

Figure from the article Social-environmental drivers inform strategic management of coral reefs in the Anthropocene

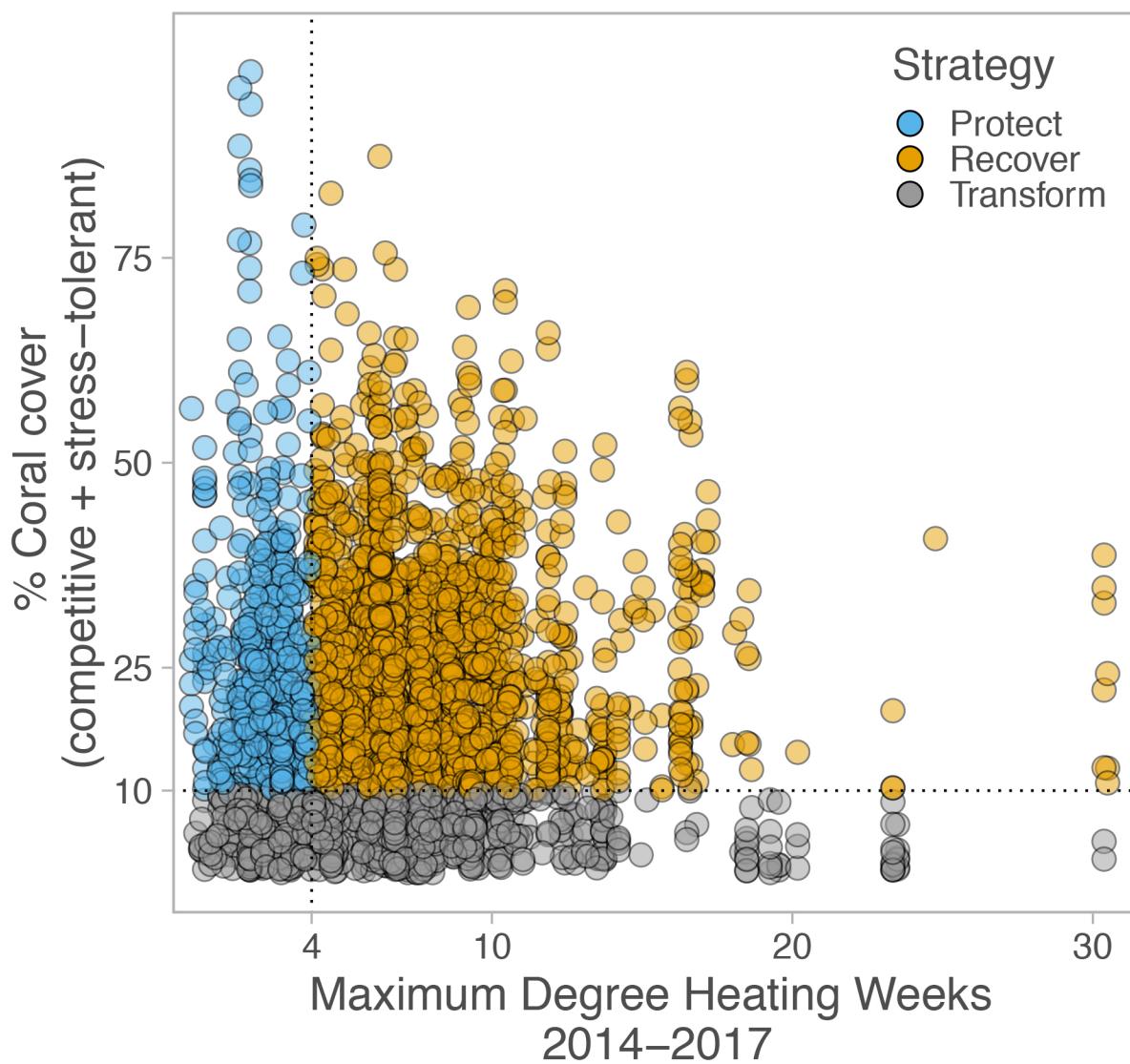


Figure 3.

Strategic management portfolio of protect, recover, and transform for Indo-Pacific coral reefs. The 2,584 reefs varied in their ecological condition (assessed at the combined cover of stress tolerant and competitive corals) and exposure to maximum annual DHW during the 2014–2017 Third Global Coral Bleaching Event. A protect strategy (blue dots) is suggested for 449 reefs (out of 2,584, or 17.4%) that were associated with limited exposure to recent bleaching-level thermal stress (<4 DHW) and maintained coral cover above 10%. A recover strategy could be prioritized for reefs that have recently maintained cover above 10% but were exposed to severe potential bleaching stress in 2014–2017 (orange dots; $n = 1407$, or 54.5%). As coral cover falls below potential net-positive carbonate budgets (i.e., <10% hard coral cover), a transformation is needed for existing management or ultimately, the dependence of societies on reef-dependent livelihoods (grey dots; $n = 728$, or 28.2%).