# Appendix C

# Fish Data: Species Lists, Site Summaries, and Species Summaries

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**Notes**:

Site Summaries: Sites indicated with an asterisk (*) (17 total) include data only for those species on the list of fishes used for analysis of historical trends (see Table 2-5). All other sites include data for all observed "conspicuous" species.

> "Abundance" is the total count for the site.
> "Mean density" is the mean abundance per 30 m x 2 m x 2 m transect.
> "Percent Freq Occ" is the frequency of occurrence among replicates at the site.
> "Mean Size" is the mean total length in centimeters.

Species Summaries: All plots are for benthic transect data except where midwater data are indicated in the title. Species data are for all sites except where indicated in the title.

> "Mean Abundance": Mean (symbol) $\pm$ 1 standard error
> "Length": Mean (symbol); Median (vertical mark); Range (horizontal line)

**Table C1.** List of fishes, sharks, and rays observed in 2004 CRANE study, ordered by family.

| Family | Genus_Species | Common Name |
|---|---|---|
| Squatinidae | | |
| | *Squatina californica* | Pacific angel shark |
| Heterodontidae | | |
| | *Heterodontus francisci* | horn shark |
| Triakidae | | |
| | *Galeorhinus galeus* | soupfin shark |
| | *Triakis semifasciata* | leopard shark |
| Scyliorhinidae | | |
| | *Cephaloscyllium ventriosum* | swell shark |
| Torpedinidae | | |
| | *Torpedo californica* | Pacific electric ray |
| Platyrhinidae | | |
| | *Platyrhinoidis triseriata* | thornback |
| Urolophidae | | |
| | *Urolophus halleri* | round stingray |
| Myliobatidae | | |
| | *Myliobatis californica* | bat ray |
| Muraenidae | | |
| | *Gymnothorax mordax* | California moray |
| Engraulidae | | |
| | Engraulidae/Atherinopsidae/Clupeidae | unidentified baitfishes |
| | *Engraulis mordax* | northern anchovy |
| Clupeidae | | |
| | *Sardinops sagax* | Pacific sardine |
| Atherinopsidae | | |
| | *Atherinops affinis* | topsmelt |
| | Atherinopsidae | silversides |
| | *Atherinopsis californiensis* | jacksmelt |
| Aulorhynchidae | | |
| | *Aulorhynchus flavidus* | tubesnout |
| Syngnathidae | | |
| | *Syngnathus* spp. | pipefishes |
| Scorpaenidae | | |
| | *Scorpaena guttata* | California scorpionfish |
| | *Sebastes atrovirens* | kelp rockfish |
| | *Sebastes atrovirens/S. carnatus/S. chrysomelas* (yoy) | kelp/gopher/black and yellow rockfish (yoy) |
| | *Sebastes auriculatus* | brown rockfish |
| | *Sebastes carnatus* | gopher rockfish |
| | *Sebastes caurinus* | copper rockfish |
| | *Sebastes chrysomelas* | black and yellow rockfish |
| | *Sebastes dalli* | calico rockfish |
| | *Sebastes melanops* | black rockfish |
| | *Sebastes miniatus* | vermilion rockfish |
| | *Sebastes mystinus* | blue rockfish |
| | *Sebastes paucispinis* | bocaccio |
| | *Sebastes pinniger* | canary rockfish |
| | *Sebastes rastrelliger* | grass rockfish |
| | *Sebastes serranoides/S. flavidus* | olive/yellowtail rockfish |
| | *Sebastes serriceps* | treefish |
| | *Sebastes* spp. | rockfishes |

*(table continued)*

**Table C1** (continued). List of fishes, sharks, and rays observed in 2004 CRANE study, ordered by family.

| Family | Genus_Species | Common Name |
|---|---|---|
| Hexagrammidae | | |
| | *Hexagrammos decagrammus* | kelp greenling |
| | *Ophiodon elongatus* | lingcod |
| | *Oxylebius pictus* | painted greenling |
| Cottidae | | |
| | *Artedius corallinus* | coralline sculpin |
| | *Artedius* spp. | unidentified sculpins |
| | *Jordania zonope* | longfin sculpin |
| | *Leiocottus hirundo* | lavender sculpin |
| | *Orthonopias triacis* | snubnose sculpin |
| | *Scorpaenichthys marmoratus* | cabezon |
| | *Synchirus gilli* | manacled sculpin |
| Polyprionidae | | |
| | *Stereolepis gigas* | giant sea bass |
| Serranidae | | |
| | *Myctoperca xenarcha* | broomtail grouper |
| | *Paralabrax clathratus* | kelp bass |
| | *Paralabrax nebulifer* | barred sand bass |
| Malacanthidae | | |
| | *Caulolatilus princeps* | ocean whitefish |
| Carangidae | | |
| | *Seriola lalandi* | yellowtail jack |
| | *Trachurus symmetricus* | jack mackerel |
| Haemulidae | | |
| | *Anisotremus davidsoni* | sargo |
| | *Xenistius californiensis* | salema |
| Sciaenidae | | |
| | *Cheilotrema saturnum* | black croaker |
| Chaetodontidae | | |
| | *Prognathodes falcifer* | scythe butterflyfish |
| Kyphosidae | | |
| | *Girella nigricans* | opaleye |
| | *Hermosilla azurea* | zebra perch |
| | *Medialuna californiensis* | halfmoon |
| Embiotocidae | | |
| | *Brachyistius frenatus* | kelp surfperch |
| | *Cymatogaster aggregata* | shiner surfperch |
| | *Embiotoca jacksoni* | black surfperch |
| | *Embiotoca lateralis* | striped surfperch |
| | Embiotocidae | unidentified surfperches |
| | *Hyperprosopon anale* | spotfin surfperch |
| | *Hyperprosopon argenteum* | walleye surfperch |
| | *Hypsurus caryi* | rainbow surfperch |
| | *Phanerodon furcatus* | white surfperch |
| | *Rhacochilus toxotes* | rubberlip surfperch |
| | *Rhacochilus vacca* | pile surfperch |
| Pomacentridae | | |
| | *Chromis punctipinnis* | blacksmith |
| | *Hypsypops rubicundus* | garibaldi |

*(table continued)*

**Table C1** (continued). List of fishes, sharks, and rays observed in 2004 CRANE study, ordered by family.

| Family | Genus_Species | Common Name |
|---|---|---|
| Labridae | | |
| | *Halichoeres semicinctus* | rock wrasse |
| | *Oxyjulis californica* | señorita |
| | *Semicossyphus pulcher* | California sheephead |
| Bathymasteridae | | |
| | *Ronquilus jordani* | northern ronquil |
| Stichaeidae | | |
| | *Cebidichthys violaceus* | monkeyface eel |
| Pholidae | | |
| | *Apodichthys flavidus* | penpoint gunnel |
| Anarhichadidae | | |
| | *Anarrhichthys ocellatus* | wolf-eel |
| Labrisomidae | | |
| | *Alloclinus holderi* | island kelpfish |
| Clinidae | | |
| | *Gibbonsia elegans* | spotted kelpfish |
| | *Gibbonsia* spp. | unidentified kelpfishes |
| | *Heterostichus rostratus* | giant kelpfish |
| Chaenopsidae | | |
| | *Neoclinus stephensae* | yellowfin fringehead |
| Gobiesocidae | | |
| | *Rimicola muscarum* | kelp clingfish |
| Gobiidae | | |
| | *Lythrypnus dalli* | bluebanded goby |
| | *Rhinogobiops nicholsi* | blackeye goby |
| Scombridae | | |
| | *Scomber japonicus* | Pacific chub mackerel |
| Paralichthyidae | | |
| | *Paralichthys californicus* | California halibut |
| | *Citharichthys stigmaeus* | speckled sanddab |
| Pleuronectidae | | |
| | *Pleuronichthys coenosus* | c-o sole |
| | *Pleuronichthys ritteri* | spotted turbot |

**Table C2.** List of fishes, sharks, and rays observed in 2004 CRANE study, ordered alphabetically.

| Taxon | Common Name |
|---|---|
| *Alloclinus holderi* | island kelpfish |
| *Anarrhichthys ocellatus* | wolf-eel |
| *Anisotremus davidsoni* | sargo |
| *Apodichthys flavidus* | penpoint gunnel |
| *Artedius corallinus* | coralline sculpin |
| *Artedius* spp. | sculpins |
| *Atherinops affinis* | topsmelt |
| Atherinopsidae | silversides |
| *Atherinopsis californiensis* | jacksmelt |
| *Aulorhynchus flavidus* | tubesnout |
| *Brachyistius frenatus* | kelp surfperch |
| *Caulolatilus princeps* | ocean whitefish |
| *Cebidichthys violaceus* | monkeyface eel |
| *Cephaloscyllium ventriosum* | swell shark |
| *Chaetodon falcifer* | scythemarked butterflyfish |
| *Cheilotrema saturnum* | black croaker |
| *Chromis punctipinnis* | blacksmith |
| *Citharichthys stigmaeus* | speckled sanddab |
| *Cymatogaster aggregata* | shiner surfperch |
| *Embiotoca jacksoni* | black surfperch |
| *Embiotoca lateralis* | striped surfperch |
| Embiotocidae | surfperches |
| Engraulidae/Atherinopsidae/Clupeidae | unidentified baitfish |
| *Engraulis mordax* | northern anchovy |
| *Galeorhinus galeus* | soupfin shark |
| *Gibbonsia elegans* | spotted kelpfish |
| *Gibbonsia* spp. | clinid kelpfishes |
| *Girella nigricans* | opaleye |
| *Gymnothorax mordax* | California moray |
| *Halichoeres semicinctus* | rock wrasse |
| *Hermosilla azurea* | zebra perch |
| *Heterodontus francisci* | horn shark |
| *Heterostichus rostratus* | giant kelpfish |
| *Hexagrammos decagrammus* | kelp greenling |
| *Hyperprosopon anale* | spotfin surfperch |
| *Hyperprosopon argenteum* | walleye surfperch |
| *Hypsurus caryi* | rainbow surfperch |
| *Hypsypops rubicundus* | garibaldi |
| *Jordania zonope* | longfin sculpin |
| *Leiocottus hirundo* | lavender sculpin |
| *Lythrypnus dalli* | bluebanded goby |
| *Medialuna californiensis* | halfmoon |
| *Myctoperca xenarcha* | broomtail grouper |
| *Myliobatis californica* | bat ray |
| *Neoclinus stephensae* | yellowfin fringehead |
| *Ophiodon elongatus* | lingcod |
| *Orthonopias triacis* | snubnose sculpin |
| *Oxyjulis californica* | senorita |

*(table continued)*

**Table C2** (continued)**.** List of fishes, sharks, and rays observed in 2004 CRANE study, ordered alphabetically.

| **Taxon** | **Common Name** |
|---|---|
| *Oxylebius pictus* | painted greenling |
| *Paralabrax clathratus* | kelp bass |
| *Paralabrax nebulifer* | barred sand bass |
| *Paralichthys californicus* | California halibut |
| *Phanerodon furcatus* | white surfperch |
| *Platyrhinoidis triseriata* | thornback |
| *Pleuronichthys coenosus* | c-o turbot |
| *Pleuronichthys ritteri* | spotted turbot |
| *Rhacochilus toxotes* | rubberlip surfperch |
| *Rhacochilus vacca* | pile surfperch |
| *Rhinogobiops nicholsi* | blackeye goby |
| *Rimicola muscarum* | kelp clingfish |
| *Ronquilus jordani* | northern ronquil |
| *Sardinops sagax* | Pacific sardine |
| *Scomber japonicus* | Pacific mackerel |
| *Scorpaena guttata* | spotted scorpionfish |
| *Scorpaenichthys marmoratus* | cabezon |
| *Sebastes atrovirens* | kelp rockfish |
| *Sebastes auriculatus* | brown rockfish |
| *Sebastes atrovirens/S. carnatus/S. chrysomelas* (yoy) | kelp/gopher/black and yellow rockfish (yoy) |
| *Sebastes carnatus* | gopher rockfish |
| *Sebastes caurinus* | copper rockfish |
| *Sebastes chrysomelas* | black and yellow rockfish |
| *Sebastes dalli* | calico rockfish |
| *Sebastes melanops* | black rockfish |
| *Sebastes miniatus* | vermilion rockfish |
| *Sebastes mystinus* | blue rockfish |
| *Sebastes paucispinis* | bocaccio |
| *Sebastes pinniger* | canary rockfish |
| *Sebastes rastrelliger* | grass rockfish |
| *Sebastes serranoides* | olive rockfish |
| *Sebastes serranoides/S. flavidus* (yoy) | olive/yellowtail rockfishes (yoy) |
| *Sebastes serriceps* | treefish |
| *Sebastes* spp. | rockfishes |
| *Semicossyphus pulcher* | California sheephead |
| *Seriola lalandi* | yellowtail jack |
| *Squatina californica* | Pacific angel shark |
| *Stereolepis gigas* | giant sea bass |
| *Synchirus gilli* | manacled sculpin |
| *Syngnathus* spp. | pipefishes |
| *Torpedo californica* | Pacific electric ray |
| *Trachurus symmetricus* | jack mackerel |
| *Triakis semifasciata* | leopard shark |
| *Urolophus halleri* | round stingray |
| *Xenistius californiensis* | salema |

**Site Number:** 1
**Site:** Sandhill Bluff*
**Location:** Santa Cruz

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes serranoides/S. flavidus (yoy) | 684 | 28.50 | 0.55 | 62.50 | 7.69 | 3 | 18 |
| Hypsurus caryi | 256 | 10.67 | 0.38 | 83.33 | 14.17 | 3 | 28 |
| Sebastes melanops | 242 | 10.08 | 0.42 | 45.83 | 7.73 | 3 | 38 |
| Rhacochilus vacca | 94 | 3.92 | 0.29 | 70.83 | 18.32 | 8 | 33 |
| Embiotoca lateralis | 83 | 3.46 | 0.27 | 79.17 | 15.11 | 3 | 33 |
| Sebastes mystinus | 42 | 1.75 | 0.27 | 37.50 | 11.33 | 3 | 33 |
| Hexagrammos decagrammus | 38 | 1.58 | 0.23 | 62.50 | 24.18 | 8 | 43 |
| Rhacochilus toxotes | 23 | 0.96 | 0.30 | 4.17 | 27.35 | 18 | 38 |
| Embiotoca jacksoni | 7 | 0.29 | 0.18 | 20.83 | 17.29 | 8 | 28 |
| Sebastes chrysomelas | 7 | 0.29 | 0.21 | 12.50 | 23.00 | 13 | 33 |
| Ophiodon elongatus | 2 | 0.08 | 0.15 | 8.33 | 35.50 | 23 | 48 |
| Oxyjulis californica | 2 | 0.08 | 0.16 | 4.17 | 8.00 | 3 | 13 |
| Hyperprosopon argenteum | 1 | 0.04 | 0.14 | 4.17 | 8.00 | 8 | 8 |
| Scorpaenichthys marmoratus | 1 | 0.04 | 0.14 | 4.17 | 13.00 | 13 | 13 |
| Sebastes caurinus | 1 | 0.04 | 0.14 | 4.17 | 3.00 | 3 | 3 |
| Sebastes pinniger | 1 | 0.04 | 0.14 | 4.17 | 3.00 | 3 | 3 |

**Replicate Transects:** 24
**Total Species:** 16
**Total Abundance:** 1484
**Diversity:** 1.638
**Dominance:** 0.266
**Evenness:** 0.591

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes serranoides/S. flavidus (yoy) | 59 | 2.46 | 0.33 | 20.83 | 7.32 | 3 | 18 |
| Oxyjulis californica | 50 | 2.08 | 0.31 | 25.00 | 14.30 | 13 | 18 |
| Hypsurus caryi | 31 | 1.29 | 0.29 | 12.50 | 16.71 | 8 | 18 |
| Sebastes chrysomelas/S. carnatus (yoy) | 15 | 0.63 | 0.23 | 16.67 | 4.33 | 3 | 8 |
| Sebastes mystinus | 14 | 0.58 | 0.25 | 12.50 | 11.21 | 8 | 28 |
| Sebastes pinniger | 14 | 0.58 | 0.24 | 8.33 | 5.14 | 3 | 8 |
| Rhacochilus vacca | 3 | 0.13 | 0.16 | 12.50 | 21.33 | 18 | 28 |
| Sebastes melanops | 3 | 0.13 | 0.18 | 4.17 | 8.00 | 8 | 8 |
| Embiotoca lateralis | 1 | 0.04 | 0.14 | 4.17 | 23.00 | 23 | 23 |
| Rhacochilus toxotes | 1 | 0.04 | 0.14 | 4.17 | 13.00 | 13 | 13 |

**Replicate Transects:** 24
**Total Species:** 10
**Total Abundance:** 191
**Diversity:** 1.778
**Dominance:** 0.094
**Evenness:** 0.772

**Site Number:** 2
**Site:** Terrace Point*
**Location:** Santa Cruz

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes serranoides/S. flavidus (yoy) | 127 | 5.29 | 0.36 | 54.17 | 7.96 | 3 | 8 |
| Hypsurus caryi | 46 | 1.92 | 0.29 | 41.67 | 8.65 | 8 | 13 |
| Oxyjulis californica | 38 | 1.58 | 0.31 | 12.50 | 12.34 | 8 | 18 |
| Hexagrammos decagrammus | 16 | 0.67 | 0.20 | 45.83 | 20.81 | 8 | 38 |
| Embiotoca jacksoni | 13 | 0.54 | 0.21 | 25.00 | 10.69 | 8 | 23 |
| Rhacochilus vacca | 6 | 0.25 | 0.17 | 20.83 | 13.00 | 8 | 23 |
| Rhacochilus toxotes | 3 | 0.13 | 0.18 | 4.17 | 8.00 | 8 | 8 |
| Sebastes caurinus | 3 | 0.13 | 0.18 | 4.17 | 6.33 | 3 | 8 |
| Ophiodon elongatus | 2 | 0.08 | 0.15 | 8.33 | 55.50 | 43 | 68 |
| Sebastes mystinus | 2 | 0.08 | 0.16 | 4.17 | 8.00 | 8 | 8 |
| Embiotoca lateralis | 1 | 0.04 | 0.14 | 4.17 | 8.00 | 8 | 8 |
| Sebastes chrysomelas | 1 | 0.04 | 0.14 | 4.17 | 28.00 | 28 | 28 |
| Sebastes melanops | 1 | 0.04 | 0.14 | 4.17 | 8.00 | 8 | 8 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 13 |
| **Total Abundance:** | 259 |
| **Diversity:** | 1.589 |
| **Dominance:** | 0.229 |
| **Evenness:** | 0.620 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 31 | 1.29 | 0.28 | 12.50 | 11.23 | 8 | 18 |
| Embiotoca jacksoni | 3 | 0.13 | 0.18 | 4.17 | 23.00 | 23 | 23 |
| Hypsurus caryi | 2 | 0.08 | 0.15 | 8.33 | 8.00 | 8 | 8 |
| Sebastes serranoides/S. flavidus (yoy) | 2 | 0.08 | 0.16 | 4.17 | 8.00 | 8 | 8 |
| Sebastes atrovirens | 1 | 0.04 | 0.14 | 4.17 | 28.00 | 28 | 28 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 5 |
| **Total Abundance:** | 39 |
| **Diversity:** | 0.772 |
| **Dominance:** | 0.075 |
| **Evenness:** | 0.480 |

**Site Number:** 3
**Site:** MacAbee*
**Location:** Monterey

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 382 | 15.92 | 0.39 | 83.33 | 9.11 | 8 | 33 |
| Sebastes serranoides/S. flavidus (yoy) | 235 | 9.79 | 0.34 | 95.83 | 9.26 | 8 | 28 |
| Embiotoca lateralis | 64 | 2.67 | 0.30 | 50.00 | 10.97 | 8 | 38 |
| Sebastes melanops | 56 | 2.33 | 0.29 | 29.17 | 8.00 | 8 | 8 |
| Oxyjulis californica | 43 | 1.79 | 0.34 | 12.50 | 15.56 | 13 | 18 |
| Sebastes atrovirens | 40 | 1.67 | 0.26 | 50.00 | 25.88 | 8 | 38 |
| Embiotoca jacksoni | 19 | 0.79 | 0.23 | 37.50 | 19.05 | 8 | 38 |
| Rhacochilus vacca | 15 | 0.63 | 0.21 | 37.50 | 28.33 | 8 | 38 |
| Hexagrammos decagrammus | 9 | 0.38 | 0.19 | 20.83 | 36.33 | 23 | 43 |
| Sebastes pinniger | 9 | 0.38 | 0.20 | 20.83 | 8.00 | 8 | 8 |
| Hypsurus caryi | 7 | 0.29 | 0.19 | 16.67 | 13.71 | 13 | 18 |
| Sebastes chrysomelas | 6 | 0.25 | 0.18 | 16.67 | 25.50 | 13 | 33 |
| Sebastes carnatus | 5 | 0.21 | 0.18 | 12.50 | 27.00 | 23 | 28 |
| Sebastes caurinus | 2 | 0.08 | 0.16 | 4.17 | 25.50 | 18 | 33 |
| Scorpaenichthys marmoratus | 1 | 0.04 | 0.14 | 4.17 | 43.00 | 43 | 43 |
| Sebastes chrysomelas/S. carnatus (yoy) | 1 | 0.04 | 0.14 | 4.17 | 3.00 | 3 | 3 |
| Sebastes miniatus | 1 | 0.04 | 0.14 | 4.17 | 18.00 | 18 | 18 |
| Sebastes paucispinis | 1 | 0.04 | 0.14 | 4.17 | 13.00 | 13 | 13 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 18 |
| **Total Abundance:** | 896 |
| **Diversity:** | 1.747 |
| **Dominance:** | 0.245 |
| **Evenness:** | 0.605 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 134 | 5.58 | 0.39 | 45.83 | 11.73 | 8 | 28 |
| Sebastes serranoides/S. flavidus (yoy) | 89 | 3.71 | 0.40 | 37.50 | 8.96 | 8 | 18 |
| Oxyjulis californica | 74 | 3.08 | 0.37 | 16.67 | 12.66 | 8 | 23 |
| Sebastes melanops | 18 | 0.75 | 0.27 | 16.67 | 16.61 | 8 | 28 |
| Embiotoca lateralis | 11 | 0.46 | 0.22 | 16.67 | 15.27 | 8 | 38 |
| Sebastes paucispinis | 2 | 0.08 | 0.16 | 4.17 | 8.00 | 8 | 8 |
| Rhacochilus vacca | 1 | 0.04 | 0.14 | 4.17 | 33.00 | 33 | 33 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 7 |
| **Total Abundance:** | 329 |
| **Diversity:** | 1.375 |
| **Dominance:** | 0.238 |
| **Evenness:** | 0.707 |

