Seabirds are the most threatened group of birds globally. The West Indian Ocean is an important area for seabirds – including 20 globally threatened species. Cumulative impacts are known to be increasing in the West Indian Ocean (Halpern et al. 2015) and the current main threats at sea are commercial fisheries (through competition and mortality on fishing gear) and pollution. However, specific threats to seabird species and their spatial distribution in the West Indian Ocean region are poorly understood. Understanding threats to seabirds is important in order to inform threat mitigation, and conservation and spatial planning decision making processes. We used an innovative approach to evaluate species specific threats and their spatial distribution by combining a range of data, including spatial threat layers, seabird tracking data, and the IUCN species threat assessment. We use data for West Indian Ocean seabird species from the 2017 IUCN Red List to assess: a) population status and trends; b) the nature and severity threats, and; c) appropriate conservation actions for species. We also used global data on the distribution of threats to assess the spatial distribution of threats within Important Bird and Biodiversity Areas (IBA) in the region. We combined these data to evaluate and identify priority species and sites for conservation action.