

Pedersen, N. E., Edwards, C. B., Eynaud, Y., Gleason, A. C. R., Smith, J. E. and Sandin, S. A. 2019. The influence of habitat and adults on the spatial distribution of juvenile corals. – Ecography doi: 10.1111/ecog.04520

Appendix 1

Morphological features of juvenile colonies

Juvenile colonies were defined as individuals with a diameter greater than 1 cm or smaller than 5 cm that were not a result of partial mortality, fission, or fragmentation. Juveniles were morphologically described as being circular or symmetric, with active growth margins. If the underlying substrate of a colony was characteristic of the structure of an adult colony, in addition to having nearby remnant live tissue of the same species, that colony was not considered a juvenile due to its likelihood of being produced by fission or partial mortality. Colonies with irregular growth margins or which visibly appeared to have active overgrowth by surrounding benthic organisms such as CCA or turf are likely experiencing shrinkage and were also not designated as juvenile colonies. Branching taxa (*Pocillopora* and *Stylophora*) often had juveniles with a small encrusting base, with branches not yet erect and fully formed.

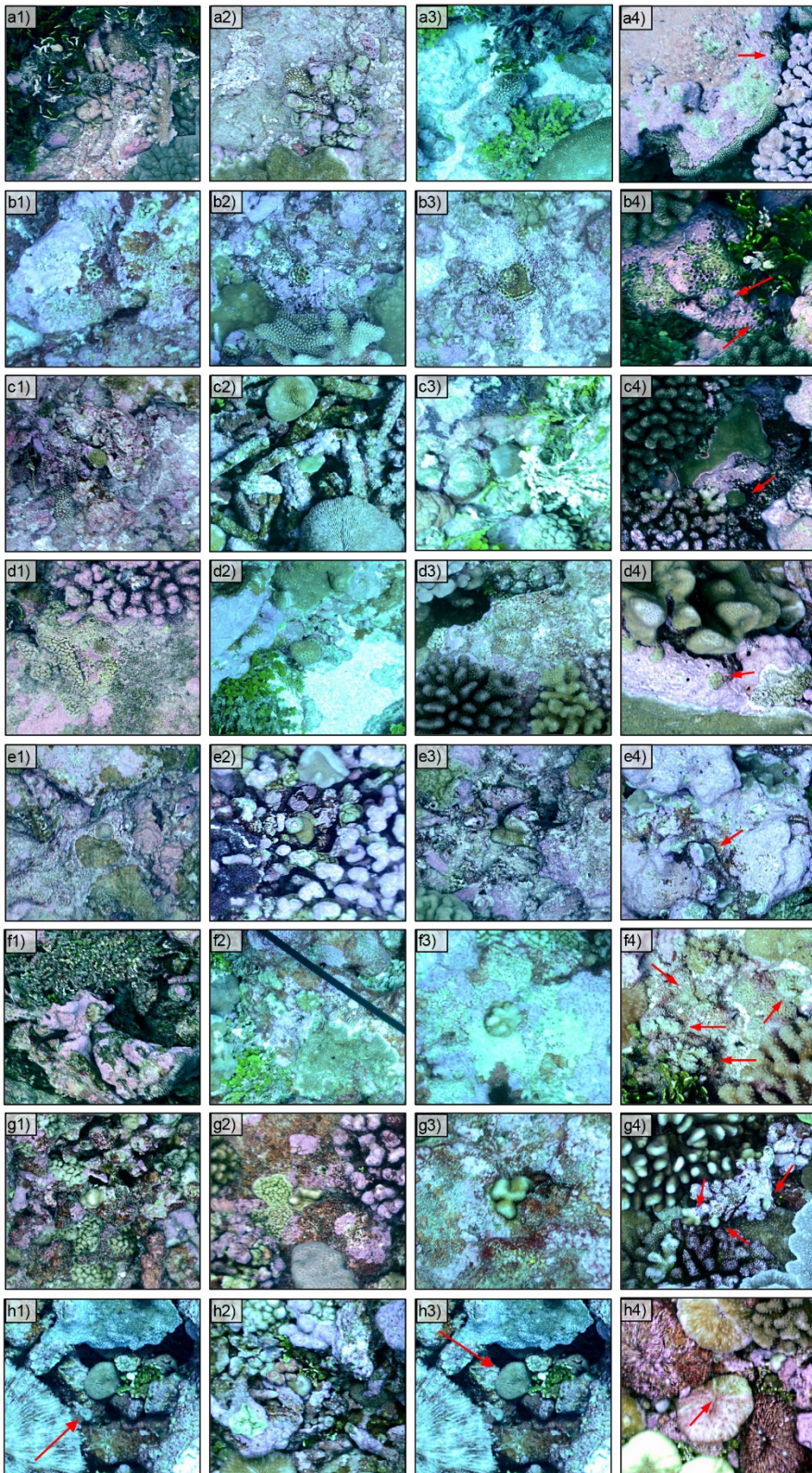


Figure A1. Examples of small (1), medium (2), and large (3) juvenile colonies for each focal taxon, which includes *H. microconos* (a), *M. curta* (b), *Porites* (c), *F. stelligera* (d), *Pavona* (e), *Pocillopora* (f), *S. pistillata* (g) and Fungiids (h). Also included for each taxon are examples of colonies not considered juveniles (4) due to partial mortality, fragmentation, or fission processes that contribute to their small size.