**Site Number:** 4
**Site:** Hopkins*
**Location:** Monterey

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 725 | 30.21 | 0.46 | 87.50 | 9.75 | 8 | 33 |
| Sebastes serranoides/S. flavidus (yoy) | 242 | 10.08 | 0.39 | 87.50 | 8.08 | 8 | 28 |
| Sebastes melanops | 132 | 5.50 | 0.35 | 58.33 | 8.23 | 8 | 38 |
| Sebastes atrovirens | 130 | 5.42 | 0.39 | 83.33 | 20.35 | 8 | 38 |
| Embiotoca lateralis | 102 | 4.25 | 0.33 | 66.67 | 12.51 | 8 | 38 |
| Oxyjulis californica | 49 | 2.04 | 0.36 | 4.17 | 10.96 | 8 | 13 |
| Sebastes chrysomelas | 45 | 1.88 | 0.25 | 79.17 | 23.11 | 8 | 33 |
| Embiotoca jacksoni | 24 | 1.00 | 0.23 | 41.67 | 16.33 | 3 | 33 |
| Sebastes pinniger | 17 | 0.71 | 0.25 | 12.50 | 8.00 | 8 | 8 |
| Hexagrammos decagrammus | 16 | 0.67 | 0.19 | 50.00 | 31.13 | 13 | 38 |
| Rhacochilus vacca | 16 | 0.67 | 0.20 | 41.67 | 20.19 | 8 | 28 |
| Hypsurus caryi | 10 | 0.42 | 0.23 | 12.50 | 17.00 | 8 | 18 |
| Sebastes carnatus | 5 | 0.21 | 0.17 | 16.67 | 24.00 | 8 | 33 |
| Sebastes rastrelliger | 3 | 0.13 | 0.17 | 8.33 | 38.00 | 38 | 38 |
| Rhacochilus toxotes | 2 | 0.08 | 0.15 | 8.33 | 35.50 | 28 | 43 |
| Scorpaenichthys marmoratus | 2 | 0.08 | 0.15 | 8.33 | 43.00 | 28 | 58 |
| Girella nigricans | 1 | 0.04 | 0.14 | 4.17 | 28.00 | 28 | 28 |
| Sebastes auriculatus | 1 | 0.04 | 0.14 | 4.17 | 28.00 | 28 | 28 |
| Sebastes caurinus | 1 | 0.04 | 0.14 | 4.17 | 8.00 | 8 | 8 |
| Sebastes paucispinis | 1 | 0.04 | 0.14 | 4.17 | 13.00 | 13 | 13 |
| Semicossyphus pulcher | 1 | 0.04 | 0.14 | 4.17 | 43.00 | 43 | 43 |

**Replicate Transects:** 24
**Total Species:** 21
**Total Abundance:** 1525
**Diversity:** 1.779
**Dominance:** 0.261
**Evenness:** 0.584

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 180 | 7.50 | 0.37 | 70.83 | 14.22 | 3 | 33 |
| Oxyjulis californica | 85 | 3.54 | 0.37 | 37.50 | 12.59 | 8 | 23 |
| Sebastes serranoides/S. flavidus (yoy) | 53 | 2.21 | 0.30 | 58.33 | 10.92 | 3 | 38 |
| Sebastes atrovirens | 16 | 0.67 | 0.20 | 45.83 | 25.81 | 18 | 43 |
| Sebastes melanops | 9 | 0.38 | 0.20 | 20.83 | 13.56 | 8 | 28 |
| Rhacochilus vacca | 7 | 0.29 | 0.20 | 16.67 | 19.43 | 13 | 38 |
| Sebastes paucispinis | 4 | 0.17 | 0.18 | 8.33 | 8.00 | 8 | 8 |
| Embiotoca jacksoni | 3 | 0.13 | 0.17 | 8.33 | 21.33 | 18 | 28 |
| Embiotoca lateralis | 3 | 0.13 | 0.17 | 8.33 | 23.00 | 18 | 28 |
| Girella nigricans | 2 | 0.08 | 0.15 | 8.33 | 33.00 | 28 | 38 |

**Replicate Transects:** 24
**Total Species:** 10
**Total Abundance:** 362
**Diversity:** 1.436
**Dominance:** 0.279
**Evenness:** 0.624

**Site Number:** 5
**Site:** Pescadero*
**Location:** Monterey

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 792 | 33.00 | 0.45 | 100.00 | 12.21 | 3 | 38 |
| Oxyjulis californica | 124 | 5.17 | 0.38 | 16.67 | 8.00 | 8 | 8 |
| Sebastes melanops | 97 | 4.04 | 0.32 | 58.33 | 10.68 | 3 | 38 |
| Embiotoca lateralis | 87 | 3.63 | 0.33 | 79.17 | 11.51 | 3 | 28 |
| Sebastes serranoides/S. flavidus (yoy) | 77 | 3.21 | 0.35 | 50.00 | 10.14 | 8 | 33 |
| Sebastes atrovirens | 39 | 1.63 | 0.24 | 70.83 | 25.56 | 8 | 33 |
| Sebastes carnatus | 28 | 1.17 | 0.24 | 37.50 | 20.32 | 8 | 33 |
| Sebastes chrysomelas | 18 | 0.75 | 0.23 | 25.00 | 21.06 | 8 | 33 |
| Hexagrammos decagrammus | 16 | 0.67 | 0.18 | 58.33 | 33.94 | 8 | 43 |
| Rhacochilus vacca | 15 | 0.63 | 0.21 | 37.50 | 18.33 | 8 | 33 |
| Hypsurus caryi | 11 | 0.46 | 0.20 | 25.00 | 12.55 | 3 | 23 |
| Sebastes paucispinis | 9 | 0.38 | 0.24 | 4.17 | 8.00 | 8 | 8 |
| Embiotoca jacksoni | 7 | 0.29 | 0.20 | 16.67 | 31.57 | 18 | 38 |
| Sebastes miniatus | 4 | 0.17 | 0.17 | 12.50 | 38.00 | 28 | 48 |
| Scorpaenichthys marmoratus | 3 | 0.13 | 0.16 | 12.50 | 33.00 | 23 | 43 |
| Ophiodon elongatus | 2 | 0.08 | 0.15 | 8.33 | 98.00 | 58 | 138 |
| Sebastes rastrelliger | 1 | 0.04 | 0.14 | 4.17 | 38.00 | 38 | 38 |
| Sebastes serriceps | 1 | 0.04 | 0.14 | 4.17 | 33.00 | 33 | 33 |
| Semicossyphus pulcher | 1 | 0.04 | 0.14 | 4.17 | 38.00 | 38 | 38 |

**Replicate Transects:** 24
**Total Species:** 19
**Total Abundance:** 1332
**Diversity:** 1.569
**Dominance:** 0.365
**Evenness:** 0.533

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 241 | 10.04 | 0.33 | 91.67 | 19.74 | 8 | 43 |
| Oxyjulis californica | 129 | 5.38 | 0.42 | 12.50 | 8.23 | 8 | 23 |
| Sebastes serranoides/S. flavidus (yoy) | 23 | 0.96 | 0.23 | 37.50 | 25.83 | 8 | 43 |
| Sebastes melanops | 13 | 0.54 | 0.21 | 33.33 | 28.38 | 18 | 38 |
| Embiotoca lateralis | 5 | 0.21 | 0.17 | 16.67 | 31.00 | 18 | 38 |
| Sebastes atrovirens | 3 | 0.13 | 0.16 | 12.50 | 19.67 | 13 | 28 |
| Scorpaenichthys marmoratus | 1 | 0.04 | 0.14 | 4.17 | 38.00 | 38 | 38 |

**Replicate Transects:** 24
**Total Species:** 7
**Total Abundance:** 415
**Diversity:** 1.052
**Dominance:** 0.403
**Evenness:** 0.541

**Site Number:** 6
**Site:** Stillwater Cove*
**Location:** Monterey

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 199 | 8.29 | 0.38 | 79.17 | 8.90 | 8 | 28 |
| Sebastes melanops | 83 | 3.46 | 0.36 | 37.50 | 9.08 | 8 | 33 |
| Embiotoca lateralis | 51 | 2.13 | 0.28 | 50.00 | 12.41 | 8 | 28 |
| Sebastes serranoides/S. flavidus (yoy) | 45 | 1.88 | 0.27 | 54.17 | 8.67 | 8 | 28 |
| Sebastes atrovirens | 28 | 1.17 | 0.21 | 58.33 | 25.50 | 8 | 33 |
| Sebastes pinniger | 23 | 0.96 | 0.24 | 29.17 | 8.43 | 8 | 13 |
| Sebastes paucispinis | 16 | 0.67 | 0.24 | 16.67 | 11.75 | 8 | 13 |
| Sebastes carnatus | 15 | 0.63 | 0.21 | 37.50 | 22.00 | 8 | 33 |
| Embiotoca jacksoni | 14 | 0.58 | 0.18 | 54.17 | 19.79 | 8 | 28 |
| Sebastes chrysomelas | 14 | 0.58 | 0.22 | 20.83 | 19.07 | 8 | 28 |
| Hypsurus caryi | 12 | 0.50 | 0.23 | 20.83 | 8.42 | 8 | 13 |
| Rhacochilus vacca | 11 | 0.46 | 0.22 | 20.83 | 13.45 | 8 | 23 |
| Hexagrammos decagrammus | 10 | 0.42 | 0.18 | 33.33 | 34.50 | 23 | 38 |
| Sebastes caurinus | 8 | 0.33 | 0.21 | 12.50 | 8.00 | 8 | 8 |
| Oxyjulis californica | 4 | 0.17 | 0.18 | 8.33 | 16.75 | 13 | 18 |
| Ophiodon elongatus | 3 | 0.13 | 0.16 | 12.50 | 66.33 | 63 | 68 |
| Sebastes miniatus | 3 | 0.13 | 0.16 | 12.50 | 36.33 | 33 | 43 |
| Scorpaenichthys marmoratus | 2 | 0.08 | 0.15 | 8.33 | 38.00 | 28 | 48 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 18 |
| **Total Abundance:** | 541 |
| **Diversity:** | 2.181 |
| **Dominance:** | 0.145 |
| **Evenness:** | 0.755 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 64 | 2.67 | 0.32 | 50.00 | 14.95 | 8 | 38 |
| Oxyjulis californica | 34 | 1.42 | 0.33 | 8.33 | 8.15 | 8 | 13 |
| Sebastes melanops | 5 | 0.21 | 0.18 | 12.50 | 22.00 | 8 | 33 |
| Embiotoca lateralis | 4 | 0.17 | 0.18 | 8.33 | 16.75 | 13 | 18 |
| Sebastes serranoides/S. flavidus (yoy) | 4 | 0.17 | 0.17 | 12.50 | 33.00 | 28 | 38 |
| Paralabrax clathratus | 1 | 0.04 | 0.14 | 4.17 | 43.00 | 43 | 43 |
| Rhacochilus vacca | 1 | 0.04 | 0.14 | 4.17 | 28.00 | 28 | 28 |
| Sebastes atrovirens | 1 | 0.04 | 0.14 | 4.17 | 18.00 | 18 | 18 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 8 |
| **Total Abundance:** | 114 |
| **Diversity:** | 1.181 |
| **Dominance:** | 0.251 |
| **Evenness:** | 0.568 |

**Site Number:** 7
**Site:** Monastery*
**Location:** Monterey

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 257 | 10.71 | 0.38 | 79.17 | 10.41 | 8 | 38 |
| Sebastes serranoides/S. flavidus (yoy) | 193 | 8.04 | 0.36 | 70.83 | 9.35 | 8 | 43 |
| Sebastes atrovirens | 48 | 2.00 | 0.27 | 54.17 | 22.06 | 8 | 38 |
| Embiotoca lateralis | 39 | 1.63 | 0.23 | 70.83 | 19.15 | 8 | 43 |
| Sebastes melanops | 17 | 0.71 | 0.20 | 45.83 | 18.29 | 8 | 28 |
| Rhacochilus vacca | 12 | 0.50 | 0.18 | 41.67 | 23.00 | 8 | 43 |
| Hexagrammos decagrammus | 11 | 0.46 | 0.19 | 37.50 | 32.55 | 13 | 43 |
| Oxyjulis californica | 9 | 0.38 | 0.24 | 4.17 | 15.22 | 13 | 23 |
| Sebastes carnatus | 9 | 0.38 | 0.21 | 20.83 | 22.44 | 13 | 28 |
| Sebastes chrysomelas | 7 | 0.29 | 0.17 | 25.00 | 23.71 | 18 | 33 |
| Embiotoca jacksoni | 3 | 0.13 | 0.16 | 12.50 | 33.00 | 28 | 38 |
| Hypsurus caryi | 3 | 0.13 | 0.17 | 8.33 | 18.00 | 13 | 23 |
| Ophiodon elongatus | 3 | 0.13 | 0.16 | 12.50 | 66.33 | 63 | 68 |
| Sebastes pinniger | 2 | 0.08 | 0.15 | 8.33 | 5.50 | 3 | 8 |
| Sebastes miniatus | 1 | 0.04 | 0.14 | 4.17 | 33.00 | 33 | 33 |
| Semicossyphus pulcher | 1 | 0.04 | 0.14 | 4.17 | 38.00 | 38 | 38 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 16 |
| **Total Abundance:** | 615 |
| **Diversity:** | 1.645 |
| **Dominance:** | 0.256 |
| **Evenness:** | 0.593 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 199 | 8.29 | 0.35 | 83.33 | 17.92 | 8 | 43 |
| Sebastes atrovirens | 12 | 0.50 | 0.20 | 29.17 | 24.67 | 18 | 33 |
| Embiotoca lateralis | 7 | 0.29 | 0.18 | 20.83 | 21.57 | 18 | 28 |
| Sebastes serranoides/S. flavidus (yoy) | 7 | 0.29 | 0.19 | 20.83 | 13.71 | 8 | 28 |
| Sebastes melanops | 2 | 0.08 | 0.15 | 8.33 | 23.00 | 23 | 23 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 5 |
| **Total Abundance:** | 227 |
| **Diversity:** | 0.525 |
| **Dominance:** | 0.748 |
| **Evenness:** | 0.326 |

**Site Number:** 8
**Site:** Bluefish Cove*
**Location:** Monterey

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 520 | 21.67 | 0.44 | 87.50 | 11.14 | 3 | 38 |
| Sebastes serranoides/S. flavidus (yoy) | 111 | 4.63 | 0.36 | 62.50 | 8.36 | 3 | 38 |
| Embiotoca lateralis | 42 | 1.75 | 0.24 | 75.00 | 18.24 | 3 | 28 |
| Sebastes carnatus | 38 | 1.58 | 0.26 | 41.67 | 19.97 | 8 | 33 |
| Hypsurus caryi | 29 | 1.21 | 0.26 | 29.17 | 13.17 | 8 | 18 |
| Sebastes melanops | 29 | 1.21 | 0.25 | 41.67 | 12.66 | 3 | 28 |
| Sebastes atrovirens | 25 | 1.04 | 0.22 | 45.83 | 24.00 | 18 | 28 |
| Sebastes chrysomelas | 18 | 0.75 | 0.22 | 41.67 | 22.72 | 18 | 33 |
| Sebastes pinniger | 17 | 0.71 | 0.28 | 4.17 | 12.41 | 8 | 13 |
| Hexagrammos decagrammus | 15 | 0.63 | 0.18 | 54.17 | 35.67 | 8 | 43 |
| Rhacochilus vacca | 13 | 0.54 | 0.21 | 33.33 | 16.85 | 8 | 38 |
| Embiotoca jacksoni | 9 | 0.38 | 0.18 | 29.17 | 23.56 | 13 | 28 |
| Ophiodon elongatus | 6 | 0.25 | 0.17 | 25.00 | 56.33 | 38 | 83 |
| Sebastes miniatus | 4 | 0.17 | 0.16 | 16.67 | 38.00 | 28 | 48 |
| Sebastes paucispinis | 4 | 0.17 | 0.19 | 4.17 | 18.00 | 18 | 18 |
| Scorpaenichthys marmoratus | 3 | 0.13 | 0.16 | 12.50 | 41.33 | 28 | 48 |
| Sebastes caurinus | 3 | 0.13 | 0.17 | 8.33 | 29.67 | 8 | 43 |
| Chromis punctipinnis | 2 | 0.08 | 0.15 | 8.33 | 18.00 | 18 | 18 |
| Sebastes nebulosus | 1 | 0.04 | 0.14 | 4.17 | 28.00 | 28 | 28 |
| Semicossyphus pulcher | 1 | 0.04 | 0.14 | 4.17 | 43.00 | 43 | 43 |

**Replicate Transects:** 24
**Total Species:** 20
**Total Abundance:** 890
**Diversity:** 1.658
**Dominance:** 0.347
**Evenness:** 0.554

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 345 | 14.38 | 0.42 | 83.33 | 21.32 | 8 | 38 |
| Sebastes serranoides/S. flavidus (yoy) | 43 | 1.79 | 0.26 | 54.17 | 28.47 | 8 | 43 |
| Oxyjulis californica | 26 | 1.08 | 0.31 | 4.17 | 13.00 | 8 | 18 |
| Sebastes atrovirens | 16 | 0.67 | 0.22 | 37.50 | 26.44 | 8 | 33 |
| Chromis punctipinnis | 8 | 0.33 | 0.23 | 4.17 | 18.63 | 18 | 23 |
| Rhacochilus vacca | 8 | 0.33 | 0.22 | 8.33 | 23.63 | 13 | 33 |
| Embiotoca lateralis | 4 | 0.17 | 0.16 | 16.67 | 28.00 | 23 | 33 |
| Sebastes melanops | 3 | 0.13 | 0.16 | 12.50 | 24.67 | 23 | 28 |
| Embiotoca jacksoni | 2 | 0.08 | 0.16 | 4.17 | 33.00 | 33 | 33 |
| Hypsurus caryi | 2 | 0.08 | 0.15 | 8.33 | 20.50 | 18 | 23 |
| Sebastes carnatus | 2 | 0.08 | 0.15 | 8.33 | 25.50 | 23 | 28 |
| Sebastes paucispinis | 1 | 0.04 | 0.14 | 4.17 | 13.00 | 13 | 13 |

**Replicate Transects:** 24
**Total Species:** 12
**Total Abundance:** 460
**Diversity:** 1.013
**Dominance:** 0.554
**Evenness:** 0.408

**Site Number:** 9
**Site:** Weston*
**Location:** Monterey

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 418 | 17.42 | 0.41 | 95.83 | 12.01 | 8 | 38 |
| Sebastes carnatus | 51 | 2.13 | 0.28 | 54.17 | 18.88 | 8 | 33 |
| Sebastes atrovirens | 38 | 1.58 | 0.24 | 62.50 | 24.05 | 13 | 33 |
| Sebastes serranoides/S. flavidus (yoy) | 35 | 1.46 | 0.26 | 45.83 | 11.86 | 8 | 33 |
| Sebastes melanops | 34 | 1.42 | 0.28 | 37.50 | 12.71 | 8 | 33 |
| Embiotoca lateralis | 17 | 0.71 | 0.21 | 37.50 | 19.76 | 8 | 28 |
| Oxyjulis californica | 16 | 0.67 | 0.26 | 8.33 | 11.75 | 8 | 13 |
| Sebastes miniatus | 14 | 0.58 | 0.20 | 33.33 | 39.07 | 28 | 43 |
| Sebastes chrysomelas | 12 | 0.50 | 0.19 | 37.50 | 21.33 | 8 | 28 |
| Hexagrammos decagrammus | 6 | 0.25 | 0.17 | 20.83 | 38.00 | 38 | 38 |
| Sebastes caurinus | 5 | 0.21 | 0.17 | 16.67 | 40.00 | 23 | 48 |
| Sebastes nebulosus | 5 | 0.21 | 0.18 | 12.50 | 25.00 | 18 | 33 |
| Sebastes serriceps | 2 | 0.08 | 0.15 | 8.33 | 23.00 | 23 | 23 |
| Embiotoca jacksoni | 1 | 0.04 | 0.14 | 4.17 | 18.00 | 18 | 18 |
| Ophiodon elongatus | 1 | 0.04 | 0.14 | 4.17 | 108.00 | 108 | 108 |
| Scorpaenichthys marmoratus | 1 | 0.04 | 0.14 | 4.17 | 58.00 | 58 | 58 |
| Semicossyphus pulcher | 1 | 0.04 | 0.14 | 4.17 | 43.00 | 43 | 43 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 17 |
| **Total Abundance:** | 657 |
| **Diversity:** | 1.474 |
| **Dominance:** | 0.400 |
| **Evenness:** | 0.520 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 309 | 12.88 | 0.40 | 87.50 | 18.87 | 8 | 43 |
| Oxyjulis californica | 91 | 3.79 | 0.40 | 12.50 | 17.18 | 13 | 18 |
| Sebastes serranoides/S. flavidus (yoy) | 25 | 1.04 | 0.22 | 45.83 | 26.80 | 13 | 48 |
| Rhacochilus vacca | 3 | 0.13 | 0.18 | 4.17 | 23.00 | 23 | 23 |
| Embiotoca lateralis | 2 | 0.08 | 0.15 | 8.33 | 25.50 | 23 | 28 |
| Sebastes melanops | 2 | 0.08 | 0.15 | 8.33 | 30.50 | 18 | 43 |
| Semicossyphus pulcher | 1 | 0.04 | 0.14 | 4.17 | 43.00 | 43 | 43 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 7 |
| **Total Abundance:** | 433 |
| **Diversity:** | 0.830 |
| **Dominance:** | 0.531 |
| **Evenness:** | 0.427 |

