in 2019 and highlighting the prevalence (>80%!) of fishing gear in the debris (Open Access)

Burt, A. J., Raguain, J., Sanchez, C., Brice, J., Fleischer-Dogley, F., Goldberg, R., ... Turnbull, L. (2020). The costs of removing the unsanctioned import of marine plastic litter to small island states. *Scientific Reports*, 10(1), 14458. doi: 10.1038/s41598-020-71444-6 [PDF](#)

A paper reporting high levels of plastic ingestions in Laysan Albatross

Lavers, J. L., & Bond, A. L. (2016). Ingested plastic as a route for trace metals in Laysan Albatross (*Phoebastria immutabilis*) and Bonin Petrel (*Pterodroma hypoleuca*) from Midway Atoll. *Marine Pollution Bulletin*, 110(1), 493–500. doi: 10.1016/j.marpolbul.2016.06.001 [PDF](#)

A paper reporting seabird death by plastic and the problems caused by balloons (Open Access)

Roman, L., Hardesty, B. D., Hindell, M. A., & Wilcox, C. (2019). A quantitative analysis linking seabird mortality and marine debris ingestion. *Scientific Reports*, 9(1), 3202. doi: 10.1038/s41598-018-36585-9 [PDF](#)

Occurrence of plastic particles in seabirds from the eastern North Pacific.

Blight, L. K., & Burger, A. E. (1997). *Marine Pollution Bulletin*, 34(5), 323–325. doi: 10.1016/S0025-326X(96)00095-1 [PDF](#)

Elastic thread pollution of puffins.

Parslow, J. L. F., & Jefferies, D. J. (1972). *Marine Pollution Bulletin*, 3(3), 43–45. doi: 10.1016/0025-326X(72)90142-7 [PDF](#)

A paper reporting microplastics in corals (PDF attached)

Hall, N. M., Berry, K. L. E., Rintoul, L., & Hoogenboom, M. O. (2015). Microplastic ingestion by scleractinian corals. *Marine Biology*, 162(3), 725–732. doi: 10.1007/s00227-015-2619-7 [PDF](#)

A paper reporting transfer of microplastics from fish to seals (Open Access)

Nelms, S. E., Galloway, T. S., Godley, B. J., Jarvis, D. S., & Lindeque, P. K. (2018). Investigating microplastic trophic transfer in marine top predators. *Environmental Pollution*. doi:

10.1016/j.envpol.2018.02.016 [PDF](#)

This sequence of readings is the order of citation in the presentation.

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