Appendix 2

Juvenile and adult correlations

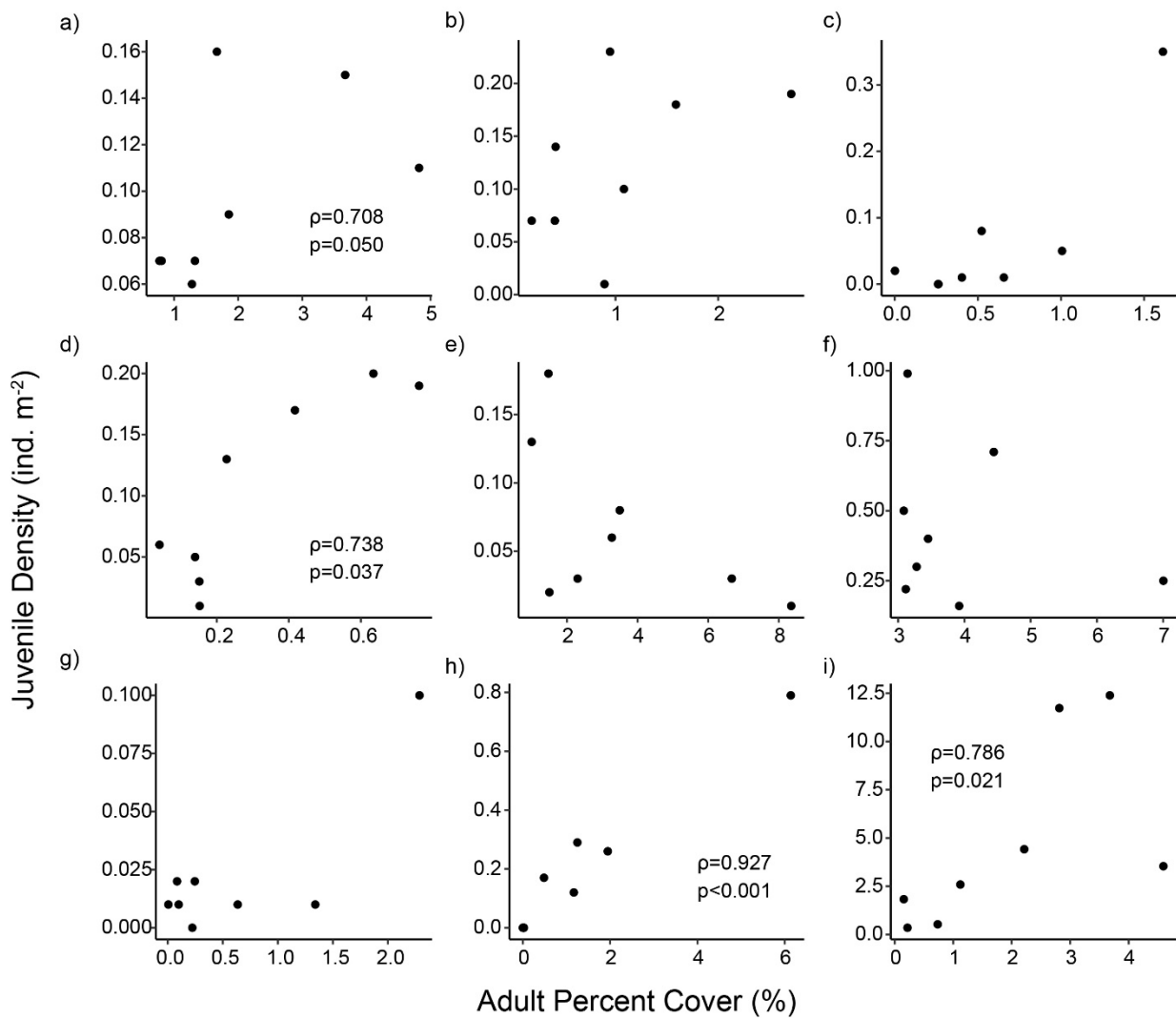


Figure A2. Relationship between juvenile density and adult percent cover for (a) *Favia stelligera* (b) *Pavona* (c) *Hydnophora microconos* (d) *Montastrea curta* (e) *Porites* (f) *Pocillopora* (g) *Acropora* (h) *Stylophora pistillata* (i) Fungiids.