**Site Number:** 10
**Site:** Andrew Molera*
**Location:** Monterey

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 100 | 4.17 | 0.32 | 70.83 | 18.50 | 8 | 33 |
| Sebastes atrovirens | 34 | 1.42 | 0.25 | 50.00 | 29.76 | 23 | 33 |
| Sebastes serranoides/S. flavidus (yoy) | 27 | 1.13 | 0.24 | 45.83 | 30.41 | 8 | 43 |
| Embiotoca lateralis | 21 | 0.88 | 0.22 | 45.83 | 19.43 | 8 | 28 |
| Sebastes carnatus | 16 | 0.67 | 0.21 | 25.00 | 20.81 | 8 | 28 |
| Sebastes chrysomelas | 13 | 0.54 | 0.19 | 37.50 | 21.85 | 13 | 28 |
| Sebastes miniatus | 9 | 0.38 | 0.19 | 29.17 | 39.67 | 23 | 43 |
| Embiotoca jacksoni | 8 | 0.33 | 0.20 | 20.83 | 24.25 | 13 | 33 |
| Hexagrammos decagrammus | 8 | 0.33 | 0.17 | 33.33 | 31.75 | 18 | 38 |
| Sebastes melanops | 8 | 0.33 | 0.19 | 20.83 | 16.13 | 8 | 33 |
| Hypsurus caryi | 4 | 0.17 | 0.18 | 8.33 | 18.00 | 13 | 23 |
| Scorpaenichthys marmoratus | 3 | 0.13 | 0.16 | 12.50 | 41.33 | 38 | 43 |
| Ophiodon elongatus | 2 | 0.08 | 0.15 | 8.33 | 63.00 | 58 | 68 |
| Rhacochilus vacca | 1 | 0.04 | 0.14 | 4.17 | 13.00 | 13 | 13 |
| Sebastes rastrelliger | 1 | 0.04 | 0.14 | 4.17 | 38.00 | 38 | 38 |
| Semicossyphus pulcher | 1 | 0.04 | 0.14 | 4.17 | 23.00 | 23 | 23 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 16 |
| **Total Abundance:** | 256 |
| **Diversity:** | 2.063 |
| **Dominance:** | 0.117 |
| **Evenness:** | 0.744 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 140 | 5.83 | 0.35 | 70.83 | 25.96 | 13 | 38 |
| Sebastes serranoides/S. flavidus (yoy) | 22 | 0.92 | 0.23 | 54.17 | 37.55 | 18 | 48 |
| Sebastes atrovirens | 7 | 0.29 | 0.21 | 8.33 | 31.57 | 23 | 38 |
| Sebastes melanops | 5 | 0.21 | 0.18 | 12.50 | 25.00 | 18 | 28 |
| Rhacochilus toxotes | 2 | 0.08 | 0.16 | 4.17 | 35.50 | 33 | 38 |
| Embiotoca lateralis | 1 | 0.04 | 0.14 | 4.17 | 18.00 | 18 | 18 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 6 |
| **Total Abundance:** | 177 |
| **Diversity:** | 0.751 |
| **Dominance:** | 0.588 |
| **Evenness:** | 0.419 |

**Site Number:** 11
**Site:** Esalen*
**Location:** Monterey

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 284 | 11.83 | 0.40 | 75.00 | 19.46 | 8 | 38 |
| Sebastes carnatus | 32 | 1.33 | 0.24 | 41.67 | 24.72 | 18 | 38 |
| Sebastes atrovirens | 29 | 1.21 | 0.23 | 54.17 | 26.45 | 18 | 38 |
| Embiotoca lateralis | 26 | 1.08 | 0.20 | 70.83 | 19.54 | 8 | 38 |
| Oxyjulis californica | 17 | 0.71 | 0.26 | 8.33 | 10.35 | 8 | 18 |
| Sebastes serranoides/S. flavidus (yoy) | 15 | 0.63 | 0.21 | 37.50 | 34.67 | 28 | 43 |
| Sebastes chrysomelas | 9 | 0.38 | 0.17 | 37.50 | 22.44 | 18 | 33 |
| Hexagrammos decagrammus | 8 | 0.33 | 0.18 | 29.17 | 31.13 | 23 | 43 |
| Sebastes miniatus | 7 | 0.29 | 0.20 | 16.67 | 45.86 | 38 | 53 |
| Semicossyphus pulcher | 5 | 0.21 | 0.17 | 16.67 | 59.00 | 43 | 88 |
| Rhacochilus vacca | 4 | 0.17 | 0.16 | 16.67 | 21.75 | 13 | 28 |
| Ophiodon elongatus | 3 | 0.13 | 0.17 | 8.33 | 76.33 | 68 | 83 |
| Embiotoca jacksoni | 2 | 0.08 | 0.15 | 8.33 | 38.00 | 38 | 38 |
| Sebastes melanops | 2 | 0.08 | 0.15 | 8.33 | 20.50 | 13 | 28 |
| Sebastes caurinus | 1 | 0.04 | 0.14 | 4.17 | 38.00 | 38 | 38 |
| Sebastes pinniger | 1 | 0.04 | 0.14 | 4.17 | 38.00 | 38 | 38 |
| Sebastes serriceps | 1 | 0.04 | 0.14 | 4.17 | 28.00 | 28 | 28 |

**Replicate Transects:** 24
**Total Species:** 17
**Total Abundance:** 446
**Diversity:** 1.490
**Dominance:** 0.389
**Evenness:** 0.526

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 294 | 12.25 | 0.41 | 87.50 | 24.56 | 13 | 43 |
| Oxyjulis californica | 45 | 1.88 | 0.33 | 16.67 | 9.00 | 3 | 18 |
| Sebastes serranoides/S. flavidus (yoy) | 39 | 1.63 | 0.28 | 41.67 | 35.05 | 23 | 48 |
| Sebastes melanops | 3 | 0.13 | 0.17 | 8.33 | 29.67 | 23 | 38 |
| Sebastes atrovirens | 2 | 0.08 | 0.15 | 8.33 | 23.00 | 23 | 23 |
| Paralabrax clathratus | 1 | 0.04 | 0.14 | 4.17 | 38.00 | 38 | 38 |
| Rhacochilus vacca | 1 | 0.04 | 0.14 | 4.17 | 28.00 | 28 | 28 |
| Semicossyphus pulcher | 1 | 0.04 | 0.14 | 4.17 | 28.00 | 28 | 28 |

**Replicate Transects:** 24
**Total Species:** 8
**Total Abundance:** 386
**Diversity:** 0.800
**Dominance:** 0.577
**Evenness:** 0.385

**Site Number:** 12
**Site:** Big Creek*
**Location:** Monterey

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 474 | 19.75 | 0.40 | 95.83 | 15.12 | 8 | 43 |
| Embiotoca lateralis | 64 | 2.67 | 0.26 | 66.67 | 20.50 | 8 | 38 |
| Sebastes carnatus | 57 | 2.38 | 0.27 | 50.00 | 22.30 | 8 | 33 |
| Sebastes serranoides/S. flavidus (yoy) | 47 | 1.96 | 0.27 | 54.17 | 15.02 | 8 | 38 |
| Oxyjulis californica | 42 | 1.75 | 0.35 | 8.33 | 14.67 | 8 | 18 |
| Rhacochilus vacca | 36 | 1.50 | 0.29 | 33.33 | 26.19 | 8 | 38 |
| Sebastes melanops | 35 | 1.46 | 0.23 | 50.00 | 23.00 | 8 | 38 |
| Sebastes atrovirens | 30 | 1.25 | 0.24 | 54.17 | 27.83 | 13 | 38 |
| Hexagrammos decagrammus | 29 | 1.21 | 0.21 | 79.17 | 32.66 | 13 | 43 |
| Sebastes chrysomelas | 25 | 1.04 | 0.23 | 45.83 | 25.40 | 8 | 33 |
| Sebastes caurinus | 12 | 0.50 | 0.22 | 25.00 | 23.00 | 8 | 33 |
| Embiotoca jacksoni | 11 | 0.46 | 0.21 | 25.00 | 23.91 | 13 | 38 |
| Sebastes miniatus | 8 | 0.33 | 0.20 | 16.67 | 39.88 | 23 | 53 |
| Sebastes serriceps | 5 | 0.21 | 0.17 | 16.67 | 28.00 | 18 | 38 |
| Semicossyphus pulcher | 3 | 0.13 | 0.16 | 12.50 | 58.00 | 33 | 88 |
| Hypsurus caryi | 2 | 0.08 | 0.15 | 8.33 | 13.00 | 13 | 13 |
| Ophiodon elongatus | 2 | 0.08 | 0.15 | 8.33 | 83.00 | 68 | 98 |
| Scorpaenichthys marmoratus | 2 | 0.08 | 0.15 | 8.33 | 43.00 | 43 | 43 |
| Sebastes pinniger | 2 | 0.08 | 0.15 | 8.33 | 40.50 | 38 | 43 |

**Replicate Transects:** 24
**Total Species:** 19
**Total Abundance:** 886
**Diversity:** 1.844
**Dominance:** 0.288
**Evenness:** 0.626

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 544 | 22.67 | 0.47 | 87.50 | 22.38 | 8 | 48 |
| Sebastes serranoides/S. flavidus (yoy) | 19 | 0.79 | 0.21 | 37.50 | 33.00 | 8 | 48 |
| Oxyjulis californica | 11 | 0.46 | 0.22 | 16.67 | 14.82 | 8 | 23 |
| Embiotoca lateralis | 9 | 0.38 | 0.22 | 12.50 | 26.89 | 18 | 33 |
| Sebastes melanops | 6 | 0.25 | 0.18 | 16.67 | 25.50 | 23 | 28 |
| Embiotoca jacksoni | 3 | 0.13 | 0.17 | 8.33 | 23.00 | 18 | 28 |
| Rhacochilus vacca | 2 | 0.08 | 0.15 | 8.33 | 28.00 | 28 | 28 |
| Sebastes atrovirens | 2 | 0.08 | 0.15 | 8.33 | 25.50 | 23 | 28 |
| Sebastes carnatus | 2 | 0.08 | 0.16 | 4.17 | 8.00 | 8 | 8 |
| Hypsurus caryi | 1 | 0.04 | 0.14 | 4.17 | 18.00 | 18 | 18 |

**Replicate Transects:** 24
**Total Species:** 10
**Total Abundance:** 599
**Diversity:** 0.473
**Dominance:** 0.819
**Evenness:** 0.205

**Site Number:** 13
**Site:** Lopez Rock*
**Location:** Monterey

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 299 | 12.46 | 0.42 | 70.83 | 22.38 | 3 | 38 |
| Embiotoca lateralis | 43 | 1.79 | 0.25 | 66.67 | 19.51 | 8 | 28 |
| Sebastes serranoides/S. flavidus (yoy) | 28 | 1.17 | 0.22 | 50.00 | 23.18 | 8 | 43 |
| Sebastes carnatus | 22 | 0.92 | 0.23 | 37.50 | 21.41 | 18 | 28 |
| Rhacochilus vacca | 13 | 0.54 | 0.19 | 37.50 | 21.08 | 8 | 28 |
| Sebastes atrovirens | 13 | 0.54 | 0.21 | 25.00 | 24.54 | 18 | 33 |
| Oxyjulis californica | 12 | 0.50 | 0.23 | 12.50 | 13.42 | 13 | 18 |
| Sebastes melanops | 10 | 0.42 | 0.19 | 29.17 | 20.50 | 8 | 33 |
| Sebastes chrysomelas | 8 | 0.33 | 0.20 | 16.67 | 23.00 | 18 | 28 |
| Embiotoca jacksoni | 7 | 0.29 | 0.17 | 29.17 | 15.14 | 3 | 23 |
| Hexagrammos decagrammus | 7 | 0.29 | 0.18 | 20.83 | 25.86 | 13 | 38 |
| Sebastes pinniger | 6 | 0.25 | 0.17 | 20.83 | 26.33 | 8 | 43 |
| Semicossyphus pulcher | 6 | 0.25 | 0.18 | 16.67 | 60.50 | 38 | 83 |
| Sebastes caurinus | 3 | 0.13 | 0.16 | 12.50 | 28.00 | 8 | 53 |
| Sebastes miniatus | 3 | 0.13 | 0.17 | 8.33 | 49.67 | 43 | 53 |
| Ophiodon elongatus | 2 | 0.08 | 0.15 | 8.33 | 58.00 | 53 | 63 |
| Scorpaenichthys marmoratus | 1 | 0.04 | 0.14 | 4.17 | 38.00 | 38 | 38 |
| Sebastes nebulosus | 1 | 0.04 | 0.14 | 4.17 | 23.00 | 23 | 23 |
| Sebastes paucispinis | 1 | 0.04 | 0.14 | 4.17 | 13.00 | 13 | 13 |
| Sebastes rastrelliger | 1 | 0.04 | 0.14 | 4.17 | 33.00 | 33 | 33 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 20 |
| **Total Abundance:** | 486 |
| **Diversity:** | 1.617 |
| **Dominance:** | 0.364 |
| **Evenness:** | 0.540 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 438 | 18.25 | 0.44 | 79.17 | 27.61 | 8 | 43 |
| Oxyjulis californica | 55 | 2.29 | 0.35 | 20.83 | 17.91 | 13 | 23 |
| Sebastes serranoides/S. flavidus (yoy) | 37 | 1.54 | 0.27 | 29.17 | 31.92 | 23 | 43 |
| Hypsurus caryi | 2 | 0.08 | 0.16 | 4.17 | 18.00 | 18 | 18 |
| Sebastes melanops | 2 | 0.08 | 0.15 | 8.33 | 33.00 | 28 | 38 |
| Embiotoca lateralis | 1 | 0.04 | 0.14 | 4.17 | 23.00 | 23 | 23 |
| Semicossyphus pulcher | 1 | 0.04 | 0.14 | 4.17 | 43.00 | 43 | 43 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 7 |
| **Total Abundance:** | 536 |
| **Diversity:** | 0.646 |
| **Dominance:** | 0.669 |
| **Evenness:** | 0.332 |

**Site Number:** 14
**Site:** Lucia*
**Location:** Monterey

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 27 | 4.50 | 0.64 | 66.67 | 14.48 | 3 | 33 |
| Sebastes serranoides/S. flavidus (yoy) | 16 | 2.67 | 0.54 | 66.67 | 9.88 | 8 | 38 |
| Sebastes melanops | 5 | 0.83 | 0.43 | 50.00 | 12.00 | 8 | 28 |
| Embiotoca lateralis | 4 | 0.67 | 0.43 | 33.33 | 25.50 | 23 | 28 |
| Sebastes carnatus | 3 | 0.50 | 0.39 | 33.33 | 21.33 | 13 | 28 |
| Sebastes chrysomelas | 3 | 0.50 | 0.39 | 33.33 | 19.67 | 13 | 28 |
| Hexagrammos decagrammus | 2 | 0.33 | 0.35 | 33.33 | 38.00 | 38 | 38 |
| Sebastes atrovirens | 2 | 0.33 | 0.35 | 33.33 | 33.00 | 33 | 33 |
| Ophiodon elongatus | 1 | 0.17 | 0.33 | 16.67 | 48.00 | 48 | 48 |

| | |
|---|---|
| **Replicate Transects:** | 6 |
| **Total Species:** | 9 |
| **Total Abundance:** | 63 |
| **Diversity:** | 1.662 |
| **Dominance:** | 0.188 |
| **Evenness:** | 0.756 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 83 | 13.83 | 0.86 | 50.00 | 23.96 | 18 | 38 |
| Sebastes serranoides/S. flavidus (yoy) | 2 | 0.33 | 0.35 | 33.33 | 30.50 | 23 | 38 |

| | |
|---|---|
| **Replicate Transects:** | 6 |
| **Total Species:** | 2 |
| **Total Abundance:** | 85 |
| **Diversity:** | 0.111 |
| **Dominance:** | 0.951 |
| **Evenness:** | 0.160 |

**Site Number:** 15
**Site:** Wild Cattle
**Location:** Monterey

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 150 | 6.25 | 2.28 | 50.00 | 21.41 | 5 | 35 |
| Embiotoca lateralis | 95 | 3.96 | 0.86 | 87.50 | 19.45 | 5 | 35 |
| Sebastes serranoides/S. flavidus | 44 | 1.83 | 0.76 | 54.17 | 10.16 | 6 | 46 |
| Sebastes melanops | 31 | 1.29 | 0.42 | 37.50 | 18.68 | 6 | 35 |
| Hexagrammos decagrammus | 24 | 1.00 | 0.25 | 58.33 | 24.63 | 10 | 44 |
| Rhacochilus vacca | 16 | 0.67 | 0.24 | 33.33 | 23.38 | 5 | 35 |
| Sebastes chrysomelas | 13 | 0.54 | 0.27 | 25.00 | 25.46 | 12 | 36 |
| Sebastes atrovirens | 11 | 0.46 | 0.19 | 25.00 | 30.36 | 23 | 35 |
| Sebastes carnatus | 11 | 0.46 | 0.20 | 25.00 | 23.82 | 12 | 35 |
| Sebastes miniatus | 8 | 0.33 | 0.25 | 12.50 | 45.88 | 42 | 50 |
| Rhinogobiops nicholsi | 7 | 0.29 | 0.18 | 12.50 | 11.14 | 10 | 12 |
| Aulorhynchus flavidus | 6 | 0.25 | 0.12 | 16.67 | 12.17 | 10 | 15 |
| Embiotoca jacksoni | 6 | 0.25 | 0.14 | 16.67 | 26.17 | 7 | 35 |
| Oxylebius pictus | 6 | 0.25 | 0.11 | 20.83 | 14.33 | 10 | 18 |
| Brachyistius frenatus | 3 | 0.13 | 0.09 | 8.33 | 10.00 | 6 | 12 |
| Sebastes caurinus | 3 | 0.13 | 0.09 | 8.33 | 21.67 | 11 | 29 |
| Cymatogaster aggregata | 2 | 0.08 | 0.08 | 4.17 | 14.50 | 7 | 22 |
| Scorpaenichthys marmoratus | 2 | 0.08 | 0.06 | 8.33 | 34.00 | 28 | 40 |
| Sebastes pinniger | 2 | 0.08 | 0.06 | 8.33 | 5.50 | 4 | 7 |
| Sebastes serriceps | 2 | 0.08 | 0.08 | 4.17 | 12.50 | 10 | 15 |
| Hypsurus caryi | 1 | 0.04 | 0.04 | 4.17 | 13.00 | 13 | 13 |
| Rhacochilus toxotes | 1 | 0.04 | 0.04 | 4.17 | 44.00 | 44 | 44 |

**Replicate Transects:** 24
**Total Species:** 22
**Total Abundance:** 444
**Diversity:** 2.180
**Dominance:** 0.135
**Evenness:** 0.705

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Aulorhynchus flavidus | 201 | 8.38 | 8.33 | 8.33 | 12.01 | 12 | 15 |
| Sebastes mystinus | 143 | 5.96 | 1.85 | 58.33 | 22.02 | 7 | 40 |
| Sebastes serranoides/S. flavidus | 9 | 0.38 | 0.13 | 29.17 | 29.44 | 12 | 41 |
| Sebastes melanops | 7 | 0.29 | 0.15 | 16.67 | 30.71 | 22 | 36 |
| Oxyjulis californica | 6 | 0.25 | 0.21 | 8.33 | 14.83 | 12 | 17 |
| Rhacochilus vacca | 5 | 0.21 | 0.10 | 16.67 | 29.80 | 23 | 36 |
| Sebastes atrovirens | 4 | 0.17 | 0.08 | 16.67 | 27.75 | 22 | 33 |
| Embiotoca lateralis | 3 | 0.13 | 0.07 | 12.50 | 28.00 | 24 | 32 |
| Brachyistius frenatus | 1 | 0.04 | 0.04 | 4.17 | 16.00 | 16 | 16 |
| Hexagrammos decagrammus | 1 | 0.04 | 0.04 | 4.17 | 35.00 | 35 | 35 |
| Ophiodon elongatus | 1 | 0.04 | 0.04 | 4.17 | 102.00 | 102 | 102 |
| Rhacochilus toxotes | 1 | 0.04 | 0.04 | 4.17 | 39.00 | 39 | 39 |
| Synchirus gilli | 1 | 0.04 | 0.04 | 4.17 | 6.00 | 6 | 6 |

**Replicate Transects:** 24
**Total Species:** 13
**Total Abundance:** 383
**Diversity:** 1.153
**Dominance:** 0.377
**Evenness:** 0.449

**Site Number:** 16
**Site:** Plaskett Rock
**Location:** Monterey

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 528 | 22.00 | 6.41 | 95.83 | 17.85 | 6 | 40 |
| Oxyjulis californica | 64 | 2.67 | 2.26 | 12.50 | 7.03 | 5 | 20 |
| Embiotoca lateralis | 44 | 1.83 | 0.29 | 83.33 | 17.18 | 6 | 35 |
| Sebastes serranoides/S. flavidus | 35 | 1.46 | 0.64 | 29.17 | 18.63 | 7 | 43 |
| Sebastes atrovirens | 24 | 1.00 | 0.30 | 50.00 | 27.29 | 12 | 37 |
| Oxylebius pictus | 21 | 0.88 | 0.19 | 58.33 | 14.14 | 9 | 17 |
| Sebastes carnatus | 21 | 0.88 | 0.37 | 37.50 | 21.57 | 12 | 27 |
| Sebastes melanops | 21 | 0.88 | 0.28 | 45.83 | 20.81 | 7 | 37 |
| Rhacochilus vacca | 19 | 0.79 | 0.27 | 41.67 | 20.95 | 14 | 36 |
| Sebastes chrysomelas | 16 | 0.67 | 0.20 | 45.83 | 18.81 | 8 | 26 |
| Sebastes pinniger | 7 | 0.29 | 0.11 | 25.00 | 43.86 | 38 | 47 |
| Embiotoca jacksoni | 6 | 0.25 | 0.09 | 25.00 | 23.67 | 13 | 33 |
| Sebastes miniatus | 6 | 0.25 | 0.17 | 8.33 | 43.33 | 38 | 50 |
| Semicossyphus pulcher | 4 | 0.17 | 0.10 | 12.50 | 44.00 | 36 | 50 |
| Hexagrammos decagrammus | 3 | 0.13 | 0.07 | 12.50 | 31.33 | 24 | 38 |
| Scorpaenichthys marmoratus | 3 | 0.13 | 0.09 | 8.33 | 45.00 | 34 | 58 |
| Hypsurus caryi | 2 | 0.08 | 0.06 | 8.33 | 14.00 | 13 | 15 |
| Ophiodon elongatus | 1 | 0.04 | 0.04 | 4.17 | 110.00 | 110 | 110 |
| Sebastes rastrelliger | 1 | 0.04 | 0.04 | 4.17 | 24.00 | 24 | 24 |
| Sebastes serriceps | 1 | 0.04 | 0.04 | 4.17 | 32.00 | 32 | 32 |

