Supplementary Materials

Table S1. List of taxa found in abundance and attachment surveys.

Taxa	Abb.	Type	PA	MS	Dur	Und	Cys	Net
Acanthochiton zelandica	Aca	Chiton	A	M	x	0	0	x
Actinothoe sp.	Act	Anemone	A	S	x	x	x	0
Adenocystis utricularis	Ade	Brown alga	P	S	x	0	0	0
Anemone orange	Ane o	Anemone	A	S	x	0	0	0
Anemone white	Ane w	Anemone	A	S	x	0	0	0
Anotrichium crinitum	Ano	Red alga	P	S	x	x	x	x
Anthopleura sp.	Ant	Anemone	A	S	x	x	0	0
Aulacomya maoriana	Aul	Mussel	A	M	x	0	0	x
Ballia callitrica	Bal c	Red alga	P	S	x	0	0	x
Ballia hirsuta	Bal sp	Red alga	P	S	x	x	0	x
Bryozoa brown	Bry b	Bryozoa	A	S	0	x	0	0
Bryozoa yellow	Bry y	Bryozoa	A	S	0	0	x	0
Callophyllis calliblepharoides	Cal	Red alga	P	S	x	x	0	x
Cantharidella tesselata	Can	Gastropod	A	M	x	x	x	x
Cellana radians	Cel	Limpet	A	M	x	0	0	x
Ceramium spp.	Cer	Red alga	P	S	x	0	x	x
Chaetomorpha coliformis	Cha	Green alga	P	S	x	x	0	x
Chondria macrocarpa	Cho	Red alga	P	S	x	0	x	x
Codium dimorphum	Cod	Green alga	P	S	x	0	0	x
Cookia sulcata	Coo	Gastropod	A	M	x	x	x	x
Corallinales 'encrusting'	Cor e	Red alga	P	S	x	x	x	x
Corallinales 'turf'	Cor t	Red alga	P	S	x	x	x	x
Cricophorus nutrix	Cri	Anemone	A	S	0	0	x	x
Cystophora retroflexa	Cys r	Brown alga	P	S	x	x	x	x
Cystophora scalaris	Cys s	Brown alga	P	S	x	x	x	x
Cystophora torulosa	Cys t	Brown alga	P	S	x	x	x	x
Dasyclonium sp.	Das	Red alga	P	S	0	x	x	0
Dictyota sp.	Dic	Brown alga	P	S	x	x	0	0
Dipterosiphonia heteroclada	Dip	Red alga	P	S	x	x	0	x
Durvillaea poha	Dur	Brown alga	P	S	x	0	x	0
Durvillaea willana	Dur w	Brown alga	P	S	x	0	0	0
Echinothamnion hystrix	Ech h	Red alga	P	S	0	0	0	x
Echinothamnion sp.	Ech sp	Red alga	P	S	x	x	x	x
Ectocarpus spp.	Ect	Brown alga	P	S	x	0	0	0
Eudoxochiton nobilis	Eud	Chiton	A	M	x	0	0	x
Euptilota formosissima	Eup	Red alga	P	S	x	0	0	0
Gelidium caulacantheum	Gel p	Red alga	P	S	0	0	0	x
Gelidium microphyllum	Gel m	Red alga	P	S	x	x	0	x
Gigartina livida	Gig	Red alga	P	S	0	0	x	0
Halicarcinus spp.	Hal	Crab	A	M	0	0	0	x
Haliotis australis	Hal a	Gastropod	A	M	x	0	0	x
Halopteris congesta	Hal sp	Brown alga	P	S	x	x	x	x
Helminthocladia sp.	Hel sp	Red alga	P	S	0	0	x	0
Heterosiphonia sp.	Het	Red alga	P	S	0	x	x	x
Hildenbrandia sp.	Hil	Red alga	P	S	x	x	0	0