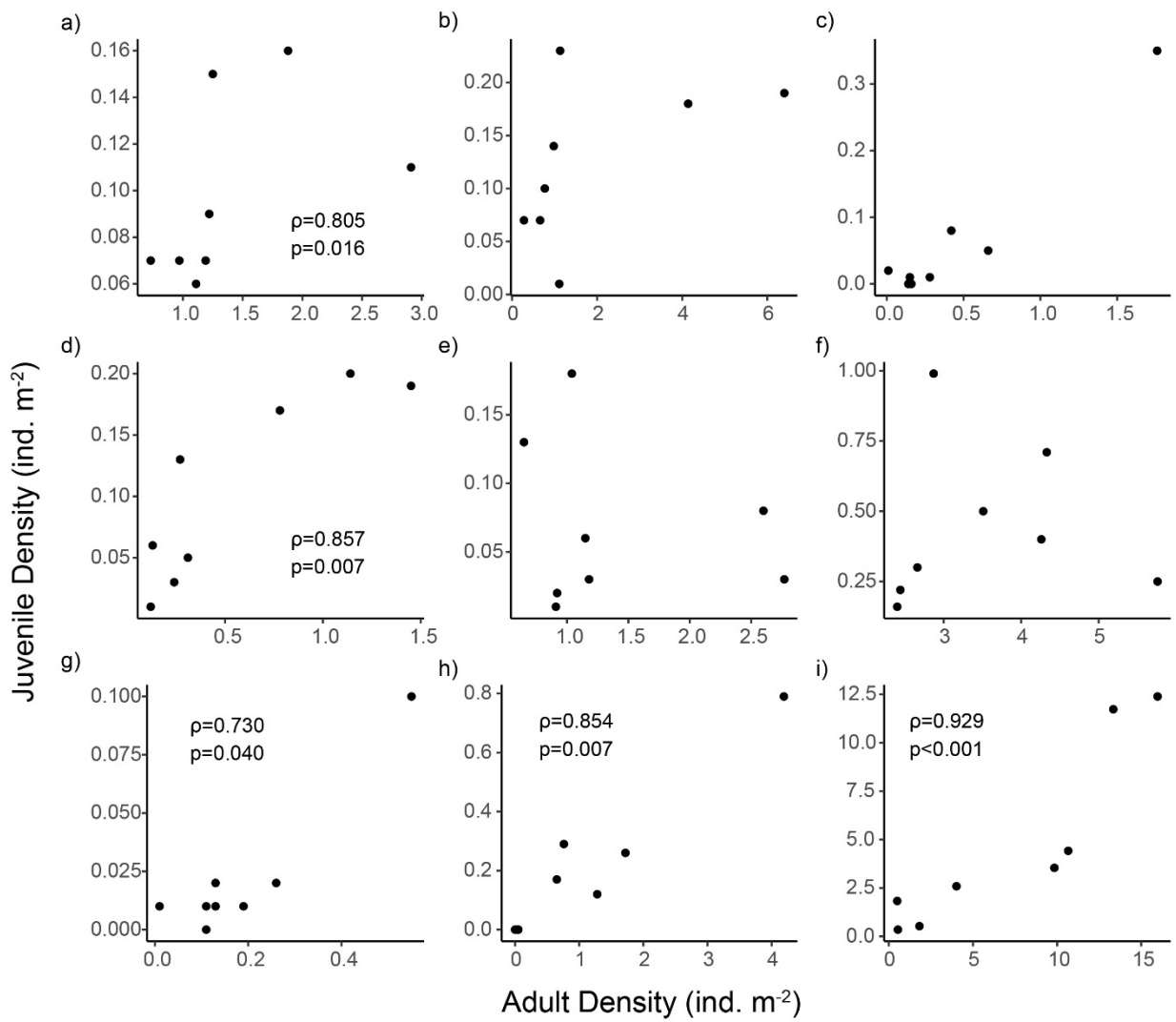


Figure A3. Relationship between juvenile density and adult density for (a) *Favia stelligera* (b) *Pavona* (c) *Hydnophora microconos* (d) *Montastrea curta* (e) *Porites* (f) *Pocillopora* (g) *Acropora* (h) *Stylophora pistillata* (i) Fungiids.

Appendix 3

Adult habitat associations

All sessile adult taxa, including *Hyndophora microconos* ($\chi^2 = 50.68$, $p \ll 0.001$), *Montastrea curta* ($\chi^2 = 62.67$, $p \ll 0.001$), *Porites* ($\chi^2 = 97.03$, $p \ll 0.001$), *Favia stelligera* ($\chi^2 = 176.02$, $p \ll 0.001$), *Pavona* ($\chi^2 = 152.90$, $p \ll 0.001$), *Pocillopora* ($\chi^2 = 328.79$, $p \ll 0.001$), *Stylophora pistillata* ($\chi^2 = 21.34$, $p \ll 0.001$), and *Acropora* ($\chi^2 = 22.92$, $p \ll 0.001$) were associated with consolidated habitat, while Fungiids ($\chi^2 = 5531.89$, $p \ll 0.001$) associated with unconsolidated habitat (Fig. A4).