**Replicate Transects:** 24
**Total Species:** 20
**Total Abundance:** 827
**Diversity:** 1.537
**Dominance:** 0.405
**Evenness:** 0.513

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 453 | 18.88 | 4.58 | 91.67 | 22.05 | 10 | 42 |
| Oxyjulis californica | 36 | 1.50 | 0.77 | 33.33 | 12.11 | 9 | 19 |
| Sebastes serranoides/S. flavidus | 33 | 1.38 | 0.38 | 54.17 | 30.06 | 12 | 46 |
| Aulorhynchus flavidus | 26 | 1.08 | 0.72 | 12.50 | 9.69 | 6 | 12 |
| Sebastes atrovirens | 8 | 0.33 | 0.19 | 16.67 | 22.88 | 10 | 30 |
| Sebastes melanops | 8 | 0.33 | 0.14 | 20.83 | 26.88 | 18 | 34 |
| Embiotoca lateralis | 4 | 0.17 | 0.10 | 12.50 | 28.50 | 22 | 36 |
| Semicossyphus pulcher | 1 | 0.04 | 0.04 | 4.17 | 38.00 | 38 | 38 |

**Replicate Transects:** 24
**Total Species:** 8
**Total Abundance:** 569
**Diversity:** 0.828
**Dominance:** 0.628
**Evenness:** 0.398

**Site Number:** 17
**Site:** Duck Pond
**Location:** Monterey

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 344 | 14.96 | 4.40 | 86.96 | 22.22 | 5 | 38 |
| Embiotoca lateralis | 80 | 3.48 | 0.56 | 91.30 | 18.69 | 8 | 35 |
| Sebastes melanops | 80 | 3.48 | 1.37 | 47.83 | 18.59 | 6 | 36 |
| Sebastes serranoides/S. flavidus | 62 | 2.70 | 0.90 | 52.17 | 10.32 | 6 | 35 |
| Oxylebius pictus | 30 | 1.30 | 0.36 | 56.52 | 14.27 | 11 | 22 |
| Sebastes carnatus | 29 | 1.26 | 0.41 | 43.48 | 24.24 | 10 | 35 |
| Sebastes chrysomelas | 24 | 1.04 | 0.33 | 43.48 | 22.21 | 10 | 29 |
| Hexagrammos decagrammus | 16 | 0.70 | 0.16 | 56.52 | 28.94 | 10 | 41 |
| Sebastes atrovirens | 12 | 0.52 | 0.19 | 30.43 | 31.58 | 20 | 44 |
| Embiotoca jacksoni | 10 | 0.43 | 0.20 | 26.09 | 17.30 | 6 | 32 |
| Sebastes miniatus | 8 | 0.35 | 0.13 | 26.09 | 46.00 | 40 | 52 |
| Rhacochilus vacca | 7 | 0.30 | 0.12 | 26.09 | 22.86 | 12 | 30 |
| Hypsurus caryi | 6 | 0.26 | 0.19 | 8.70 | 13.83 | 9 | 16 |
| Ophiodon elongatus | 4 | 0.17 | 0.08 | 17.39 | 94.75 | 75 | 140 |
| Jordania zonope | 3 | 0.13 | 0.07 | 13.04 | 11.67 | 10 | 13 |
| Scorpaenichthys marmoratus | 3 | 0.13 | 0.07 | 13.04 | 37.67 | 18 | 55 |
| Sebastes pinniger | 3 | 0.13 | 0.10 | 8.70 | 31.00 | 9 | 48 |
| Rhinogobiops nicholsi | 2 | 0.09 | 0.06 | 8.70 | 11.50 | 10 | 13 |
| Brachyistius frenatus | 1 | 0.04 | 0.04 | 4.35 | 10.00 | 10 | 10 |
| Rhacochilus toxotes | 1 | 0.04 | 0.04 | 4.35 | 24.00 | 24 | 24 |

**Replicate Transects:** 23
**Total Species:** 20
**Total Abundance:** 725
**Diversity:** 1.900
**Dominance:** 0.238
**Evenness:** 0.634

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 278 | 11.58 | 2.40 | 79.17 | 25.49 | 6 | 42 |
| Oxyjulis californica | 32 | 1.33 | 1.33 | 4.17 | 9.06 | 8 | 10 |
| Sebastes serranoides/S. flavidus | 32 | 1.33 | 0.86 | 20.83 | 15.59 | 6 | 40 |
| Sebastes melanops | 8 | 0.33 | 0.18 | 16.67 | 30.25 | 28 | 35 |
| Embiotoca lateralis | 7 | 0.29 | 0.15 | 16.67 | 13.71 | 8 | 20 |
| Rhacochilus vacca | 5 | 0.21 | 0.08 | 20.83 | 21.00 | 15 | 28 |
| Sebastes atrovirens | 3 | 0.13 | 0.09 | 8.33 | 29.33 | 25 | 35 |
| Embiotoca jacksoni | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Hexagrammos decagrammus | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |
| Sebastes chrysomelas | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |
| Sebastes chrysomelas/S. carnatus (yoy) | 1 | 0.04 | 0.04 | 4.17 | 4.00 | 4 | 4 |

**Replicate Transects:** 24
**Total Species:** 11
**Total Abundance:** 369
**Diversity:** 0.957
**Dominance:** 0.555
**Evenness:** 0.399

**Site Number:** 18
**Site:** Salmon Creek*
**Location:** Monterey

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 17 | 2.83 | 0.53 | 83.33 | 21.24 | 3 | 33 |
| Hexagrammos decagrammus | 8 | 1.33 | 0.45 | 66.67 | 40.50 | 33 | 43 |
| Sebastes serranoides/S. flavidus (yoy) | 8 | 1.33 | 0.49 | 33.33 | 8.00 | 8 | 8 |
| Sebastes carnatus | 6 | 1.00 | 0.40 | 66.67 | 27.17 | 23 | 28 |
| Sebastes atrovirens | 5 | 0.83 | 0.38 | 66.67 | 32.00 | 28 | 33 |
| Sebastes melanops | 5 | 0.83 | 0.46 | 33.33 | 18.00 | 3 | 33 |
| Embiotoca lateralis | 3 | 0.50 | 0.43 | 16.67 | 23.00 | 23 | 23 |
| Ophiodon elongatus | 3 | 0.50 | 0.35 | 50.00 | 56.33 | 43 | 68 |
| Scorpaenichthys marmoratus | 1 | 0.17 | 0.33 | 16.67 | 38.00 | 38 | 38 |

| | |
|---|---|
| **Replicate Transects:** | 6 |
| **Total Species:** | 9 |
| **Total Abundance:** | 56 |
| **Diversity:** | 1.975 |
| **Dominance:** | 0.066 |
| **Evenness:** | 0.899 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 12 | 2.00 | 0.59 | 33.33 | 28.83 | 28 | 33 |
| Sebastes serranoides/S. flavidus (yoy) | 4 | 0.67 | 0.43 | 33.33 | 15.50 | 8 | 38 |

| | |
|---|---|
| **Replicate Transects:** | 6 |
| **Total Species:** | 2 |
| **Total Abundance:** | 16 |
| **Diversity:** | 0.563 |
| **Dominance:** | 0.399 |
| **Evenness:** | 0.813 |

**Site Number:** 19
**Site:** La Cruz
**Location:** San Luis Obispo

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Aulorhynchus flavidus | 90 | 5.00 | 5.00 | 5.56 | 11.50 | 10 | 13 |
| Sebastes mystinus | 86 | 4.78 | 1.53 | 72.22 | 25.17 | 8 | 36 |
| Oxyjulis californica | 35 | 1.94 | 1.28 | 16.67 | 12.69 | 4 | 20 |
| Embiotoca lateralis | 10 | 0.56 | 0.23 | 27.78 | 23.60 | 9 | 38 |
| Hypsurus caryi | 10 | 0.56 | 0.22 | 33.33 | 15.40 | 10 | 26 |
| Hexagrammos decagrammus | 6 | 0.33 | 0.20 | 16.67 | 24.33 | 14 | 34 |
| Sebastes serranoides/S. flavidus | 5 | 0.28 | 0.14 | 22.22 | 28.80 | 18 | 42 |
| Oxylebius pictus | 4 | 0.22 | 0.13 | 16.67 | 17.50 | 15 | 20 |
| Sebastes atrovirens | 3 | 0.17 | 0.09 | 16.67 | 31.00 | 26 | 34 |
| Sebastes carnatus | 3 | 0.17 | 0.12 | 11.11 | 19.00 | 9 | 27 |
| Sebastes chrysomelas | 3 | 0.17 | 0.09 | 16.67 | 26.67 | 24 | 31 |
| Embiotoca jacksoni | 2 | 0.11 | 0.08 | 11.11 | 31.00 | 26 | 36 |
| Rhacochilus vacca | 2 | 0.11 | 0.08 | 11.11 | 30.00 | 24 | 36 |
| Artedius corallinus | 1 | 0.06 | 0.06 | 5.56 | 8.00 | 8 | 8 |
| Ophiodon elongatus | 1 | 0.06 | 0.06 | 5.56 | 100.00 | 100 | 100 |
| Rhinogobiops nicholsi | 1 | 0.06 | 0.06 | 5.56 | 10.00 | 10 | 10 |
| Sebastes pinniger | 1 | 0.06 | 0.06 | 5.56 | 42.00 | 42 | 42 |

| | |
|---|---|
| **Replicate Transects:** | 18 |
| **Total Species:** | 17 |
| **Total Abundance:** | 263 |
| **Diversity:** | 1.787 |
| **Dominance:** | 0.191 |
| **Evenness:** | 0.631 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 136 | 7.56 | 5.12 | 55.56 | 22.38 | 15 | 36 |
| Oxyjulis californica | 15 | 0.83 | 0.83 | 5.56 | 13.67 | 10 | 20 |
| Sebastes serranoides/S. flavidus | 4 | 0.22 | 0.17 | 11.11 | 23.00 | 15 | 29 |

| | |
|---|---|
| **Replicate Transects:** | 18 |
| **Total Species:** | 3 |
| **Total Abundance:** | 155 |
| **Diversity:** | 0.435 |
| **Dominance:** | 0.751 |
| **Evenness:** | 0.396 |

**Site Number:** 20
**Site:** San Simeon
**Location:** San Luis Obispo

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 25 | 1.39 | 0.69 | 38.89 | 22.12 | 7 | 37 |
| Embiotoca lateralis | 19 | 1.06 | 0.27 | 55.56 | 12.16 | 6 | 30 |
| Hypsurus caryi | 18 | 1.00 | 0.51 | 27.78 | 11.39 | 7 | 20 |
| Oxylebius pictus | 18 | 1.00 | 0.30 | 55.56 | 15.39 | 8 | 21 |
| Sebastes chrysomelas | 12 | 0.67 | 0.40 | 22.22 | 29.17 | 13 | 37 |
| Sebastes carnatus | 11 | 0.61 | 0.40 | 22.22 | 29.36 | 14 | 35 |
| Embiotoca jacksoni | 10 | 0.56 | 0.28 | 22.22 | 12.50 | 7 | 25 |
| Sebastes melanops | 10 | 0.56 | 0.29 | 27.78 | 11.70 | 9 | 20 |
| Hexagrammos decagrammus | 8 | 0.44 | 0.15 | 38.89 | 31.13 | 15 | 40 |
| Rhacochilus vacca | 7 | 0.39 | 0.18 | 27.78 | 23.14 | 15 | 30 |
| Sebastes serranoides/S. flavidus | 7 | 0.39 | 0.20 | 22.22 | 9.43 | 8 | 10 |
| Ophiodon elongatus | 5 | 0.28 | 0.14 | 22.22 | 97.00 | 65 | 150 |
| Rhinogobiops nicholsi | 4 | 0.22 | 0.13 | 16.67 | 7.75 | 6 | 10 |
| Sebastes atrovirens | 3 | 0.17 | 0.09 | 16.67 | 29.00 | 11 | 44 |
| Anarrhichthys ocellatus | 1 | 0.06 | 0.06 | 5.56 | 100.00 | 100 | 100 |
| Artedius spp. | 1 | 0.06 | 0.06 | 5.56 | 19.00 | 19 | 19 |
| Cephaloscyllium ventriosum | 1 | 0.06 | 0.06 | 5.56 | 70.00 | 70 | 70 |
| Sebastes auriculatus | 1 | 0.06 | 0.06 | 5.56 | 40.00 | 40 | 40 |
| Sebastes caurinus | 1 | 0.06 | 0.06 | 5.56 | 13.00 | 13 | 13 |
| Sebastes miniatus | 1 | 0.06 | 0.06 | 5.56 | 70.00 | 70 | 70 |

| | |
|---|---|
| **Replicate Transects:** | 18 |
| **Total Species:** | 20 |
| **Total Abundance:** | 163 |
| **Diversity:** | 2.618 |
| **Dominance:** | -0.026 |
| **Evenness:** | 0.874 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Aulorhynchus flavidus | 20 | 1.11 | 1.11 | 5.56 | 12.00 | 12 | 12 |
| Sebastes mystinus | 17 | 0.94 | 0.59 | 22.22 | 25.94 | 17 | 36 |
| Rhacochilus vacca | 2 | 0.11 | 0.11 | 5.56 | 18.00 | 18 | 18 |
| Embiotoca lateralis | 1 | 0.06 | 0.06 | 5.56 | 32.00 | 32 | 32 |
| Sebastes atrovirens | 1 | 0.06 | 0.06 | 5.56 | 25.00 | 25 | 25 |
| Sebastes melanops | 1 | 0.06 | 0.06 | 5.56 | 26.00 | 26 | 26 |

| | |
|---|---|
| **Replicate Transects:** | 18 |
| **Total Species:** | 6 |
| **Total Abundance:** | 42 |
| **Diversity:** | 1.131 |
| **Dominance:** | -0.060 |
| **Evenness:** | 0.631 |

**Site Number:** 21
**Site:** Cambria Rock*
**Location:** San Luis Obispo

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 281 | 11.71 | 0.43 | 58.33 | 21.22 | 8 | 38 |
| Embiotoca lateralis | 76 | 3.17 | 0.30 | 83.33 | 16.88 | 8 | 28 |
| Sebastes carnatus | 36 | 1.50 | 0.26 | 29.17 | 23.42 | 8 | 33 |
| Sebastes atrovirens | 18 | 0.75 | 0.20 | 50.00 | 24.11 | 13 | 38 |
| Rhacochilus vacca | 16 | 0.67 | 0.20 | 41.67 | 23.31 | 13 | 33 |
| Sebastes melanops | 16 | 0.67 | 0.27 | 12.50 | 23.31 | 8 | 28 |
| Sebastes serranoides/S. flavidus (yoy) | 15 | 0.63 | 0.21 | 33.33 | 17.33 | 8 | 38 |
| Embiotoca jacksoni | 13 | 0.54 | 0.20 | 29.17 | 22.23 | 8 | 33 |
| Hexagrammos decagrammus | 12 | 0.50 | 0.19 | 37.50 | 32.58 | 28 | 43 |
| Hypsurus caryi | 5 | 0.21 | 0.18 | 12.50 | 22.00 | 13 | 28 |
| Oxyjulis californica | 5 | 0.21 | 0.19 | 8.33 | 10.00 | 8 | 18 |
| Ophiodon elongatus | 4 | 0.17 | 0.17 | 12.50 | 65.50 | 58 | 78 |
| Sebastes pinniger | 3 | 0.13 | 0.17 | 8.33 | 43.00 | 43 | 43 |
| Sebastes chrysomelas | 2 | 0.08 | 0.15 | 8.33 | 25.50 | 23 | 28 |
| Sebastes serriceps | 2 | 0.08 | 0.15 | 8.33 | 28.00 | 28 | 28 |
| Rhacochilus toxotes | 1 | 0.04 | 0.14 | 4.17 | 28.00 | 28 | 28 |
| Semicossyphus pulcher | 1 | 0.04 | 0.14 | 4.17 | 53.00 | 53 | 53 |

**Replicate Transects:** 24
**Total Species:** 17
**Total Abundance:** 506
**Diversity:** 1.653
**Dominance:** 0.309
**Evenness:** 0.583

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 223 | 9.29 | 0.38 | 62.50 | 23.29 | 13 | 38 |
| Oxyjulis californica | 100 | 4.17 | 0.43 | 4.17 | 13.00 | 13 | 13 |
| Sebastes serranoides/S. flavidus (yoy) | 9 | 0.38 | 0.21 | 16.67 | 25.78 | 18 | 38 |
| Rhacochilus vacca | 1 | 0.04 | 0.14 | 4.17 | 28.00 | 28 | 28 |
| Sebastes atrovirens | 1 | 0.04 | 0.14 | 4.17 | 33.00 | 33 | 33 |
| Sebastes melanops | 1 | 0.04 | 0.14 | 4.17 | 23.00 | 23 | 23 |

**Replicate Transects:** 24
**Total Species:** 6
**Total Abundance:** 335
**Diversity:** 0.780
**Dominance:** 0.497
**Evenness:** 0.436

**Site Number:** 22
**Site:** White Rock*
**Location:** San Luis Obispo

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 107 | 4.46 | 0.33 | 50.00 | 22.81 | 8 | 33 |
| Sebastes atrovirens | 23 | 0.96 | 0.22 | 45.83 | 27.57 | 13 | 33 |
| Sebastes carnatus | 23 | 0.96 | 0.21 | 50.00 | 22.57 | 13 | 28 |
| Embiotoca lateralis | 22 | 0.92 | 0.21 | 41.67 | 16.86 | 8 | 28 |
| Embiotoca jacksoni | 17 | 0.71 | 0.22 | 33.33 | 17.12 | 8 | 28 |
| Hypsurus caryi | 9 | 0.38 | 0.20 | 16.67 | 15.22 | 13 | 18 |
| Sebastes serranoides/S. flavidus (yoy) | 8 | 0.33 | 0.18 | 25.00 | 19.25 | 8 | 43 |
| Hexagrammos decagrammus | 7 | 0.29 | 0.17 | 29.17 | 32.29 | 23 | 38 |
| Ophiodon elongatus | 3 | 0.13 | 0.16 | 12.50 | 56.33 | 43 | 68 |
| Semicossyphus pulcher | 3 | 0.13 | 0.17 | 8.33 | 41.33 | 38 | 43 |
| Sebastes melanops | 2 | 0.08 | 0.15 | 8.33 | 30.50 | 23 | 38 |
| Sebastes miniatus | 2 | 0.08 | 0.15 | 8.33 | 40.50 | 38 | 43 |
| Oxyjulis californica | 1 | 0.04 | 0.14 | 4.17 | 8.00 | 8 | 8 |
| Scorpaenichthys marmoratus | 1 | 0.04 | 0.14 | 4.17 | 23.00 | 23 | 23 |
| Sebastes chrysomelas | 1 | 0.04 | 0.14 | 4.17 | 23.00 | 23 | 23 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 15 |
| **Total Abundance:** | 229 |
| **Diversity:** | 1.853 |
| **Dominance:** | 0.171 |
| **Evenness:** | 0.684 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 158 | 6.58 | 0.37 | 62.50 | 25.85 | 8 | 43 |
| Oxyjulis californica | 53 | 2.21 | 0.31 | 25.00 | 16.68 | 13 | 18 |
| Sebastes serranoides/S. flavidus (yoy) | 10 | 0.42 | 0.20 | 20.83 | 15.50 | 8 | 38 |
| Embiotoca lateralis | 1 | 0.04 | 0.14 | 4.17 | 18.00 | 18 | 18 |
| Sebastes atrovirens | 1 | 0.04 | 0.14 | 4.17 | 13.00 | 13 | 13 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 5 |
| **Total Abundance:** | 223 |
| **Diversity:** | 0.773 |
| **Dominance:** | 0.507 |
| **Evenness:** | 0.480 |

**Site Number:** 23
**Site:** Cayucos
**Location:** San Luis Obispo

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Aulorhynchus flavidus | 452 | 25.11 | 15.25 | 27.78 | 9.59 | 3 | 14 |
| Sebastes mystinus | 36 | 2.00 | 1.77 | 16.67 | 17.39 | 9 | 30 |
| Embiotoca lateralis | 32 | 1.78 | 0.66 | 50.00 | 12.25 | 7 | 25 |
| Rhacochilus vacca | 22 | 1.22 | 0.66 | 27.78 | 17.14 | 9 | 35 |
| Hypsurus caryi | 19 | 1.06 | 0.43 | 33.33 | 9.58 | 6 | 20 |
| Oxylebius pictus | 18 | 1.00 | 0.29 | 44.44 | 14.83 | 12 | 17 |
| Sebastes atrovirens | 14 | 0.78 | 0.34 | 33.33 | 27.71 | 12 | 32 |
| Sebastes chrysomelas | 13 | 0.72 | 0.33 | 27.78 | 25.23 | 10 | 32 |
| Embiotoca jacksoni | 8 | 0.44 | 0.23 | 22.22 | 18.88 | 8 | 30 |
| Oxyjulis californica | 6 | 0.33 | 0.33 | 5.56 | 9.00 | 9 | 9 |
| Hexagrammos decagrammus | 4 | 0.22 | 0.10 | 22.22 | 31.75 | 28 | 35 |
| Sebastes carnatus | 3 | 0.17 | 0.12 | 11.11 | 23.67 | 18 | 28 |
| Sebastes serranoides/S. flavidus | 3 | 0.17 | 0.09 | 16.67 | 18.00 | 9 | 35 |
| Ophiodon elongatus | 2 | 0.11 | 0.08 | 11.11 | 55.00 | 50 | 60 |
| Sebastes melanops | 2 | 0.11 | 0.08 | 11.11 | 9.00 | 9 | 9 |
| Brachyistius frenatus | 1 | 0.06 | 0.06 | 5.56 | 6.00 | 6 | 6 |
| Rhinogobiops nicholsi | 1 | 0.06 | 0.06 | 5.56 | 11.00 | 11 | 11 |

| | |
|---|---|
| **Replicate Transects:** | 18 |
| **Total Species:** | 17 |
| **Total Abundance:** | 636 |
| **Diversity:** | 1.279 |
| **Dominance:** | 0.501 |
| **Evenness:** | 0.452 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Aulorhynchus flavidus | 264 | 14.67 | 13.92 | 16.67 | 7.65 | 5 | 14 |
| Sebastes mystinus | 7 | 0.39 | 0.28 | 16.67 | 18.71 | 18 | 23 |
| Sebastes serranoides/S. flavidus | 4 | 0.22 | 0.17 | 11.11 | 14.50 | 10 | 25 |
| Apodichthys flavidus | 1 | 0.06 | 0.06 | 5.56 | 12.00 | 12 | 12 |
| Sebastes atrovirens | 1 | 0.06 | 0.06 | 5.56 | 15.00 | 15 | 15 |

| | |
|---|---|
| **Replicate Transects:** | 18 |
| **Total Species:** | 5 |
| **Total Abundance:** | 277 |
| **Diversity:** | 0.241 |
| **Dominance:** | 0.903 |
| **Evenness:** | 0.149 |

