

Fig. S1. Mean density (\pm SE, $n = 15\text{--}44$) of the most common corals over 28 years at 6 sites off St. John.

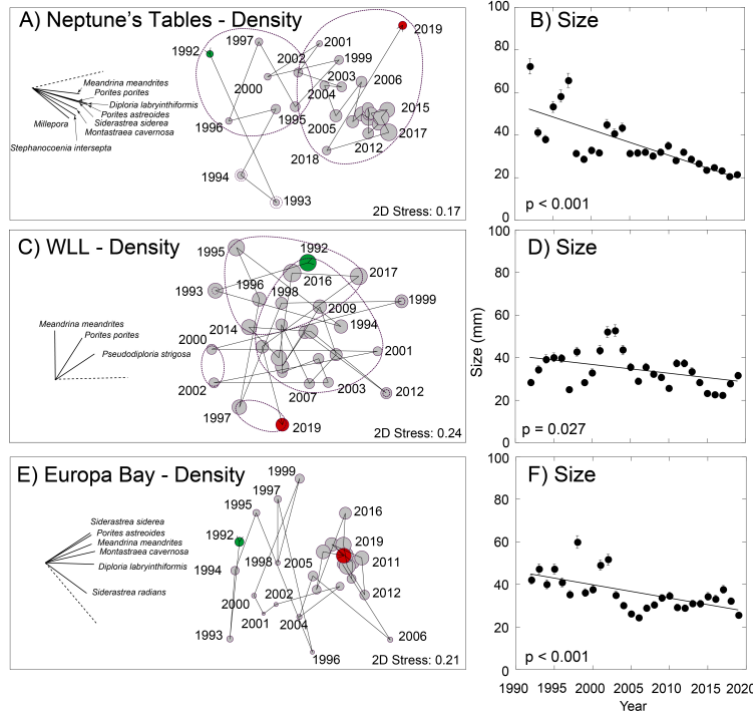


Fig. S2. Multivariate coral community structure (scleractinians + *Millepora*) over 28 yrs (A,C,E) and coral colony size (B,D,F) at three sites (see Fig. 4 for additional sites). Ordinations were prepared using fourth-root transformed colony abundance data by taxon (Table 1) with resemblance matrices prepared using Bray-Curtis dissimilarities, vectors showing the influence of each taxon, and circles scaled to overall abundance (pooled among taxa). Some samplings are not labeled by year for clarity; green = first year, red = final year. (A) Neptune's Table significant (by SIMPROF) 59% similarity contours, with vectors screened to display effects > 0.60. (C) West Little Lameshur (WLL) with significant 76% similarity contours and vectors screened to display effects > 0.60. (E) Europa Bay with significant 69% similarity contours and vectors screened to display effects > 0.60. (B,D,F) show mean (\pm SE, $n = 12$ –258) colony size by year, pooled among taxa, with lines showing Model I regressions and their significance (p)

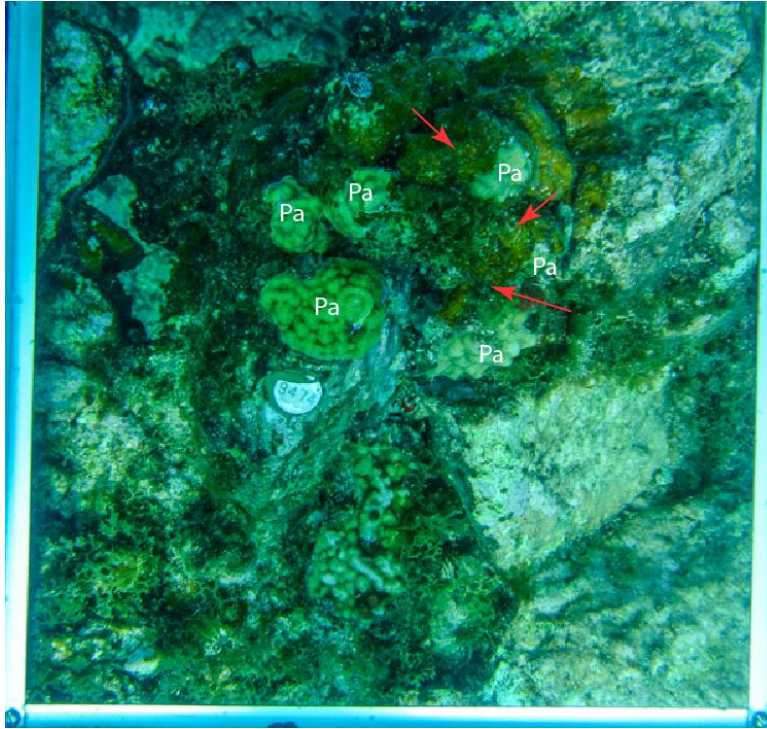


Fig. S3. *Porites astreoides* (Pa) at Yawzi Point in 2021 (4 m depth) showing the effects of rampant fission drive by encroachment of macroalgae (mostly peyssonnelid algal crust and *Dictyota*, red arrows). In recent years, fission has been a major driver of the reduction in size of a number of coral species in St. John. Quadrat is 0.5 m wide.