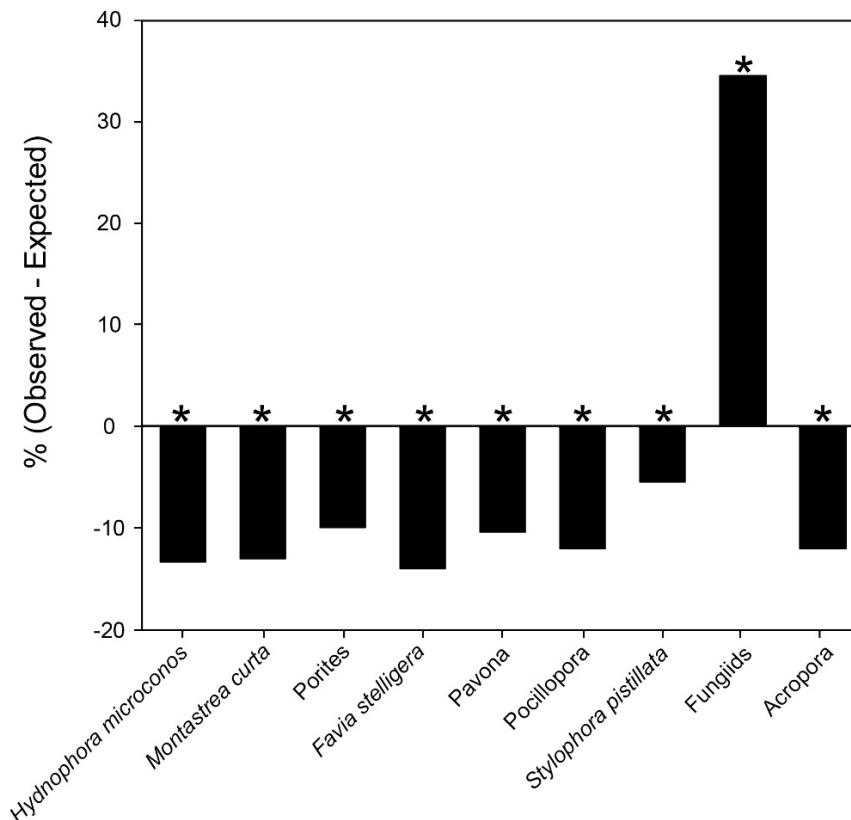


Figure A4. Habitat associations of adult corals. Proportional difference between the observed and expected number of individuals located within unconsolidated habitat. Positive values indicate association with unconsolidated