**Site Number:** 24
**Site:** Point Buchon
**Location:** San Luis Obispo

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 91 | 3.79 | 0.62 | 95.83 | 15.29 | 6 | 30 |
| Embiotoca lateralis | 38 | 1.58 | 0.27 | 79.17 | 12.92 | 7 | 25 |
| Oxylebius pictus | 30 | 1.25 | 0.15 | 87.50 | 13.30 | 7 | 15 |
| Sebastes atrovirens | 28 | 1.17 | 0.19 | 79.17 | 25.25 | 7 | 35 |
| Embiotoca jacksoni | 20 | 0.83 | 0.18 | 58.33 | 19.40 | 7 | 30 |
| Sebastes chrysomelas | 12 | 0.50 | 0.18 | 33.33 | 25.83 | 20 | 30 |
| Sebastes serranoides/S. flavidus | 11 | 0.46 | 0.19 | 29.17 | 23.73 | 8 | 35 |
| Rhacochilus vacca | 10 | 0.42 | 0.13 | 33.33 | 18.90 | 9 | 30 |
| Hexagrammos decagrammus | 8 | 0.33 | 0.10 | 33.33 | 31.88 | 25 | 35 |
| Sebastes carnatus | 6 | 0.25 | 0.11 | 20.83 | 24.50 | 7 | 30 |
| Sebastes melanops | 6 | 0.25 | 0.09 | 25.00 | 17.83 | 6 | 30 |
| Hypsurus caryi | 4 | 0.17 | 0.10 | 12.50 | 14.25 | 8 | 20 |
| Scorpaenichthys marmoratus | 3 | 0.13 | 0.07 | 12.50 | 33.33 | 30 | 35 |
| Semicossyphus pulcher | 3 | 0.13 | 0.07 | 12.50 | 50.00 | 45 | 55 |
| Brachyistius frenatus | 2 | 0.08 | 0.06 | 8.33 | 6.50 | 6 | 7 |
| Oxyjulis californica | 2 | 0.08 | 0.06 | 8.33 | 11.50 | 10 | 13 |
| Rhinogobiops nicholsi | 2 | 0.08 | 0.06 | 8.33 | 10.00 | 8 | 12 |
| Sebastes miniatus | 2 | 0.08 | 0.06 | 8.33 | 37.50 | 35 | 40 |
| Ophiodon elongatus | 1 | 0.04 | 0.04 | 4.17 | 70.00 | 70 | 70 |
| Rhacochilus toxotes | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |
| Sebastes rastrelliger | 1 | 0.04 | 0.04 | 4.17 | 40.00 | 40 | 40 |
| Sebastes serriceps | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 22 |
| **Total Abundance:** | 282 |
| **Diversity:** | 2.312 |
| **Dominance:** | 0.077 |
| **Evenness:** | 0.748 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 342 | 14.25 | 2.27 | 95.83 | 13.20 | 5 | 25 |
| Oxyjulis californica | 124 | 5.17 | 2.27 | 50.00 | 9.82 | 6 | 14 |
| Aulorhynchus flavidus | 55 | 2.29 | 2.08 | 8.33 | 8.09 | 8 | 9 |
| Brachyistius frenatus | 21 | 0.88 | 0.50 | 16.67 | 5.81 | 4 | 7 |
| Sebastes serranoides/S. flavidus | 8 | 0.33 | 0.12 | 29.17 | 21.13 | 7 | 40 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 5 |
| **Total Abundance:** | 550 |
| **Diversity:** | 1.048 |
| **Dominance:** | 0.424 |
| **Evenness:** | 0.651 |

**Site Number:** 25
**Site:** Diablo Canyon
**Location:** San Luis Obispo

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 59 | 2.46 | 0.76 | 54.17 | 10.81 | 5 | 20 |
| Sebastes atrovirens | 33 | 1.38 | 0.52 | 70.83 | 19.42 | 7 | 35 |
| Embiotoca jacksoni | 28 | 1.17 | 0.34 | 58.33 | 20.68 | 7 | 35 |
| Embiotoca lateralis | 27 | 1.13 | 0.28 | 58.33 | 16.89 | 7 | 30 |
| Oxylebius pictus | 25 | 1.04 | 0.19 | 66.67 | 14.12 | 11 | 15 |
| Sebastes mystinus | 19 | 0.79 | 0.29 | 37.50 | 16.89 | 7 | 30 |
| Hypsurus caryi | 17 | 0.71 | 0.34 | 25.00 | 16.53 | 5 | 25 |
| Rhacochilus vacca | 11 | 0.46 | 0.19 | 29.17 | 19.55 | 8 | 30 |
| Brachyistius frenatus | 7 | 0.29 | 0.21 | 12.50 | 9.14 | 8 | 10 |
| Sebastes carnatus | 7 | 0.29 | 0.11 | 25.00 | 24.29 | 10 | 30 |
| Sebastes chrysomelas | 7 | 0.29 | 0.16 | 12.50 | 25.71 | 20 | 30 |
| Hexagrammos decagrammus | 6 | 0.25 | 0.09 | 25.00 | 32.50 | 25 | 35 |
| Sebastes melanops | 4 | 0.17 | 0.08 | 16.67 | 24.50 | 8 | 40 |
| Sebastes serranoides/S. flavidus | 4 | 0.17 | 0.08 | 16.67 | 13.75 | 8 | 20 |
| Scorpaenichthys marmoratus | 3 | 0.13 | 0.09 | 8.33 | 40.00 | 30 | 55 |
| Ophiodon elongatus | 2 | 0.08 | 0.06 | 8.33 | 65.00 | 60 | 70 |
| Rhacochilus toxotes | 2 | 0.08 | 0.06 | 8.33 | 32.50 | 30 | 35 |
| Sebastes miniatus | 2 | 0.08 | 0.08 | 4.17 | 40.00 | 35 | 45 |
| Sebastes rastrelliger | 2 | 0.08 | 0.06 | 8.33 | 35.00 | 35 | 35 |
| Semicossyphus pulcher | 2 | 0.08 | 0.06 | 8.33 | 42.50 | 40 | 45 |
| Aulorhynchus flavidus | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Cebidichthys violaceus | 1 | 0.04 | 0.04 | 4.17 | 50.00 | 50 | 50 |
| Rhinogobiops nicholsi | 1 | 0.04 | 0.04 | 4.17 | 10.00 | 10 | 10 |
| Ronquilus jordani | 1 | 0.04 | 0.04 | 4.17 | 12.00 | 12 | 12 |
| Sebastes caurinus | 1 | 0.04 | 0.04 | 4.17 | 35.00 | 35 | 35 |

**Replicate Transects:** 24
**Total Species:** 25
**Total Abundance:** 272
**Diversity:** 2.583
**Dominance:** 0.018
**Evenness:** 0.803

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 425 | 17.71 | 4.53 | 91.67 | 12.42 | 4 | 20 |
| Sebastes mystinus | 180 | 7.50 | 1.67 | 79.17 | 17.32 | 5 | 30 |
| Atherinopsidae | 28 | 1.17 | 1.17 | 4.17 | 19.57 | 14 | 20 |
| Sebastes serranoides/S. flavidus | 13 | 0.54 | 0.17 | 37.50 | 25.23 | 8 | 35 |
| Rhacochilus vacca | 4 | 0.17 | 0.10 | 12.50 | 27.50 | 25 | 35 |
| Brachyistius frenatus | 2 | 0.08 | 0.06 | 8.33 | 16.50 | 8 | 25 |
| Rimicola muscarum | 2 | 0.08 | 0.08 | 4.17 | 4.00 | 4 | 4 |
| Sebastes atrovirens | 2 | 0.08 | 0.06 | 8.33 | 9.00 | 5 | 13 |
| Aulorhynchus flavidus | 1 | 0.04 | 0.04 | 4.17 | 5.00 | 5 | 5 |
| Rhacochilus toxotes | 1 | 0.04 | 0.04 | 4.17 | 40.00 | 40 | 40 |

**Replicate Transects:** 24
**Total Species:** 10
**Total Abundance:** 658
**Diversity:** 0.952
**Dominance:** 0.475
**Evenness:** 0.414

**Site Number:** 27
**Site:** Purisima
**Location:** Santa Barbara

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 80 | 3.33 | 2.24 | 12.50 | 6.33 | 5 | 13 |
| Sebastes mystinus | 80 | 3.33 | 1.95 | 33.33 | 14.09 | 7 | 26 |
| Sebastes carnatus | 22 | 0.92 | 0.29 | 41.67 | 21.59 | 5 | 30 |
| Sebastes miniatus | 22 | 0.92 | 0.54 | 25.00 | 27.09 | 8 | 50 |
| Embiotoca jacksoni | 18 | 0.75 | 0.22 | 41.67 | 13.22 | 6 | 20 |
| Oxylebius pictus | 14 | 0.58 | 0.24 | 25.00 | 11.14 | 10 | 14 |
| Sebastes caurinus | 13 | 0.54 | 0.23 | 25.00 | 20.08 | 10 | 43 |
| Sebastes melanops | 13 | 0.54 | 0.19 | 29.17 | 21.00 | 10 | 31 |
| Rhacochilus toxotes | 12 | 0.50 | 0.50 | 4.17 | 26.92 | 25 | 30 |
| Hypsurus caryi | 10 | 0.42 | 0.28 | 12.50 | 12.10 | 9 | 17 |
| Sebastes serranoides/S. flavidus | 9 | 0.38 | 0.13 | 29.17 | 22.00 | 8 | 34 |
| Sebastes atrovirens | 6 | 0.25 | 0.15 | 12.50 | 23.17 | 19 | 30 |
| Ophiodon elongatus | 5 | 0.21 | 0.10 | 16.67 | 44.20 | 31 | 57 |
| Hexagrammos decagrammus | 3 | 0.13 | 0.09 | 8.33 | 23.67 | 14 | 32 |
| Phanerodon furcatus | 2 | 0.08 | 0.08 | 4.17 | 14.00 | 14 | 14 |
| Cephaloscyllium ventriosum | 1 | 0.04 | 0.04 | 4.17 | 75.00 | 75 | 75 |
| Sebastes chrysomelas | 1 | 0.04 | 0.04 | 4.17 | 21.00 | 21 | 21 |
| Sebastes serriceps | 1 | 0.04 | 0.04 | 4.17 | 26.00 | 26 | 26 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 18 |
| **Total Abundance:** | 312 |
| **Diversity:** | 2.253 |
| **Dominance:** | 0.084 |
| **Evenness:** | 0.779 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 49 | 2.72 | 1.79 | 22.22 | 21.63 | 14 | 28 |
| Oxyjulis californica | 34 | 1.89 | 1.89 | 5.56 | 11.06 | 7 | 14 |
| Sebastes serranoides/S. flavidus | 22 | 1.22 | 0.72 | 16.67 | 25.14 | 15 | 33 |
| Sebastes atrovirens | 6 | 0.33 | 0.23 | 11.11 | 26.00 | 20 | 32 |
| Rhacochilus vacca | 4 | 0.22 | 0.22 | 5.56 | 16.50 | 15 | 21 |

| | |
|---|---|
| **Replicate Transects:** | 18 |
| **Total Species:** | 5 |
| **Total Abundance:** | 115 |
| **Diversity:** | 1.311 |
| **Dominance:** | 0.181 |
| **Evenness:** | 0.815 |

**Site Number:** 28
**Site:** Jalama
**Location:** Santa Barbara

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Aulorhynchus flavidus | 104 | 4.33 | 3.60 | 8.33 | 9.42 | 8 | 11 |
| Oxyjulis californica | 98 | 4.08 | 1.56 | 50.00 | 10.17 | 3 | 16 |
| Brachyistius frenatus | 60 | 2.50 | 1.20 | 50.00 | 6.20 | 4 | 9 |
| Hypsurus caryi | 46 | 1.92 | 0.46 | 66.67 | 11.17 | 4 | 21 |
| Phanerodon furcatus | 33 | 1.38 | 0.79 | 20.83 | 6.79 | 4 | 15 |
| Embiotoca jacksoni | 30 | 1.25 | 0.29 | 66.67 | 12.43 | 6 | 20 |
| Rhacochilus toxotes | 12 | 0.50 | 0.50 | 4.17 | 31.50 | 28 | 35 |
| Sebastes chrysomelas/S. carnatus (yoy) | 11 | 0.46 | 0.29 | 12.50 | 5.00 | 4 | 6 |
| Oxylebius pictus | 10 | 0.42 | 0.15 | 33.33 | 12.30 | 9 | 15 |
| Sebastes paucispinis | 9 | 0.38 | 0.33 | 8.33 | 7.22 | 6 | 8 |
| Trachurus symmetricus | 7 | 0.29 | 0.29 | 4.17 | 9.86 | 7 | 11 |
| Hexagrammos decagrammus | 4 | 0.17 | 0.08 | 16.67 | 22.50 | 17 | 30 |
| Ophiodon elongatus | 4 | 0.17 | 0.08 | 16.67 | 34.75 | 30 | 40 |
| Rhacochilus vacca | 3 | 0.13 | 0.07 | 12.50 | 13.67 | 7 | 20 |
| Sebastes miniatus | 3 | 0.13 | 0.13 | 4.17 | 9.00 | 9 | 9 |
| Scorpaenichthys marmoratus | 2 | 0.08 | 0.06 | 8.33 | 20.00 | 14 | 26 |
| Sebastes caurinus | 2 | 0.08 | 0.06 | 8.33 | 15.00 | 9 | 21 |
| Sebastes mystinus | 2 | 0.08 | 0.08 | 4.17 | 7.00 | 7 | 7 |
| Platyrhinoidis triseriata | 1 | 0.04 | 0.04 | 4.17 | 47.00 | 47 | 47 |
| Pleuronichthys coenosus | 1 | 0.04 | 0.04 | 4.17 | 11.00 | 11 | 11 |
| Sebastes atrovirens | 1 | 0.04 | 0.04 | 4.17 | 32.00 | 32 | 32 |
| Sebastes carnatus | 1 | 0.04 | 0.04 | 4.17 | 22.00 | 22 | 22 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 22 |
| **Total Abundance:** | 444 |
| **Diversity:** | 2.253 |
| **Dominance:** | 0.097 |
| **Evenness:** | 0.729 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Trachurus symmetricus | 45 | 2.50 | 2.50 | 5.56 | 13.00 | 11 | 15 |
| Oxyjulis californica | 38 | 2.11 | 1.01 | 55.56 | 11.18 | 3 | 17 |
| Aulorhynchus flavidus | 37 | 2.06 | 1.69 | 11.11 | 15.00 | 14 | 16 |
| Brachyistius frenatus | 22 | 1.22 | 0.59 | 38.89 | 6.45 | 5 | 11 |
| Sebastes chrysomelas/S. carnatus (yoy) | 7 | 0.39 | 0.23 | 22.22 | 4.86 | 4 | 6 |
| Syngnathus spp. | 6 | 0.33 | 0.16 | 22.22 | 18.83 | 16 | 21 |
| Chromis punctipinnis | 1 | 0.06 | 0.06 | 5.56 | 4.00 | 4 | 4 |

| | |
|---|---|
| **Replicate Transects:** | 18 |
| **Total Species:** | 7 |
| **Total Abundance:** | 156 |
| **Diversity:** | 1.617 |
| **Dominance:** | 0.121 |
| **Evenness:** | 0.831 |

**Site Number:** 29
**Site:** Cojo
**Location:** Santa Barbara

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Hypsurus caryi | 94 | 3.92 | 1.02 | 70.83 | 12.20 | 4 | 21 |
| Oxyjulis californica | 74 | 3.08 | 1.55 | 16.67 | 13.86 | 6 | 17 |
| Brachyistius frenatus | 51 | 2.13 | 0.95 | 41.67 | 6.25 | 3 | 12 |
| Phanerodon furcatus | 49 | 2.04 | 0.89 | 33.33 | 8.76 | 3 | 18 |
| Embiotoca jacksoni | 47 | 1.96 | 0.88 | 54.17 | 12.60 | 6 | 18 |
| Rhacochilus vacca | 18 | 0.75 | 0.46 | 20.83 | 12.67 | 7 | 22 |
| Trachurus symmetricus | 17 | 0.71 | 0.71 | 4.17 | 14.00 | 13 | 15 |
| Oxylebius pictus | 8 | 0.33 | 0.16 | 20.83 | 13.13 | 12 | 15 |
| Paralabrax clathratus | 6 | 0.25 | 0.21 | 8.33 | 27.50 | 21 | 32 |
| Rhacochilus toxotes | 5 | 0.21 | 0.21 | 4.17 | 9.20 | 8 | 12 |
| Embiotocidae | 2 | 0.08 | 0.08 | 4.17 | 10.00 | 10 | 10 |
| Sebastes carnatus | 2 | 0.08 | 0.08 | 4.17 | 27.50 | 24 | 31 |
| Sebastes caurinus | 2 | 0.08 | 0.06 | 8.33 | 11.50 | 9 | 14 |
| Sebastes atrovirens | 1 | 0.04 | 0.04 | 4.17 | 13.00 | 13 | 13 |
| Sebastes serranoides/S. flavidus | 1 | 0.04 | 0.04 | 4.17 | 13.00 | 13 | 13 |

**Replicate Transects:** 24
**Total Species:** 15
**Total Abundance:** 377
**Diversity:** 2.066
**Dominance:** 0.099
**Evenness:** 0.763

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Brachyistius frenatus | 53 | 2.94 | 1.83 | 44.44 | 1.72 | 0 | 12 |
| Sebastes serranoides/S. flavidus | 26 | 1.44 | 1.11 | 22.22 | 11.92 | 9 | 16 |
| Oxyjulis californica | 24 | 1.33 | 1.05 | 22.22 | 18.38 | 14 | 20 |
| Phanerodon furcatus | 15 | 0.83 | 0.61 | 22.22 | 10.13 | 7 | 16 |
| Sebastes chrysomelas/S. carnatus (yoy) | 5 | 0.28 | 0.28 | 5.56 | 0.00 | 0 | 0 |
| Atherinopsidae | 3 | 0.17 | 0.17 | 5.56 | 15.00 | 14 | 16 |
| Hypsurus caryi | 3 | 0.17 | 0.12 | 11.11 | 14.33 | 13 | 15 |
| Sebastes atrovirens | 3 | 0.17 | 0.17 | 5.56 | 21.67 | 20 | 25 |
| Embiotoca jacksoni | 2 | 0.11 | 0.08 | 11.11 | 16.50 | 16 | 17 |
| Heterostichus rostratus | 1 | 0.06 | 0.06 | 5.56 | 22.00 | 22 | 22 |
| Myliobatis californica | 1 | 0.06 | 0.06 | 5.56 | 90.00 | 90 | 90 |
| Paralabrax clathratus | 1 | 0.06 | 0.06 | 5.56 | 7.00 | 7 | 7 |
| Rhacochilus vacca | 1 | 0.06 | 0.06 | 5.56 | 17.00 | 17 | 17 |

**Replicate Transects:** 18
**Total Species:** 13
**Total Abundance:** 138
**Diversity:** 1.802
**Dominance:** 0.112
**Evenness:** 0.702

**Site Number:** 30
**Site:** Naples
**Location:** Santa Barbara
**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 190 | 7.60 | 1.63 | 80.00 | 14.48 | 4 | 22 |
| Hypsurus caryi | 170 | 6.80 | 1.25 | 84.00 | 14.25 | 7 | 25 |
| Oxyjulis californica | 142 | 5.68 | 1.60 | 76.00 | 13.63 | 0 | 20 |
| Embiotoca jacksoni | 141 | 5.64 | 0.88 | 80.00 | 18.79 | 8 | 30 |
| Phanerodon furcatus | 115 | 4.60 | 2.89 | 52.00 | 15.48 | 5 | 20 |
| Paralabrax clathratus | 83 | 3.32 | 0.77 | 72.00 | 27.72 | 20 | 48 |
| Semicossyphus pulcher | 48 | 1.92 | 0.28 | 80.00 | 33.75 | 13 | 50 |
| Rhacochilus vacca | 39 | 1.56 | 0.28 | 76.00 | 21.54 | 10 | 35 |
| Sebastes mystinus | 37 | 1.48 | 0.66 | 36.00 | 13.19 | 8 | 27 |
| Sebastes serranoides/S. flavidus | 29 | 1.16 | 0.59 | 28.00 | 12.21 | 5 | 22 |
| Oxylebius pictus | 25 | 1.00 | 0.23 | 52.00 | 9.76 | 0 | 15 |
| Rhacochilus toxotes | 22 | 0.88 | 0.60 | 24.00 | 29.91 | 28 | 33 |
| Girella nigricans | 18 | 0.72 | 0.47 | 16.00 | 29.78 | 25 | 40 |
| Sebastes atrovirens | 17 | 0.68 | 0.21 | 40.00 | 20.88 | 13 | 30 |
| Sebastes caurinus | 10 | 0.40 | 0.15 | 28.00 | 21.70 | 15 | 25 |
| Brachyistius frenatus | 7 | 0.28 | 0.12 | 20.00 | 9.57 | 8 | 12 |
| Sebastes carnatus | 5 | 0.20 | 0.13 | 12.00 | 22.40 | 14 | 26 |
| Sebastes chrysomelas | 5 | 0.20 | 0.13 | 12.00 | 19.80 | 12 | 29 |
| Medialuna californiensis | 3 | 0.12 | 0.12 | 4.00 | 25.00 | 23 | 26 |
| Embiotoca lateralis | 2 | 0.08 | 0.06 | 8.00 | 15.00 | 14 | 16 |
| Halichoeres semicinctus | 2 | 0.08 | 0.06 | 8.00 | 24.50 | 20 | 29 |
| Hypsypops rubicundus | 2 | 0.08 | 0.06 | 8.00 | 29.00 | 28 | 30 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.00 | 24.00 | 24 | 24 |
| Ophiodon elongatus | 1 | 0.04 | 0.04 | 4.00 | 33.00 | 33 | 33 |
| Paralabrax nebulifer | 1 | 0.04 | 0.04 | 4.00 | 38.00 | 38 | 38 |
| Scorpaenichthys marmoratus | 1 | 0.04 | 0.04 | 4.00 | 35.00 | 35 | 35 |

