Figure 4 Supplementary Material

Figure 4A citation and methods details:

The home ranges compiled in Figure 4 of McCauley et al. 2015 are used for species 1-9. The home range for species 10 (*Carcharinus albimarginatus*) is from Barnett et al. 2012. The home range for species 11 (*Thunnus obesus*) is the average 95% utilization distribution (UD) estimate across fish with UD estimates from Schaefer and Fuller 2002 (Table 4). The home range estimate for species 12 (*Thunnus albacares*) is the average 95% UD estimate across fish with UD estimates from Schaefer et al. 2007 (Table 3).

Species ranges for all species are Extant Resident ranges from the IUCN Red list (IUCN, 2019).

Figure 4B citation details:

The home ranges and body masses for all species except for species 10-12 in Figure 4A are as collected in Figure 4 in McCauley et al. 2015. The home ranges from species 10-12 are as cited for Figure 4A. The body mass for species 10 (*Carcharinus albimarginatus*) is from Fish Base (Froese and Pauly, 2019), the body mass for species 11 (*Thunnus obesus*) is from a PEW Trust tuna management fact sheet (PEW, 2012), and the body mass for species 12 (*Thunnus albacares*) is from NOAA Fisheries.

References:

A. Barnett, K. G. Abrantes, J. Seymour, and R. Fitzpatrick. Residency and spatial use by reef sharks of an isolated seamount and its implications for conservation. PloS one, 7(5):e36574, 2012.

R. Froese and D. Pauly, FishBase. World Wide Web electronic publication. https://www.fishbase.se/summary/Carcharhinus-albimarginatus. Data ref. 40637, 2019.

IUCN. (2019). *The IUCN Red List of threatened species*. *Version 2019-2*. Retrieved from http://www.iucnredlist.org

D. J. McCauley, M. L. Pinsky, S. R. Palumbi, J. A Estes, F. H. Joyce, and R. R. Warner. Marine defaunation: Animal loss in the global ocean. Science, 347(6219):1255641, 2015.

NOAA Fisheries, Pacific Yellowfin Tuna. <u>https://www.fisheries.noaa.gov/species/pacific-yellowfin-tuna</u>. Accessed September 2019.

PEW, Maps: Global Tuna Management. https://www.pewtrusts.org/en/research-andanalysis/fact-sheets/2012/05/02/maps-global-tuna-management. 2012. Accessed September 2019. K. M. Schaefer and D. W. Fuller. Movements, behavior, and habitat selection of bigeye tuna *(Thunnus obesus)* in the eastern equatorial pacific, ascertained through archival tags. Fishery Bulletin, 100(4):765–788, 2002.

K. M. Schaefer, D. W. Fuller, and B. A. Block. Movements, behavior, and habitat utilization of yellowfin tuna (*Thunnus albacares*) in the northeastern pacific ocean, ascertained through archival tag data. Marine Biology, 152(3):503–525, 2007.