habitat, negative values indicate association with consolidated habitat. Asterisks indicate significant habitat associations.

Appendix 4

Juvenile colony size distribution

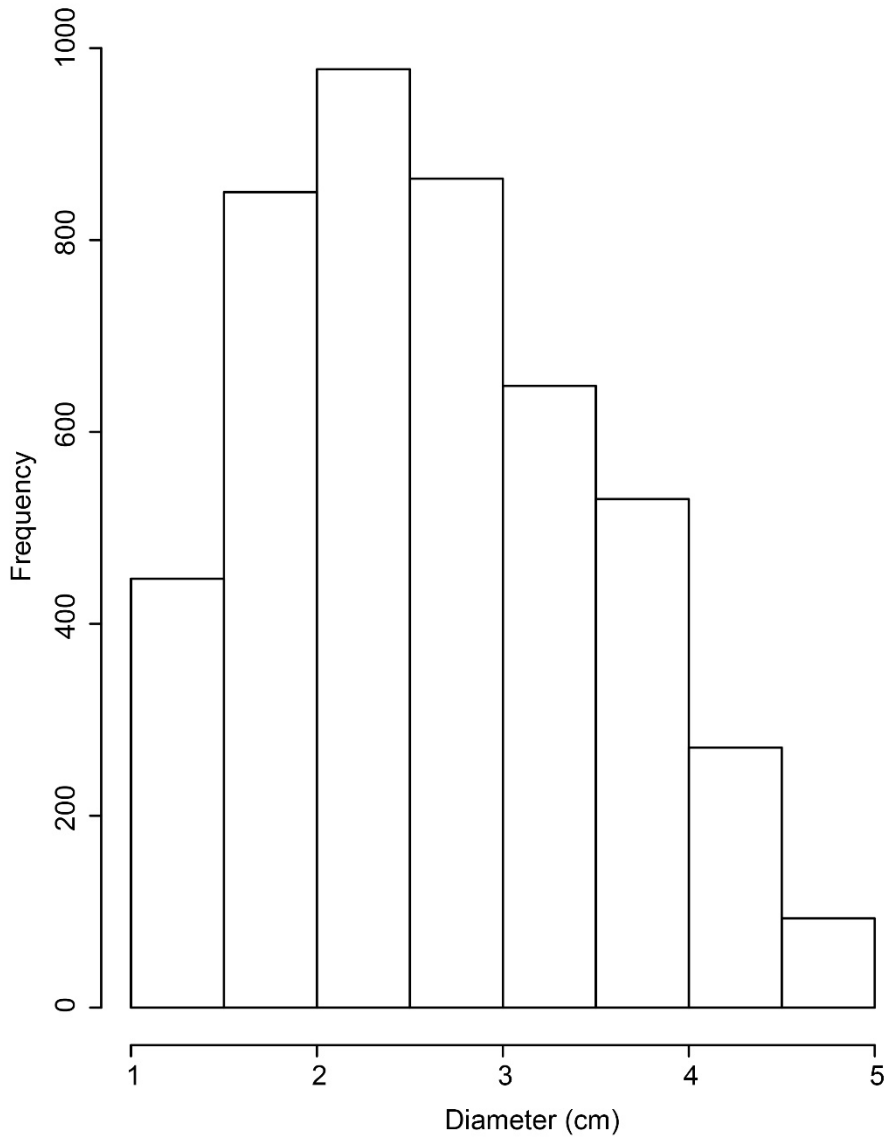


Figure A5. Frequency distribution of all juvenile colony diameters.