**Replicate Transects:** 25
**Total Species:** 26
**Total Abundance:** 1116
**Diversity:** 2.490
**Dominance:** 0.086
**Evenness:** 0.764

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Trachurus symmetricus | 412 | 16.48 | 13.03 | 8.00 | 11.21 | 9 | 14 |
| Atherinopsidae | 375 | 15.00 | 3.93 | 64.00 | 19.22 | 7 | 35 |
| Oxyjulis californica | 371 | 14.84 | 2.15 | 96.00 | 14.12 | 1 | 20 |
| Paralabrax clathratus | 100 | 4.00 | 0.99 | 80.00 | 20.41 | 10 | 40 |
| Chromis punctipinnis | 30 | 1.20 | 0.80 | 24.00 | 5.30 | 1 | 18 |
| Brachyistius frenatus | 21 | 0.84 | 0.40 | 24.00 | 8.05 | 4 | 13 |
| Medialuna californiensis | 19 | 0.76 | 0.32 | 28.00 | 16.79 | 12 | 25 |
| Sebastes serranoides/S. flavidus | 16 | 0.64 | 0.37 | 24.00 | 12.81 | 9 | 19 |
| Girella nigricans | 11 | 0.44 | 0.40 | 8.00 | 29.45 | 25 | 31 |
| Phanerodon furcatus | 7 | 0.28 | 0.24 | 8.00 | 12.29 | 10 | 16 |
| Myliobatis californica | 3 | 0.12 | 0.07 | 12.00 | 66.67 | 50 | 80 |
| Caulolatilus princeps | 2 | 0.08 | 0.08 | 4.00 | 26.50 | 25 | 28 |
| Embiotoca jacksoni | 2 | 0.08 | 0.06 | 8.00 | 19.00 | 17 | 21 |
| Sebastes atrovirens | 2 | 0.08 | 0.06 | 8.00 | 24.00 | 21 | 27 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.00 | 25.00 | 25 | 25 |
| Sebastes mystinus | 1 | 0.04 | 0.04 | 4.00 | 21.00 | 21 | 21 |

**Replicate Transects**: 25
**Total Species:** 16
**Total Abundance:** 1373
**Diversity:** 1.637
**Dominance:** 0.230
**Evenness:** 0.590

**Site Number:** 31
**Site:** Cuyler
**Location:** San Miguel Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 298 | 12.42 | 6.43 | 37.50 | 8.66 | 3 | 16 |
| Aulorhynchus flavidus | 109 | 4.54 | 4.17 | 8.33 | 9.70 | 8 | 13 |
| Embiotoca lateralis | 101 | 4.21 | 0.90 | 66.67 | 12.52 | 6 | 30 |
| Sebastes atrovirens | 75 | 3.13 | 1.08 | 50.00 | 9.81 | 5 | 32 |
| Chromis punctipinnis | 50 | 2.08 | 1.61 | 8.33 | 3.62 | 2 | 5 |
| Oxylebius pictus | 49 | 2.04 | 0.48 | 70.83 | 12.29 | 6 | 15 |
| Sebastes mystinus | 30 | 1.25 | 0.47 | 37.50 | 16.63 | 10 | 34 |
| Embiotoca jacksoni | 23 | 0.96 | 0.29 | 50.00 | 15.52 | 6 | 35 |
| Rhacochilus vacca | 12 | 0.50 | 0.23 | 25.00 | 11.17 | 6 | 31 |
| Sebastes serranoides/S. flavidus | 9 | 0.38 | 0.16 | 20.83 | 18.67 | 8 | 30 |
| Semicossyphus pulcher | 6 | 0.25 | 0.09 | 25.00 | 35.17 | 30 | 40 |
| Sebastes caurinus | 5 | 0.21 | 0.08 | 20.83 | 32.60 | 27 | 40 |
| Ophiodon elongatus | 4 | 0.17 | 0.08 | 16.67 | 62.50 | 55 | 70 |
| Sebastes carnatus | 4 | 0.17 | 0.08 | 16.67 | 20.00 | 9 | 36 |
| Brachyistius frenatus | 3 | 0.13 | 0.07 | 12.50 | 9.33 | 7 | 11 |
| Hypsurus caryi | 3 | 0.13 | 0.07 | 12.50 | 8.33 | 6 | 12 |
| Sebastes chrysomelas | 3 | 0.13 | 0.07 | 12.50 | 21.67 | 20 | 24 |
| Rhacochilus toxotes | 2 | 0.08 | 0.06 | 8.33 | 32.50 | 30 | 35 |
| Sebastes chrysomelas/S. carnatus (yoy) | 2 | 0.08 | 0.06 | 8.33 | 6.00 | 6 | 6 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |
| Neoclinus stephensae | 1 | 0.04 | 0.04 | 4.17 | 7.00 | 7 | 7 |
| Sebastes miniatus | 1 | 0.04 | 0.04 | 4.17 | 7.00 | 7 | 7 |
| Sebastes serriceps | 1 | 0.04 | 0.04 | 4.17 | 27.00 | 27 | 27 |

**Replicate Transects:** 24
**Total Species:** 23
**Total Abundance:** 792
**Diversity:** 2.064
**Dominance:** 0.171
**Evenness:** 0.658

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Atherinopsidae | 100 | 5.56 | 3.81 | 11.11 | 14.00 | 12 | 16 |
| Trachurus symmetricus | 55 | 3.06 | 3.06 | 5.56 | 14.00 | 13 | 15 |
| Brachyistius frenatus | 24 | 1.33 | 0.67 | 27.78 | 8.67 | 6 | 15 |
| Sebastes atrovirens | 13 | 0.72 | 0.23 | 50.00 | 23.15 | 5 | 31 |
| Sebastes mystinus | 10 | 0.56 | 0.26 | 27.78 | 17.00 | 10 | 24 |
| Sebastes serranoides/S. flavidus | 7 | 0.39 | 0.14 | 33.33 | 18.86 | 9 | 24 |
| Sebastes chrysomelas/S. carnatus (yoy) | 3 | 0.17 | 0.09 | 16.67 | 5.00 | 5 | 5 |
| Embiotoca lateralis | 2 | 0.11 | 0.08 | 11.11 | 17.50 | 9 | 26 |
| Heterostichus rostratus | 2 | 0.11 | 0.08 | 11.11 | 6.50 | 6 | 7 |
| Myliobatis californica | 2 | 0.11 | 0.08 | 11.11 | 82.50 | 65 | 100 |
| Oxyjulis californica | 2 | 0.11 | 0.11 | 5.56 | 11.00 | 10 | 12 |
| Aulorhynchus flavidus | 1 | 0.06 | 0.06 | 5.56 | 9.00 | 9 | 9 |
| Rhacochilus vacca | 1 | 0.06 | 0.06 | 5.56 | 24.00 | 24 | 24 |

**Replicate Transects:** 18
**Total Species:** 13
**Total Abundance:** 222
**Diversity:** 1.637
**Dominance:** 0.220
**Evenness:** 0.638

**Site Number:** 32
**Site:** Harris Point
**Location:** San Miguel Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Aulorhynchus flavidus | 355 | 14.79 | 6.63 | 20.83 | 10.00 | 8 | 12 |
| Chromis punctipinnis | 111 | 4.63 | 2.42 | 37.50 | 5.89 | 1 | 22 |
| Oxyjulis californica | 106 | 4.42 | 2.15 | 41.67 | 8.06 | 4 | 15 |
| Embiotoca lateralis | 105 | 4.38 | 0.71 | 91.67 | 15.24 | 6 | 30 |
| Sebastes mystinus | 89 | 3.71 | 1.38 | 58.33 | 17.26 | 7 | 35 |
| Oxylebius pictus | 80 | 3.33 | 0.61 | 91.67 | 12.18 | 6 | 15 |
| Sebastes atrovirens | 70 | 2.92 | 0.74 | 75.00 | 12.90 | 4 | 32 |
| Sebastes serranoides/S. flavidus | 43 | 1.79 | 0.63 | 58.33 | 16.81 | 5 | 35 |
| Embiotoca jacksoni | 35 | 1.46 | 0.46 | 41.67 | 17.69 | 6 | 37 |
| Sebastes chrysomelas/S. carnatus (yoy) | 24 | 1.00 | 0.76 | 12.50 | 4.79 | 4 | 6 |
| Semicossyphus pulcher | 14 | 0.58 | 0.19 | 37.50 | 31.93 | 19 | 45 |
| Ophiodon elongatus | 9 | 0.38 | 0.12 | 33.33 | 49.89 | 40 | 59 |
| Sebastes caurinus | 7 | 0.29 | 0.14 | 20.83 | 27.71 | 25 | 30 |
| Sebastes chrysomelas | 6 | 0.25 | 0.11 | 20.83 | 22.33 | 17 | 27 |
| Brachyistius frenatus | 5 | 0.21 | 0.12 | 12.50 | 9.00 | 6 | 12 |
| Paralabrax clathratus | 5 | 0.21 | 0.08 | 20.83 | 40.20 | 38 | 45 |
| Caulolatilus princeps | 4 | 0.17 | 0.12 | 8.33 | 37.00 | 35 | 40 |
| Rhacochilus vacca | 4 | 0.17 | 0.12 | 8.33 | 17.00 | 7 | 28 |
| Scorpaenichthys marmoratus | 4 | 0.17 | 0.08 | 16.67 | 31.25 | 26 | 35 |
| Sebastes carnatus | 4 | 0.17 | 0.08 | 16.67 | 12.50 | 6 | 25 |
| Sebastes serriceps | 3 | 0.13 | 0.07 | 12.50 | 28.33 | 26 | 32 |
| Sebastes miniatus | 2 | 0.08 | 0.08 | 4.17 | 18.00 | 18 | 18 |
| Myliobatis californica | 1 | 0.04 | 0.04 | 4.17 | 70.00 | 70 | 70 |
| Sebastes melanops | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |

**Replicate Transects:** 24
**Total Species:** 24
**Total Abundance:** 1087
**Diversity:** 2.277
**Dominance:** 0.137
**Evenness:** 0.716

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Trachurus symmetricus | 220 | 10.48 | 5.32 | 19.05 | 14.18 | 12 | 17 |
| Aulorhynchus flavidus | 180 | 8.57 | 4.84 | 14.29 | 12.00 | 9 | 15 |
| Atherinopsidae | 130 | 6.19 | 4.28 | 9.52 | 16.00 | 11 | 21 |
| Sebastes mystinus | 71 | 3.38 | 1.22 | 57.14 | 17.38 | 10 | 29 |
| Scomber japonicus | 50 | 2.38 | 2.38 | 4.76 | 13.00 | 11 | 15 |
| Sebastes serranoides/S. flavidus | 37 | 1.76 | 0.52 | 57.14 | 21.81 | 11 | 39 |
| Oxyjulis californica | 29 | 1.38 | 0.62 | 42.86 | 14.07 | 3 | 16 |
| Brachyistius frenatus | 19 | 0.90 | 0.39 | 33.33 | 8.16 | 7 | 11 |
| Sebastes chrysomelas/S. carnatus (yoy) | 19 | 0.90 | 0.45 | 28.57 | 5.74 | 4 | 7 |
| Embiotoca lateralis | 11 | 0.52 | 0.19 | 28.57 | 20.55 | 7 | 28 |
| Sebastes atrovirens | 7 | 0.33 | 0.13 | 28.57 | 23.86 | 22 | 26 |
| Heterostichus rostratus | 4 | 0.19 | 0.11 | 14.29 | 6.00 | 4 | 8 |
| Chromis punctipinnis | 3 | 0.14 | 0.10 | 9.52 | 22.67 | 18 | 31 |
| Sebastes melanops | 3 | 0.14 | 0.14 | 4.76 | 28.33 | 27 | 31 |
| Ophiodon elongatus | 1 | 0.05 | 0.05 | 4.76 | 70.00 | 70 | 70 |
| Paralabrax clathratus | 1 | 0.05 | 0.05 | 4.76 | 34.00 | 34 | 34 |
| Rhacochilus vacca | 1 | 0.05 | 0.05 | 4.76 | 19.00 | 19 | 19 |
| Syngnathus spp. | 1 | 0.05 | 0.05 | 4.76 | 31.00 | 31 | 31 |

**Replicate Transects:** 21
**Total Species:** 18
**Total Abundance:** 787
**Diversity:** 2.033
**Dominance:** 0.152
**Evenness:** 0.703

**Site Number:** 33
**Site:** Tyler Bight
**Location:** San Miguel Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Embiotoca lateralis | 469 | 19.54 | 4.10 | 95.83 | 19.93 | 5 | 31 |
| Oxyjulis californica | 242 | 10.08 | 10.00 | 8.33 | 5.59 | 5 | 16 |
| Sebastes atrovirens | 239 | 9.96 | 2.64 | 91.67 | 18.31 | 5 | 32 |
| Aulorhynchus flavidus | 219 | 9.13 | 8.40 | 16.67 | 12.39 | 10 | 14 |
| Sebastes mystinus | 79 | 3.29 | 1.45 | 45.83 | 15.71 | 7 | 31 |
| Oxylebius pictus | 74 | 3.08 | 0.80 | 58.33 | 12.77 | 5 | 15 |
| Embiotoca jacksoni | 46 | 1.92 | 0.44 | 54.17 | 24.67 | 8 | 32 |
| Sebastes carnatus | 43 | 1.79 | 0.95 | 16.67 | 19.56 | 6 | 27 |
| Rhacochilus vacca | 38 | 1.58 | 0.46 | 50.00 | 24.24 | 12 | 35 |
| Sebastes chrysomelas/S. carnatus (yoy) | 21 | 0.88 | 0.49 | 12.50 | 5.29 | 4 | 7 |
| Brachyistius frenatus | 13 | 0.54 | 0.37 | 12.50 | 9.00 | 5 | 10 |
| Semicossyphus pulcher | 13 | 0.54 | 0.22 | 25.00 | 33.69 | 24 | 40 |
| Ophiodon elongatus | 11 | 0.46 | 0.17 | 25.00 | 55.36 | 41 | 65 |
| Sebastes chrysomelas | 10 | 0.42 | 0.21 | 16.67 | 24.00 | 18 | 31 |
| Sebastes serranoides/S. flavidus | 9 | 0.38 | 0.22 | 12.50 | 19.33 | 12 | 28 |
| Galeorhinus galeus | 8 | 0.33 | 0.20 | 12.50 | 146.25 | 90 | 200 |
| Sebastes caurinus | 8 | 0.33 | 0.26 | 8.33 | 23.75 | 17 | 28 |
| Sebastes serriceps | 8 | 0.33 | 0.16 | 16.67 | 21.75 | 8 | 28 |
| Rhacochilus toxotes | 7 | 0.29 | 0.14 | 16.67 | 31.57 | 27 | 35 |
| Scorpaenichthys marmoratus | 6 | 0.25 | 0.14 | 12.50 | 37.00 | 30 | 46 |
| Sebastes melanops | 6 | 0.25 | 0.18 | 8.33 | 22.67 | 14 | 31 |
| Chromis punctipinnis | 2 | 0.08 | 0.08 | 4.17 | 25.00 | 25 | 25 |
| Myliobatis californica | 2 | 0.08 | 0.08 | 4.17 | 80.00 | 80 | 80 |
| Anarrhichthys ocellatus | 1 | 0.04 | 0.04 | 4.17 | 0.00 | 0 | 0 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.17 | 10.00 | 10 | 10 |
| Hypsurus caryi | 1 | 0.04 | 0.04 | 4.17 | 9.00 | 9 | 9 |

**Replicate Transects:** 24
**Total Species:** 26
**Total Abundance:** 1576
**Diversity:** 2.204
**Dominance:** 0.149
**Evenness:** 0.677

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 136 | 6.48 | 2.51 | 61.90 | 9.14 | 1 | 18 |
| Sebastes mystinus | 82 | 3.90 | 1.77 | 42.86 | 17.45 | 11 | 29 |
| Brachyistius frenatus | 75 | 3.57 | 1.50 | 42.86 | 7.97 | 5 | 12 |
| Sebastes chrysomelas/S. carnatus (yoy) | 71 | 3.38 | 1.39 | 28.57 | 5.39 | 4 | 7 |
| Sebastes serranoides/S. flavidus | 34 | 1.62 | 0.43 | 57.14 | 19.79 | 8 | 40 |
| Sebastes atrovirens | 33 | 1.57 | 0.47 | 47.62 | 18.94 | 5 | 35 |
| Chromis punctipinnis | 24 | 1.14 | 1.14 | 4.76 | 16.50 | 15 | 18 |
| Embiotoca lateralis | 18 | 0.86 | 0.43 | 23.81 | 25.00 | 14 | 30 |
| Heterostichus rostratus | 13 | 0.62 | 0.31 | 23.81 | 5.00 | 2 | 11 |
| Aulorhynchus flavidus | 7 | 0.33 | 0.29 | 9.52 | 10.14 | 10 | 11 |
| Myliobatis californica | 2 | 0.10 | 0.10 | 4.76 | 100.00 | 100 | 100 |
| Rhacochilus toxotes | 2 | 0.10 | 0.10 | 4.76 | 24.00 | 22 | 26 |
| Rhacochilus vacca | 2 | 0.10 | 0.10 | 4.76 | 8.00 | 8 | 8 |

**Replicate Transects:** 21
**Total Species:** 13
**Total Abundance:** 499
**Diversity:** 2.063
**Dominance:** 0.121
**Evenness:** 0.804

**Site Number:** 34
**Site:** Crook Point
**Location:** San Miguel Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 241 | 10.04 | 3.28 | 58.33 | 9.74 | 5 | 18 |
| Sebastes atrovirens | 83 | 3.46 | 1.22 | 58.33 | 15.30 | 6 | 32 |
| Aulorhynchus flavidus | 72 | 3.00 | 2.04 | 16.67 | 13.38 | 9 | 17 |
| Brachyistius frenatus | 26 | 1.08 | 0.39 | 45.83 | 8.19 | 4 | 16 |
| Oxylebius pictus | 20 | 0.83 | 0.23 | 50.00 | 11.10 | 5 | 16 |
| Embiotoca lateralis | 19 | 0.79 | 0.36 | 25.00 | 14.58 | 7 | 26 |
| Embiotoca jacksoni | 15 | 0.63 | 0.17 | 45.83 | 16.93 | 7 | 32 |
| Rhacochilus vacca | 14 | 0.58 | 0.50 | 8.33 | 13.93 | 12 | 26 |
| Sebastes chrysomelas/S. carnatus (yoy) | 13 | 0.54 | 0.33 | 16.67 | 6.23 | 5 | 8 |
| Sebastes caurinus | 10 | 0.42 | 0.25 | 20.83 | 16.40 | 7 | 36 |
| Sebastes paucispinis | 7 | 0.29 | 0.22 | 8.33 | 11.00 | 8 | 12 |
| Semicossyphus pulcher | 7 | 0.29 | 0.19 | 12.50 | 39.29 | 31 | 70 |
| Sebastes carnatus | 6 | 0.25 | 0.17 | 8.33 | 25.33 | 23 | 28 |
| Sebastes mystinus | 6 | 0.25 | 0.15 | 12.50 | 21.67 | 10 | 32 |
| Hypsurus caryi | 4 | 0.17 | 0.17 | 4.17 | 14.25 | 14 | 15 |
| Ophiodon elongatus | 3 | 0.13 | 0.09 | 8.33 | 50.00 | 47 | 56 |
| Rhacochilus toxotes | 2 | 0.08 | 0.08 | 4.17 | 34.50 | 33 | 36 |
| Sebastes miniatus | 2 | 0.08 | 0.06 | 8.33 | 42.00 | 39 | 45 |
| Sebastes serranoides/S. flavidus | 2 | 0.08 | 0.06 | 8.33 | 15.00 | 13 | 17 |
| Sebastes serriceps | 2 | 0.08 | 0.06 | 8.33 | 28.00 | 21 | 35 |
| Myliobatis californica | 1 | 0.04 | 0.04 | 4.17 | 65.00 | 65 | 65 |
| Phanerodon furcatus | 1 | 0.04 | 0.04 | 4.17 | 12.00 | 12 | 12 |
| Scorpaenichthys marmoratus | 1 | 0.04 | 0.04 | 4.17 | 35.00 | 35 | 35 |
| Sebastes chrysomelas | 1 | 0.04 | 0.04 | 4.17 | 27.00 | 27 | 27 |

**Replicate Transects:** 24
**Total Species:** 24
**Total Abundance:** 558
**Diversity:** 2.034
**Dominance:** 0.198
**Evenness:** 0.640

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Aulorhynchus flavidus | 206 | 11.44 | 5.47 | 33.33 | 11.89 | 9 | 15 |
| Oxyjulis californica | 91 | 5.06 | 2.97 | 33.33 | 10.65 | 8 | 17 |
| Brachyistius frenatus | 82 | 4.56 | 1.85 | 72.22 | 9.15 | 6 | 14 |
| Sebastes atrovirens | 12 | 0.67 | 0.35 | 22.22 | 25.17 | 21 | 28 |
| Sebastes mystinus | 6 | 0.33 | 0.23 | 16.67 | 17.83 | 15 | 28 |
| Sebastes serranoides/S. flavidus | 4 | 0.22 | 0.10 | 22.22 | 23.75 | 15 | 32 |
| Embiotoca lateralis | 1 | 0.06 | 0.06 | 5.56 | 30.00 | 30 | 30 |
| Heterostichus rostratus | 1 | 0.06 | 0.06 | 5.56 | 9.00 | 9 | 9 |
| Medialuna californiensis | 1 | 0.06 | 0.06 | 5.56 | 35.00 | 35 | 35 |
| Semicossyphus pulcher | 1 | 0.06 | 0.06 | 5.56 | 65.00 | 65 | 65 |
| Syngnathus spp. | 1 | 0.06 | 0.06 | 5.56 | 15.00 | 15 | 15 |

