

# The role of habitat complexity in shaping the size-structure of a kelp forest reef fish community

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## Supplement.

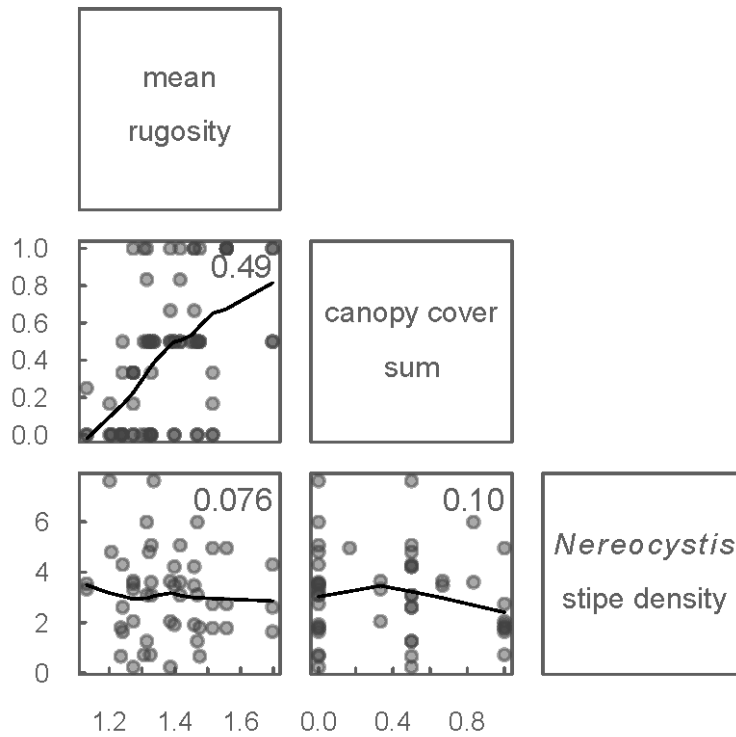


Fig. S1. Correlations (top panes are pairwise correlation coefficients) between habitat complexity covariates included in models. Lines are LOESS smoothers

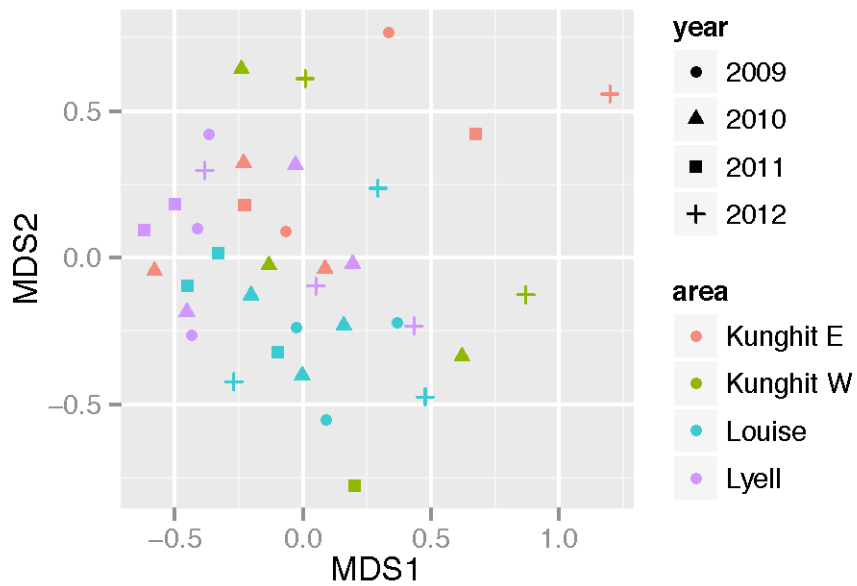


Fig. S2. MDS plot of community composition, based on species abundances, for fish from 32-2048 g. Points represent discrete site/year combinations. Distances are Bray-Curtis, calculated using a Wisconsin transformation with the R package *vegan* 2.2. 2D stress = 0.22

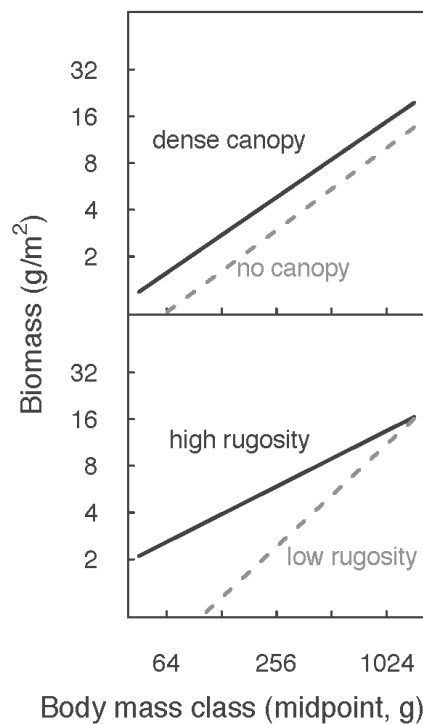


Fig. S3. Predicted kelp forest reef fish biomass spectra for high (0) and low kelp stipe density (1) cover at intermediate rugosity (1.35, top), and for high (1.7) and low (1.0) rugosity while holding kelp stipe density constant (at 7, bottom)

Table S1. Species surveyed on transects

| Species   | n surveyed |
|---|------------|
| Yellowtail rockfish ( <i>Sebastes flavidus</i> )      | 1837       |
| Black rockfish ( <i>Sebastes melanops</i> )           | 1452       |
| Kelp greenling ( <i>Hexagrammos decagrammus</i> )     | 476        |
| Copper rockfish ( <i>Sebastes caurinus</i> )          | 245        |
| Quillback rockfish ( <i>Sebastes maliger</i> )        | 195        |
| China rockfish ( <i>Sebastes nebulosus</i> )          | 128        |
| Puget Sound rockfish ( <i>Sebastes emphaeus</i> )     | 106        |
| Painted greenling ( <i>Oxylebius pictus</i> )         | 32         |
| Lingcod ( <i>Ophiodon elongatus</i> )                 | 26         |
| Striped perch ( <i>Embiotoca lateralis</i> )          | 13         |
| Vermilion rockfish ( <i>Sebastes miniatus</i> )       | 9          |
| Canary rockfish ( <i>Sebastes pinniger</i> )          | 4          |
| Cabezón ( <i>Scorpaenichthys marmoratus</i> )         | 4          |
| Rock greenling ( <i>Hexagrammos lagocephalus</i> )    | 3          |
| Red Irish lord ( <i>Hemilepidotus hemilepidotus</i> ) | 3          |
| Tiger rockfish ( <i>Sebastes nigrocinctus</i> )       | 1          |
| Kelp perch ( <i>Brachyistius frenatus</i> )           | 1          |
| Bufo sculpin ( <i>Enophrys bison</i> )                | 1          |
| Brown Irish lord ( <i>Hemilepidotus spinosus</i> )    | 1          |