Hydrozoa sp.	Hyd	Hydroid	A	S	0	x	0	x
Hymenena sp.	Hym	Red alga	P	S	x	x	x	x
Isactinia olivacea.	Isa	Anemone	A	S	x	0	x	0
Jania sphaeroramosa	Jan	Red alga	P	S	x	x	x	x
Leathesia diformis	Col	Brown alga	P	S	0	x	0	x
Lophothamnion hirtum	Lop h	Red alga	P	S	x	x	x	x
Lophurella caespitosa	Lop c	Red alga	P	S	x	x	x	0
Lophurella sp	Lop sp	Red alga	P	S	x	0	0	x
Lunella smaragda	Lun	Gastropod	A	M	x	x	x	x
Membranipora sp.	Mem	Bryozoa	A	S	0	0	0	x
Micrelenchus spp.	Mic	Gastropod	A	M	0	0	0	x
Microcladia novae-zelandiae	Mic n	Red alga	P	S	0	0	0	x
Microzonia velutina	Zon	Brown alga	P	S	x	x	x	x
Modiolus areolatus	Mod	Mussel	A	M	x	0	0	x
Notoacmea spp.	Not	Limpet	A	M	x	x	0	x
Onithochiton neglectus	Oni	Chiton	A	M	x	0	x	0
Oulactis mucosa	Oul	Anemone	A	S	x	x	0	0
Perna canaliculus	Per	Mussel	A	M	x	0	0	x
Plocamium microcladioides	Plo	Red alga	P	S	0	0	x	0
Polysiphonia decipiens	Pol	Red alga	P	S	0	0	x	x
Polysiphonia strictissima	Pol s	Red alga	P	S	x	0	x	0
Pomatoceros sp.	Pom	Polychaete	A	S	x	x	x	0
Ralfsia sp.	Ral	Brown alga	P	S	x	x	x	x
Red blade	Red b	Red alga	P	S	x	x	x	x
Red blade prostrate	Red bp	Red alga	P	S	x	0	0	0
Red filament	Red f	Red alga	P	S	0	0	0	x
Schizoseris dichotoma	Sch	Red alga	P	S	0	0	0	x
Shell (dead bivalvia)	She	Mussel	A	M	0	0	0	x
Siphonaria sp.	Sip	Limpet	A	M	x	x	x	x
Spiky Red	Spi r	Red alga	P	S	x	x	0	0
Spirobis sp.	Spi	Polychaete	A	S	0	x	0	x
Sponge (orange)	Spo o	Sponge	A	S	x	0	0	0
Sponge (pink)	Spo p	Sponge	A	S	x	0	0	0
Sponge (yellow)	Spo y	Sponge	A	S	x	0	0	0
Sypharochiton pelliserpentis	Syp	Chiton	A	M	x	0	x	x
Terebellidae	Ter	Polychaete	A	M	x	0	x	0
Tethya sp.	Tet	Sponge	A	S	0	x	0	0
Ulva sp	Ulv	Green alga	P	S	x	x	x	x
Undaria pinnatifida	Und	Brown alga	P	S	x	x	x	x
Xiphophora gladiata	Xip	Brown alga	P	S	x	x	0	0

Data were collected from 16 plots dominated by *Durvillaea* spp. (Dur) spp., 7 plots dominated by *Undaria pinnatifida* (Und) and 7 plots dominated by *Cystophora* spp. (Cys). Column coding: Abb. = Abbreviation (as used in the manuscript figures), P = plant, A = animal, M = mobile, S = sessile. Cyst, Dur, Und = taxa recorded in the abundance survey, grouped by three types of habitats. Net = taxa recorded in the attachment survey (pooled across habitats, habitat specific network data is shown in figure 4), x = observed, 0 = not observed.

Table S2. Network terminology and measured metrics.

Network Terminology	Measured Metrics
Nodes	Species
Links	Interaction between two nodes (here attachment of an epibiont on a host)
Directional network	nodes can be connected with directional links (here a linked species pair can theoretically be hosts and epibionts)
Degree of a node	Number of links (connections, edges) a node has to other nodes. If a network is directed, meaning that links point in one direction from one node to another, then nodes have two different degrees; the in-degree, which is the number of incoming links, and the out-degree, which is the number of outgoing edges
In Degree for a node	Straightforward measure of centrality. It measures the total number of nodes linking to that node
Out Degree for a node	Straightforward measure of centrality. It measures the total number of nodes that that node links to
Total Degree for a node	Straightforward measure of centrality. It is the total number of edges that that node has. For directed networks it is the sum of In Degree and Out Degree
Average Neighbor Degree for a node	The average number of edges (i.e., degree) that a node's neighbors have. For directed networks, it is possible to specify whether to use in-degree or out-degree for each of the source and target nodes in the calculation
Betweenness Centrality for a node	The total number of shortest paths that pass through that node and, if the Normalized option is selected, divided by the total number of shortest paths in the network. It is a measure of how much a node is a 'bridge' between other nodes in the network