**Replicate Transects:** 18
**Total Species:** 11
**Total Abundance:** 406
**Diversity:** 1.288
**Dominance:** 0.320
**Evenness:** 0.537

**Site Number:** 35
**Site:** Rodes Reef
**Location:** Santa Rosa Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 570 | 23.75 | 6.25 | 91.67 | 12.36 | 7 | 25 |
| Chromis punctipinnis | 23 | 0.96 | 0.66 | 16.67 | 22.83 | 20 | 30 |
| Embiotoca lateralis | 23 | 0.96 | 0.33 | 41.67 | 22.83 | 8 | 35 |
| Oxylebius pictus | 20 | 0.83 | 0.29 | 33.33 | 12.80 | 8 | 20 |
| Semicossyphus pulcher | 16 | 0.67 | 0.18 | 45.83 | 49.06 | 35 | 70 |
| Brachyistius frenatus | 10 | 0.42 | 0.15 | 29.17 | 9.20 | 8 | 12 |
| Sebastes mystinus | 8 | 0.33 | 0.18 | 16.67 | 21.25 | 15 | 30 |
| Caulolatilus princeps | 5 | 0.21 | 0.13 | 12.50 | 52.00 | 40 | 70 |
| Paralabrax clathratus | 5 | 0.21 | 0.13 | 12.50 | 36.60 | 30 | 50 |
| Sebastes atrovirens | 4 | 0.17 | 0.10 | 12.50 | 25.00 | 20 | 30 |
| Rhacochilus vacca | 2 | 0.08 | 0.06 | 8.33 | 20.00 | 20 | 20 |
| Embiotoca jacksoni | 1 | 0.04 | 0.04 | 4.17 | 24.00 | 24 | 24 |
| Girella nigricans | 1 | 0.04 | 0.04 | 4.17 | 40.00 | 40 | 40 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.17 | 12.00 | 12 | 12 |
| Sebastes serranoides/S. flavidus | 1 | 0.04 | 0.04 | 4.17 | 16.00 | 16 | 16 |

**Replicate Transects:** 24
**Total Species:** 15
**Total Abundance:** 690
**Diversity:** 0.844
**Dominance:** 0.675
**Evenness:** 0.312

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 21 | 0.88 | 0.57 | 20.83 | 20.90 | 15 | 30 |
| Aulorhynchus flavidus | 20 | 0.83 | 0.83 | 4.17 | 15.00 | 15 | 15 |
| Brachyistius frenatus | 20 | 0.83 | 0.27 | 37.50 | 8.55 | 7 | 11 |
| Oxyjulis californica | 8 | 0.33 | 0.16 | 20.83 | 12.38 | 5 | 15 |
| Heterostichus rostratus | 3 | 0.13 | 0.07 | 12.50 | 10.67 | 8 | 15 |
| Sebastes serranoides/S. flavidus | 3 | 0.13 | 0.13 | 4.17 | 12.00 | 12 | 12 |
| Rhacochilus vacca | 2 | 0.08 | 0.08 | 4.17 | 24.00 | 24 | 24 |
| Chromis punctipinnis | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |
| Embiotoca lateralis | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |
| Sebastes atrovirens | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |

**Replicate Transects:** 24
**Total Species:** 10
**Total Abundance:** 80
**Diversity:** 1.777
**Dominance:** -0.132
**Evenness:** 0.772

**Site Number:** 36
**Site:** Beacon Reef
**Location:** Santa Rosa Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 267 | 11.13 | 7.90 | 33.33 | 11.58 | 8 | 25 |
| Rhinogobiops nicholsi | 17 | 0.71 | 0.19 | 45.83 | 9.94 | 7 | 12 |
| Semicossyphus pulcher | 17 | 0.71 | 0.22 | 37.50 | 46.76 | 30 | 60 |
| Oxylebius pictus | 15 | 0.63 | 0.24 | 33.33 | 12.27 | 8 | 18 |
| Paralabrax clathratus | 6 | 0.25 | 0.12 | 16.67 | 38.33 | 30 | 45 |
| Sebastes atrovirens | 6 | 0.25 | 0.14 | 12.50 | 27.50 | 20 | 35 |
| Embiotoca lateralis | 5 | 0.21 | 0.12 | 12.50 | 19.00 | 10 | 35 |
| Chromis punctipinnis | 4 | 0.17 | 0.10 | 12.50 | 9.00 | 4 | 20 |
| Embiotoca jacksoni | 4 | 0.17 | 0.17 | 4.17 | 30.00 | 30 | 30 |
| Sebastes chrysomelas/S. carnatus (yoy) | 4 | 0.17 | 0.17 | 4.17 | 5.00 | 5 | 5 |
| Sebastes caurinus | 3 | 0.13 | 0.09 | 8.33 | 28.67 | 20 | 35 |
| Sebastes serranoides/S. flavidus | 3 | 0.13 | 0.13 | 4.17 | 15.00 | 15 | 15 |
| Hypsurus caryi | 2 | 0.08 | 0.08 | 4.17 | 8.00 | 8 | 8 |
| Sebastes auriculatus | 2 | 0.08 | 0.06 | 8.33 | 36.50 | 35 | 38 |
| Artedius spp. | 1 | 0.04 | 0.04 | 4.17 | 6.00 | 6 | 6 |
| Gibbonsia spp. | 1 | 0.04 | 0.04 | 4.17 | 6.00 | 6 | 6 |
| Sebastes miniatus | 1 | 0.04 | 0.04 | 4.17 | 4.00 | 4 | 4 |
| Sebastes mystinus | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |

**Replicate Transects:** 24
**Total Species:** 18
**Total Abundance:** 359
**Diversity:** 1.192
**Dominance:** 0.529
**Evenness:** 0.412

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 32 | 1.33 | 0.91 | 16.67 | 6.50 | 3 | 15 |
| Brachyistius frenatus | 4 | 0.17 | 0.13 | 8.33 | 8.50 | 8 | 10 |
| Sebastes chrysomelas/S. carnatus (yoy) | 2 | 0.08 | 0.08 | 4.17 | 5.00 | 5 | 5 |

**Replicate Transects:** 24
**Total Species:** 3
**Total Abundance:** 38
**Diversity:** 0.537
**Dominance:** 0.248
**Evenness:** 0.488

**Site Number:** 37
**Site:** Monacos
**Location:** Santa Rosa Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 265 | 11.04 | 6.33 | 62.50 | 9.12 | 4 | 25 |
| Hypsurus caryi | 57 | 2.38 | 1.36 | 20.83 | 11.51 | 5 | 15 |
| Brachyistius frenatus | 52 | 2.17 | 0.81 | 37.50 | 6.48 | 5 | 10 |
| Chromis punctipinnis | 22 | 0.92 | 0.92 | 4.17 | 5.00 | 5 | 5 |
| Rhacochilus vacca | 12 | 0.50 | 0.22 | 25.00 | 23.92 | 12 | 30 |
| Oxylebius pictus | 9 | 0.38 | 0.23 | 12.50 | 13.11 | 10 | 15 |
| Rhinogobiops nicholsi | 7 | 0.29 | 0.18 | 16.67 | 10.86 | 8 | 12 |
| Sebastes caurinus | 7 | 0.29 | 0.22 | 8.33 | 7.86 | 7 | 8 |
| Embiotoca jacksoni | 6 | 0.25 | 0.25 | 4.17 | 15.00 | 15 | 15 |
| Heterostichus rostratus | 5 | 0.21 | 0.21 | 4.17 | 7.80 | 5 | 12 |
| Sebastes atrovirens | 3 | 0.13 | 0.13 | 4.17 | 14.00 | 6 | 30 |
| Semicossyphus pulcher | 3 | 0.13 | 0.09 | 8.33 | 48.33 | 40 | 55 |
| Alloclinus holderi | 2 | 0.08 | 0.06 | 8.33 | 9.50 | 7 | 12 |
| Embiotoca lateralis | 2 | 0.08 | 0.08 | 4.17 | 15.00 | 15 | 15 |
| Paralabrax clathratus | 2 | 0.08 | 0.06 | 8.33 | 37.50 | 30 | 45 |
| Sebastes auriculatus | 2 | 0.08 | 0.06 | 8.33 | 18.00 | 6 | 30 |
| Artedius corallinus | 1 | 0.04 | 0.04 | 4.17 | 5.00 | 5 | 5 |
| Aulorhynchus flavidus | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Cheilotrema saturnum | 1 | 0.04 | 0.04 | 4.17 | 10.00 | 10 | 10 |
| Medialuna californiensis | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Scorpaenichthys marmoratus | 1 | 0.04 | 0.04 | 4.17 | 45.00 | 45 | 45 |

**Replicate Transects:** 24
**Total Species:** 21
**Total Abundance:** 461
**Diversity:** 1.599
**Dominance:** 0.328
**Evenness:** 0.525

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Atherinopsidae | 120 | 5.00 | 2.64 | 20.83 | 17.75 | 17 | 20 |
| Brachyistius frenatus | 71 | 2.96 | 0.82 | 62.50 | 8.41 | 6 | 13 |
| Sebastes chrysomelas/S. carnatus (yoy) | 5 | 0.21 | 0.12 | 12.50 | 6.60 | 5 | 8 |
| Sebastes paucispinis | 3 | 0.13 | 0.09 | 8.33 | 10.00 | 10 | 10 |
| Oxyjulis californica | 2 | 0.08 | 0.08 | 4.17 | 3.00 | 3 | 3 |
| Sebastes atrovirens | 2 | 0.08 | 0.06 | 8.33 | 20.00 | 10 | 30 |
| Aulorhynchus flavidus | 1 | 0.04 | 0.04 | 4.17 | 18.00 | 18 | 18 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.17 | 6.00 | 6 | 6 |
| Rhacochilus toxotes | 1 | 0.04 | 0.04 | 4.17 | 19.00 | 19 | 19 |
| Rhacochilus vacca | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |

**Replicate Transects:** 24
**Total Species:** 10
**Total Abundance:** 207
**Diversity:** 1.027
**Dominance:** 0.383
**Evenness:** 0.446

**Site Number:** 38
**Site:** Bee Rock
**Location:** Santa Rosa Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Embiotoca lateralis | 101 | 4.21 | 0.93 | 54.17 | 18.47 | 6 | 35 |
| Sebastes mystinus | 65 | 2.71 | 1.03 | 50.00 | 15.94 | 8 | 40 |
| Sebastes paucispinis | 38 | 1.58 | 1.46 | 12.50 | 10.97 | 10 | 12 |
| Aulorhynchus flavidus | 33 | 1.38 | 1.12 | 20.83 | 11.12 | 8 | 18 |
| Rhinogobiops nicholsi | 31 | 1.29 | 0.57 | 29.17 | 12.35 | 8 | 15 |
| Hypsurus caryi | 27 | 1.13 | 0.60 | 33.33 | 12.19 | 8 | 25 |
| Phanerodon furcatus | 23 | 0.96 | 0.47 | 25.00 | 11.78 | 5 | 20 |
| Semicossyphus pulcher | 21 | 0.88 | 0.23 | 50.00 | 33.57 | 20 | 50 |
| Brachyistius frenatus | 19 | 0.79 | 0.51 | 20.83 | 10.00 | 3 | 12 |
| Embiotoca jacksoni | 19 | 0.79 | 0.26 | 50.00 | 20.89 | 6 | 35 |
| Sebastes atrovirens | 16 | 0.67 | 0.21 | 37.50 | 20.75 | 10 | 40 |
| Sebastes serranoides/S. flavidus | 14 | 0.58 | 0.19 | 37.50 | 13.86 | 10 | 15 |
| Rhacochilus vacca | 8 | 0.33 | 0.12 | 29.17 | 16.13 | 12 | 20 |
| Oxylebius pictus | 7 | 0.29 | 0.14 | 20.83 | 13.14 | 8 | 18 |
| Oxyjulis californica | 5 | 0.21 | 0.15 | 8.33 | 17.00 | 10 | 25 |
| Rhacochilus toxotes | 4 | 0.17 | 0.13 | 8.33 | 43.75 | 40 | 45 |
| Sebastes melanops | 4 | 0.17 | 0.10 | 12.50 | 15.50 | 12 | 20 |
| Sebastes carnatus | 3 | 0.13 | 0.07 | 12.50 | 20.67 | 14 | 28 |
| Sebastes miniatus | 3 | 0.13 | 0.07 | 12.50 | 20.00 | 8 | 40 |
| Sebastes chrysomelas/S. carnatus (yoy) | 1 | 0.04 | 0.04 | 4.17 | 4.00 | 4 | 4 |
| Sebastes serriceps | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 21 |
| **Total Abundance:** | 443 |
| **Diversity:** | 2.546 |
| **Dominance:** | 0.056 |
| **Evenness:** | 0.836 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Trachurus symmetricus | 300 | 12.50 | 12.50 | 4.17 | 20.00 | 20 | 20 |
| Sebastes mystinus | 77 | 3.21 | 0.99 | 54.17 | 14.92 | 10 | 25 |
| Aulorhynchus flavidus | 30 | 1.25 | 1.25 | 4.17 | 12.00 | 12 | 12 |
| Oxyjulis californica | 24 | 1.00 | 0.87 | 16.67 | 9.88 | 8 | 22 |
| Sebastes serranoides/S. flavidus | 21 | 0.88 | 0.31 | 37.50 | 17.43 | 10 | 35 |
| Sebastes melanops | 7 | 0.29 | 0.25 | 8.33 | 15.71 | 10 | 25 |
| Brachyistius frenatus | 5 | 0.21 | 0.17 | 8.33 | 6.00 | 3 | 12 |
| Chromis punctipinnis | 3 | 0.13 | 0.09 | 8.33 | 15.00 | 12 | 18 |
| Semicossyphus pulcher | 3 | 0.13 | 0.09 | 8.33 | 33.33 | 30 | 35 |
| Sebastes atrovirens | 2 | 0.08 | 0.06 | 8.33 | 20.00 | 20 | 20 |
| Embiotoca lateralis | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 11 |
| **Total Abundance:** | 473 |
| **Diversity:** | 1.260 |
| **Dominance:** | 0.408 |
| **Evenness:** | 0.525 |

**Site Number:** 39
**Site:** Cluster Point
**Location:** Santa Rosa Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Embiotoca lateralis | 42 | 1.75 | 0.69 | 29.17 | 13.21 | 7 | 35 |
| Sebastes mystinus | 40 | 1.67 | 0.77 | 25.00 | 20.25 | 10 | 40 |
| Aulorhynchus flavidus | 36 | 1.50 | 1.25 | 20.83 | 4.78 | 3 | 20 |
| Sebastes atrovirens | 22 | 0.92 | 0.32 | 37.50 | 26.41 | 15 | 35 |
| Oxylebius pictus | 20 | 0.83 | 0.25 | 41.67 | 10.80 | 6 | 14 |
| Rhacochilus vacca | 7 | 0.29 | 0.13 | 20.83 | 24.57 | 15 | 35 |
| Sebastes miniatus | 7 | 0.29 | 0.14 | 20.83 | 29.71 | 10 | 60 |
| Semicossyphus pulcher | 7 | 0.29 | 0.19 | 12.50 | 40.71 | 30 | 60 |
| Embiotoca jacksoni | 5 | 0.21 | 0.10 | 16.67 | 32.00 | 30 | 40 |
| Hypsurus caryi | 3 | 0.13 | 0.07 | 12.50 | 18.67 | 10 | 36 |
| Sebastes serranoides/S. flavidus | 3 | 0.13 | 0.07 | 12.50 | 15.33 | 12 | 20 |
| Oxyjulis californica | 2 | 0.08 | 0.08 | 4.17 | 15.00 | 15 | 15 |
| Sebastes chrysomelas | 2 | 0.08 | 0.06 | 8.33 | 25.00 | 20 | 30 |
| Anarrhichthys ocellatus | 1 | 0.04 | 0.04 | 4.17 | 80.00 | 80 | 80 |
| Brachyistius frenatus | 1 | 0.04 | 0.04 | 4.17 | 6.00 | 6 | 6 |
| Chromis punctipinnis | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.17 | 12.00 | 12 | 12 |
| Ophiodon elongatus | 1 | 0.04 | 0.04 | 4.17 | 70.00 | 70 | 70 |
| Orthonopias triacis | 1 | 0.04 | 0.04 | 4.17 | 8.00 | 8 | 8 |
| Rhinogobiops nicholsi | 1 | 0.04 | 0.04 | 4.17 | 12.00 | 12 | 12 |
| Sebastes caurinus | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |
| Sebastes serriceps | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 22 |
| **Total Abundance:** | 205 |
| **Diversity:** | 2.300 |
| **Dominance:** | 0.022 |
| **Evenness:** | 0.744 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 39 | 1.63 | 0.74 | 33.33 | 17.13 | 11 | 25 |
| Sebastes serranoides/S. flavidus | 16 | 0.67 | 0.33 | 20.83 | 16.56 | 10 | 30 |
| Oxyjulis californica | 6 | 0.25 | 0.21 | 8.33 | 13.50 | 13 | 16 |
| Sebastes atrovirens | 2 | 0.08 | 0.08 | 4.17 | 20.00 | 20 | 20 |
| Chromis punctipinnis | 1 | 0.04 | 0.04 | 4.17 | 17.00 | 17 | 17 |
| Rhacochilus vacca | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Sebastes chrysomelas/S. carnatus (yoy) | 1 | 0.04 | 0.04 | 4.17 | 5.00 | 5 | 5 |
| Sebastes miniatus | 1 | 0.04 | 0.04 | 4.17 | 23.00 | 23 | 23 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 8 |
| **Total Abundance:** | 67 |
| **Diversity:** | 1.229 |
| **Dominance:** | 0.074 |
| **Evenness:** | 0.591 |

**Site Number:** 40
**Site:** Chickasaw
**Location:** Santa Rosa Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 136 | 5.67 | 1.73 | 70.83 | 17.49 | 10 | 30 |
| Embiotoca lateralis | 113 | 4.71 | 0.99 | 75.00 | 20.61 | 5 | 40 |
| Embiotoca jacksoni | 38 | 1.58 | 0.30 | 70.83 | 21.32 | 4 | 40 |
| Semicossyphus pulcher | 37 | 1.54 | 0.34 | 70.83 | 39.32 | 18 | 60 |
| Chromis punctipinnis | 35 | 1.46 | 0.87 | 29.17 | 18.86 | 10 | 30 |
| Oxylebius pictus | 34 | 1.42 | 0.34 | 62.50 | 11.18 | 8 | 18 |
| Oxyjulis californica | 16 | 0.67 | 0.29 | 29.17 | 13.38 | 10 | 20 |
| Rhacochilus vacca | 16 | 0.67 | 0.19 | 50.00 | 19.00 | 5 | 45 |
| Sebastes serranoides/S. flavidus | 13 | 0.54 | 0.23 | 29.17 | 18.69 | 10 | 35 |
| Sebastes atrovirens | 10 | 0.42 | 0.19 | 20.83 | 24.00 | 8 | 35 |
| Rhacochilus toxotes | 6 | 0.25 | 0.14 | 16.67 | 40.83 | 20 | 50 |
| Hypsurus caryi | 5 | 0.21 | 0.17 | 8.33 | 16.00 | 15 | 20 |
| Brachyistius frenatus | 3 | 0.13 | 0.07 | 12.50 | 4.33 | 3 | 5 |
| Rhinogobiops nicholsi | 3 | 0.13 | 0.07 | 12.50 | 7.00 | 3 | 10 |
| Sebastes carnatus | 3 | 0.13 | 0.07 | 12.50 | 22.33 | 20 | 25 |
| Girella nigricans | 2 | 0.08 | 0.06 | 8.33 | 35.00 | 30 | 40 |
| Sebastes paucispinis | 2 | 0.08 | 0.08 | 4.17 | 11.00 | 10 | 12 |
| Myliobatis californica | 1 | 0.04 | 0.04 | 4.17 | 90.00 | 90 | 90 |
| Ophiodon elongatus | 1 | 0.04 | 0.04 | 4.17 | 70.00 | 70 | 70 |
| Scorpaenichthys marmoratus | 1 | 0.04 | 0.04 | 4.17 | 40.00 | 40 | 40 |
| Sebastes auriculatus | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |
| Sebastes chrysomelas | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |
| Sebastes chrysomelas/S. carnatus (yoy) | 1 | 0.04 | 0.04 | 4.17 | 8.00 | 8 | 8 |
| Sebastes serriceps | 1 | 0.04 | 0.04 | 4.17 | 8.00 | 8 | 8 |

**Replicate Transects:** 24
**Total Species:** 24
**Total Abundance:** 479
**Diversity:** 2.215
**Dominance:** 0.119
**Evenness:** 0.697

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Sebastes mystinus | 297 | 12.38 | 3.02 | 70.83 | 17.16 | 5 | 25 |
| Oxyjulis californica | 160 | 6.67 | 1.96 | 79.17 | 14.88 | 10 | 20 |
| Sebastes serranoides/S. flavidus | 111 | 4.63 | 1.74 | 58.33 | 18.73 | 10 | 35 |
| Trachurus symmetricus | 100 | 4.17 | 4.17 | 4.17 | 15.00 | 15 | 15 |
| Chromis punctipinnis | 70 | 2.92 | 1.23 | 50.00 | 16.34 | 10 | 30 |
| Brachyistius frenatus | 36 | 1.50 | 0.76 | 16.67 | 9.39 | 8 | 15 |
| Sebastes atrovirens | 22 | 0.92 | 0.49 | 33.33 | 20.55 | 15 | 28 |
| Sebastes paucispinis | 13 | 0.54 | 0.54 | 4.17 | 8.46 | 8 | 10 |
| Embiotoca lateralis | 5 | 0.21 | 0.10 | 16.67 | 22.60 | 15 | 33 |
| Embiotoca jacksoni | 2 | 0.08 | 0.06 | 8.33 | 20.00 | 20 | 20 |
| Sebastes melanops | 2 | 0.08 | 0.06 | 8.33 | 25.00 | 25 | 25 |
| Paralabrax clathratus | 1 | 0.04 | 0.04 | 4.17 | 35.00 | 35 | 35 |
| Rhacochilus vacca | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |

**Site Number:** 40
**Site:** Chickasaw
**Location:** Santa Rosa Island

**Replicate Transects:** 24
**Total Species:** 13
**Total Abundance:** 820
**Diversity:** 1.801
**Dominance:** 0.189
**Evenness:** 0.702

**Site Number:** 41
**Site:** Johnsons Lee
**Location:** Santa Rosa Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 535 | 22.29 | 3.10 | 100.00 | 10.98 | 3 | 20 |
| Girella nigricans | 64 | 2.67 | 1.38 | 33.33 | 26.81 | 25 | 38 |
| Embiotoca lateralis | 41 | 1.71 | 0.65 | 50.00 | 16.46 | 8 | 25 |
| Semicossyphus pulcher | 32 | 1.33 | 0.34 | 54.17 | 31.81 | 15 | 45 |
| Rhinogobiops nicholsi | 22 | 0.92 | 0.23 | 54.17 | 8.55 | 4 | 12 |
| Oxylebius pictus | 20 | 0.83 | 0.21 | 50.00 | 10.45 | 8 | 14 |
| Embiotoca jacksoni | 16 | 0.67 | 0.33 | 20.83 | 12.63 | 5 | 25 |
| Chromis punctipinnis | 15 | 0.63 | 0.42 | 20.83 | 6.00 | 3 | 15 |
| Hypsurus caryi | 15 | 0.63 | 0.22 | 33.33 | 12.53 | 5 | 20 |
| Sebastes atrovirens | 12 | 0.50 | 0.19 | 33.33 | 24.58 | 20 | 30 |
| Myliobatis californica | 11 | 0.46 | 0.15 | 37.50 | 79.09 | 55 | 100 |
| Brachyistius frenatus | 10 | 0.42 | 0.10 | 41.67 | 7.20 | 5 | 10 |
| Sebastes serranoides/S. flavidus | 9 | 0.38 | 0.12 | 33.33 | 13.33 | 8 | 20 |
| Paralabrax clathratus | 8 | 0.33 | 0.12 | 29.17 | 37.25 | 30 | 45 |
| Rhacochilus vacca | 8 | 0.33 | 0.13 | 25.00 | 16.25 | 10 | 25 |
| Hypsypops rubicundus | 5 | 0.21 | 0.17 | 8.33 | 22.00 | 20 | 25 |
| Atherinopsidae | 3 | 0.13 | 0.13 | 4.17 | 20.00 | 20 | 20 |
| Sebastes chrysomelas | 3 | 0.13 | 0.13 | 4.17 | 25.00 | 22 | 28 |
| Cymatogaster aggregata | 2 | 0.08 | 0.08 | 4.17 | 8.00 | 8 | 8 |
| Orthonopias triacis | 2 | 0.08 | 0.06 | 8.33 | 9.00 | 8 | 10 |
| Medialuna californiensis | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Ophiodon elongatus | 1 | 0.04 | 0.04 | 4.17 | 50.00 | 50 | 50 |
| Pleuronichthys coenosus | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Sebastes rastrelliger | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |
| Syngnathus spp. | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 25 |
| **Total Abundance:** | 838 |
| **Diversity:** | 1.607 |
| **Dominance:** | 0.403 |
| **Evenness:** | 0.499 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 328 | 13.67 | 4.31 | 87.50 | 9.59 | 3 | 22 |
| Atherinopsidae | 190 | 7.92 | 4.06 | 25.00 | 19.81 | 12 | 25 |
| Chromis punctipinnis | 27 | 1.13 | 1.04 | 12.50 | 6.00 | 5 | 20 |
| Brachyistius frenatus | 19 | 0.79 | 0.32 | 33.33 | 10.00 | 6 | 14 |
| Sebastes serranoides/S. flavidus | 7 | 0.29 | 0.14 | 20.83 | 19.57 | 15 | 40 |
| Embiotoca lateralis | 4 | 0.17 | 0.13 | 8.33 | 24.25 | 24 | 25 |
| Heterostichus rostratus | 2 | 0.08 | 0.06 | 8.33 | 6.50 | 5 | 8 |
| Paralabrax clathratus | 1 | 0.04 | 0.04 | 4.17 | 38.00 | 38 | 38 |
| Sebastes atrovirens | 1 | 0.04 | 0.04 | 4.17 | 24.00 | 24 | 24 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 9 |
| **Total Abundance:** | 579 |
| **Diversity:** | 1.072 |
| **Dominance:** | 0.408 |
| **Evenness:** | 0.488 |

**Site Number:** 42
**Site:** Jolla Vieja
**Location:** Santa Rosa Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 87 | 3.63 | 1.46 | 58.33 | 10.21 | 3 | 22 |
| Chromis punctipinnis | 50 | 2.08 | 0.93 | 41.67 | 16.32 | 12 | 25 |
| Embiotoca jacksoni | 36 | 1.50 | 0.32 | 66.67 | 17.33 | 6 | 32 |
| Atherinopsidae | 30 | 1.25 | 1.25 | 4.17 | 20.00 | 20 | 20 |
| Oxylebius pictus | 30 | 1.25 | 0.35 | 62.50 | 10.43 | 6 | 15 |
| Rhacochilus toxotes | 26 | 1.08 | 0.91 | 20.83 | 31.77 | 22 | 36 |
| Hypsurus caryi | 20 | 0.83 | 0.33 | 37.50 | 14.25 | 6 | 20 |
| Brachyistius frenatus | 16 | 0.67 | 0.34 | 29.17 | 6.69 | 4 | 15 |
| Rhacochilus vacca | 16 | 0.67 | 0.24 | 37.50 | 21.88 | 10 | 30 |
| Semicossyphus pulcher | 14 | 0.58 | 0.16 | 45.83 | 39.36 | 25 | 80 |
| Rhinogobiops nicholsi | 10 | 0.42 | 0.18 | 25.00 | 9.00 | 5 | 12 |
| Sebastes atrovirens | 10 | 0.42 | 0.19 | 25.00 | 21.50 | 8 | 30 |
| Embiotoca lateralis | 7 | 0.29 | 0.15 | 16.67 | 15.14 | 5 | 25 |
| Girella nigricans | 6 | 0.25 | 0.15 | 12.50 | 30.50 | 15 | 40 |
| Sebastes serranoides/S. flavidus | 6 | 0.25 | 0.14 | 16.67 | 25.17 | 12 | 40 |
| Sebastes mystinus | 5 | 0.21 | 0.13 | 12.50 | 19.00 | 10 | 25 |
| Hyperprosopon argenteum | 4 | 0.17 | 0.08 | 16.67 | 6.50 | 6 | 8 |
| Aulorhynchus flavidus | 3 | 0.13 | 0.13 | 4.17 | 12.00 | 12 | 12 |
| Paralabrax clathratus | 3 | 0.13 | 0.09 | 8.33 | 36.67 | 30 | 45 |
| Sebastes melanops | 3 | 0.13 | 0.09 | 8.33 | 25.33 | 18 | 34 |
| Cymatogaster aggregata | 2 | 0.08 | 0.08 | 4.17 | 7.00 | 7 | 7 |
| Hypsypops rubicundus | 2 | 0.08 | 0.08 | 4.17 | 30.00 | 30 | 30 |
| Phanerodon furcatus | 2 | 0.08 | 0.08 | 4.17 | 10.00 | 10 | 10 |
| Sebastes carnatus | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Sebastes chrysomelas | 1 | 0.04 | 0.04 | 4.17 | 22.00 | 22 | 22 |
| Sebastes miniatus | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |
| Sebastes rastrelliger | 1 | 0.04 | 0.04 | 4.17 | 28.00 | 28 | 28 |

**Replicate Transects:** 24
**Total Species:** 27
**Total Abundance:** 392
**Diversity:** 2.664
**Dominance:** 0.041
**Evenness:** 0.808

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 168 | 7.00 | 4.42 | 45.83 | 6.28 | 3 | 17 |
| Trachurus symmetricus | 100 | 4.17 | 4.17 | 4.17 | 15.00 | 15 | 15 |
| Atherinopsidae | 55 | 2.29 | 1.59 | 8.33 | 20.00 | 20 | 20 |
| Brachyistius frenatus | 22 | 0.92 | 0.55 | 29.17 | 10.77 | 5 | 20 |
| Chromis punctipinnis | 18 | 0.75 | 0.26 | 37.50 | 14.33 | 9 | 20 |
| Sebastes atrovirens | 12 | 0.50 | 0.21 | 25.00 | 19.83 | 5 | 28 |
| Sebastes serranoides/S. flavidus | 12 | 0.50 | 0.21 | 29.17 | 15.42 | 9 | 24 |
| Sebastes mystinus | 9 | 0.38 | 0.23 | 12.50 | 16.00 | 9 | 20 |
| Sebastes melanops | 5 | 0.21 | 0.15 | 8.33 | 19.40 | 13 | 23 |
| Rhacochilus vacca | 4 | 0.17 | 0.08 | 16.67 | 19.00 | 14 | 25 |
| Paralabrax clathratus | 3 | 0.13 | 0.09 | 8.33 | 27.33 | 25 | 30 |
| Semicossyphus pulcher | 2 | 0.08 | 0.06 | 8.33 | 30.00 | 25 | 35 |
| Embiotocidae | 1 | 0.04 | 0.04 | 4.17 | 6.00 | 6 | 6 |
| Girella nigricans | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |
| Rhacochilus toxotes | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |
| Sebastes paucispinis | 1 | 0.04 | 0.04 | 4.17 | 6.00 | 6 | 6 |

**Replicate Transects:** 24
**Total Species:** 16
**Total Abundance:** 414
**Diversity:** 1.776
**Dominance:** 0.202
**Evenness:** 0.641

**Site Number:** 43
**Site:** Forney
**Location:** Santa Cruz Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 227 | 9.46 | 2.68 | 75.00 | 9.61 | 3 | 21 |
| Chromis punctipinnis | 88 | 3.67 | 1.23 | 58.33 | 14.51 | 6 | 21 |
| Paralabrax clathratus | 54 | 2.25 | 0.71 | 70.83 | 29.56 | 14 | 43 |
| Girella nigricans | 39 | 1.63 | 0.78 | 29.17 | 27.95 | 23 | 31 |
| Embiotoca lateralis | 30 | 1.25 | 0.48 | 37.50 | 22.17 | 9 | 31 |
| Semicossyphus pulcher | 29 | 1.21 | 0.41 | 54.17 | 34.69 | 21 | 65 |
| Embiotoca jacksoni | 27 | 1.13 | 0.37 | 45.83 | 16.33 | 7 | 29 |
| Brachyistius frenatus | 25 | 1.04 | 0.32 | 45.83 | 9.20 | 5 | 14 |
| Heterostichus rostratus | 18 | 0.75 | 0.21 | 50.00 | 6.78 | 4 | 11 |
| Oxylebius pictus | 16 | 0.67 | 0.22 | 37.50 | 12.38 | 9 | 17 |
| Sebastes atrovirens | 16 | 0.67 | 0.28 | 25.00 | 20.00 | 13 | 31 |
| Rhacochilus vacca | 14 | 0.58 | 0.25 | 29.17 | 23.29 | 8 | 32 |
| Hypsurus caryi | 13 | 0.54 | 0.50 | 8.33 | 10.23 | 9 | 13 |
| Atherinopsidae | 7 | 0.29 | 0.29 | 4.17 | 22.71 | 21 | 24 |
| Rhacochilus toxotes | 3 | 0.13 | 0.09 | 8.33 | 32.00 | 32 | 32 |
| Leiocottus hirundo | 2 | 0.08 | 0.06 | 8.33 | 23.00 | 21 | 25 |
| Sebastes carnatus | 2 | 0.08 | 0.06 | 8.33 | 15.50 | 12 | 19 |
| Sebastes serranoides/S. flavidus | 2 | 0.08 | 0.08 | 4.17 | 21.50 | 20 | 23 |
| Caulolatilus princeps | 1 | 0.04 | 0.04 | 4.17 | 31.00 | 31 | 31 |
| Gibbonsia spp. | 1 | 0.04 | 0.04 | 4.17 | 11.00 | 11 | 11 |
| Sebastes chrysomelas | 1 | 0.04 | 0.04 | 4.17 | 17.00 | 17 | 17 |

**Replicate Transects:** 24
**Total Species:** 21
**Total Abundance:** 615
**Diversity:** 2.218
**Dominance:** 0.147
**Evenness:** 0.729

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 316 | 17.56 | 5.29 | 88.89 | 10.44 | 2 | 25 |
| Brachyistius frenatus | 104 | 5.78 | 1.41 | 66.67 | 8.55 | 5 | 14 |
| Trachurus symmetricus | 60 | 3.33 | 3.33 | 5.56 | 14.00 | 13 | 15 |
| Atherinopsidae | 29 | 1.61 | 1.35 | 11.11 | 15.48 | 13 | 17 |
| Medialuna californiensis | 18 | 1.00 | 0.73 | 11.11 | 23.22 | 20 | 26 |
| Chromis punctipinnis | 17 | 0.94 | 0.42 | 27.78 | 18.12 | 13 | 26 |
| Heterostichus rostratus | 13 | 0.72 | 0.23 | 44.44 | 5.38 | 2 | 11 |
| Paralabrax clathratus | 5 | 0.28 | 0.14 | 22.22 | 31.80 | 27 | 36 |
| Sebastes atrovirens | 2 | 0.11 | 0.08 | 11.11 | 27.00 | 22 | 32 |
| Myliobatis californica | 1 | 0.06 | 0.06 | 5.56 | 60.00 | 60 | 60 |
| Rhacochilus vacca | 1 | 0.06 | 0.06 | 5.56 | 23.00 | 23 | 23 |
| Sebastes chrysomelas/S. carnatus (yoy) | 1 | 0.06 | 0.06 | 5.56 | 5.00 | 5 | 5 |
| Sebastes serranoides/S. flavidus | 1 | 0.06 | 0.06 | 5.56 | 17.00 | 17 | 17 |

**Replicate Transects:** 18
**Total Species:** 13
**Total Abundance:** 568
**Diversity:** 1.433
**Dominance:** 0.338
**Evenness:** 0.559

**Site Number:** 44
**Site:** Painted Cave
**Location:** Santa Cruz Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 372 | 15.50 | 8.23 | 58.33 | 11.55 | 2 | 24 |
| Chromis punctipinnis | 353 | 14.71 | 5.42 | 45.83 | 4.21 | 1 | 22 |
| Embiotoca jacksoni | 86 | 3.58 | 0.71 | 70.83 | 13.65 | 5 | 28 |
| Paralabrax clathratus | 38 | 1.58 | 0.32 | 75.00 | 30.05 | 5 | 45 |
| Oxylebius pictus | 30 | 1.25 | 0.37 | 50.00 | 12.33 | 5 | 17 |
| Girella nigricans | 27 | 1.13 | 0.42 | 37.50 | 28.74 | 24 | 35 |
| Semicossyphus pulcher | 27 | 1.13 | 0.28 | 50.00 | 33.63 | 22 | 50 |
| Brachyistius frenatus | 23 | 0.96 | 0.47 | 20.83 | 6.26 | 4 | 12 |
| Rhacochilus vacca | 21 | 0.88 | 0.19 | 62.50 | 15.05 | 6 | 32 |
| Sebastes paucispinis | 13 | 0.54 | 0.42 | 12.50 | 6.08 | 5 | 9 |
| Embiotoca lateralis | 12 | 0.50 | 0.23 | 20.83 | 12.00 | 9 | 20 |
| Heterostichus rostratus | 10 | 0.42 | 0.19 | 25.00 | 8.10 | 5 | 14 |
| Medialuna californiensis | 9 | 0.38 | 0.17 | 20.83 | 20.89 | 12 | 27 |
| Sebastes serranoides/S. flavidus | 8 | 0.33 | 0.13 | 25.00 | 11.88 | 9 | 16 |
| Sebastes atrovirens | 5 | 0.21 | 0.10 | 16.67 | 13.80 | 3 | 25 |
| Sebastes chrysomelas/S. carnatus (yoy) | 5 | 0.21 | 0.15 | 8.33 | 4.40 | 4 | 5 |
| Caulolatilus princeps | 3 | 0.13 | 0.09 | 8.33 | 35.67 | 31 | 39 |
| Sebastes caurinus | 3 | 0.13 | 0.07 | 12.50 | 17.00 | 14 | 20 |
| Sebastes chrysomelas | 3 | 0.13 | 0.09 | 8.33 | 25.67 | 24 | 28 |
| Gymnothorax mordax | 1 | 0.04 | 0.04 | 4.17 | 35.00 | 35 | 35 |
| Hyperprosopon anale | 1 | 0.04 | 0.04 | 4.17 | 7.00 | 7 | 7 |
| Hypsypops rubicundus | 1 | 0.04 | 0.04 | 4.17 | 28.00 | 28 | 28 |
| Rhacochilus toxotes | 1 | 0.04 | 0.04 | 4.17 | 31.00 | 31 | 31 |
| Sebastes mystinus | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Sebastes serriceps | 1 | 0.04 | 0.04 | 4.17 | 7.00 | 7 | 7 |

**Replicate Transects:** 24
**Total Species:** 25
**Total Abundance:** 1054
**Diversity:** 1.876
**Dominance:** 0.231
**Evenness:** 0.583

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 63 | 5.25 | 1.77 | 58.33 | 17.14 | 12 | 25 |
| Oxyjulis californica | 54 | 4.50 | 2.39 | 50.00 | 11.00 | 3 | 40 |
| Paralabrax clathratus | 22 | 1.83 | 0.67 | 66.67 | 28.95 | 21 | 40 |
| Medialuna californiensis | 5 | 0.42 | 0.26 | 25.00 | 27.00 | 18 | 31 |
| Sebastes serranoides/S. flavidus | 4 | 0.33 | 0.14 | 33.33 | 17.00 | 13 | 21 |
| Girella nigricans | 2 | 0.17 | 0.17 | 8.33 | 24.00 | 23 | 25 |
| Sebastes mystinus | 2 | 0.17 | 0.11 | 16.67 | 19.50 | 17 | 22 |

**Replicate Transects:** 12
**Total Species:** 7
**Total Abundance:** 152
**Diversity:** 1.334
**Dominance:** 0.263
**Evenness:** 0.686

**Site Number:** 45
**Site:** Hazards
**Location:** Santa Cruz Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Paralabrax clathratus | 725 | 30.21 | 5.30 | 100.00 | 7.19 | 3 | 36 |
| Chromis punctipinnis | 284 | 11.83 | 7.45 | 33.33 | 3.89 | 1 | 19 |
| Embiotoca jacksoni | 93 | 3.88 | 0.83 | 79.17 | 12.24 | 5 | 27 |
| Oxyjulis californica | 58 | 2.42 | 0.66 | 66.67 | 13.05 | 3 | 24 |
| Sebastes atrovirens | 50 | 2.08 | 0.63 | 54.17 | 16.54 | 5 | 28 |
| Phanerodon furcatus | 47 | 1.96 | 1.42 | 29.17 | 8.49 | 6 | 10 |
| Girella nigricans | 35 | 1.46 | 1.12 | 29.17 | 29.00 | 14 | 37 |
| Rhacochilus vacca | 33 | 1.38 | 0.54 | 50.00 | 15.79 | 8 | 30 |
| Oxylebius pictus | 32 | 1.33 | 0.37 | 50.00 | 11.25 | 4 | 16 |
| Sebastes serranoides/S. flavidus | 23 | 0.96 | 0.32 | 41.67 | 11.00 | 7 | 21 |
| Semicossyphus pulcher | 14 | 0.58 | 0.25 | 25.00 | 32.79 | 24 | 50 |
| Hypsypops rubicundus | 10 | 0.42 | 0.16 | 29.17 | 21.40 | 17 | 32 |
| Medialuna californiensis | 6 | 0.25 | 0.17 | 12.50 | 22.50 | 16 | 29 |
| Sebastes mystinus | 6 | 0.25 | 0.15 | 12.50 | 16.50 | 12 | 24 |
| Hypsurus caryi | 5 | 0.21 | 0.12 | 12.50 | 14.80 | 10 | 18 |
| Brachyistius frenatus | 4 | 0.17 | 0.12 | 8.33 | 8.50 | 8 | 9 |
| Caulolatilus princeps | 4 | 0.17 | 0.13 | 8.33 | 34.25 | 32 | 35 |
| Sebastes chrysomelas | 3 | 0.13 | 0.09 | 8.33 | 24.33 | 23 | 25 |
| Sebastes serriceps | 3 | 0.13 | 0.09 | 8.33 | 16.00 | 9 | 25 |
| Embiotoca lateralis | 2 | 0.08 | 0.06 | 8.33 | 19.50 | 17 | 22 |
| Heterostichus rostratus | 2 | 0.08 | 0.06 | 8.33 | 8.00 | 8 | 8 |
| Sebastes chrysomelas/S. carnatus (yoy) | 2 | 0.08 | 0.08 | 4.17 | 4.00 | 4 | 4 |
| Rhacochilus toxotes | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |
| Sebastes auriculatus | 1 | 0.04 | 0.04 | 4.17 | 14.00 | 14 | 14 |
| Sebastes caurinus | 1 | 0.04 | 0.04 | 4.17 | 9.00 | 9 | 9 |
| Sebastes melanops | 1 | 0.04 | 0.04 | 4.17 | 19.00 | 19 | 19 |

**Replicate Transects:** 24
**Total Species:** 26
**Total Abundance:** 1445
**Diversity:** 1.776
**Dominance:** 0.289
**Evenness:** 0.545

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Paralabrax clathratus | 174 | 14.50 | 3.18 | 100.00 | 7.10 | 2 | 40 |
| Brachyistius frenatus | 146 | 12.17 | 8.23 | 33.33 | 6.84 | 3 | 12 |
| Chromis punctipinnis | 68 | 5.67 | 2.32 | 66.67 | 11.51 | 6 | 20 |
| Atherinopsidae | 48 | 4.00 | 3.31 | 25.00 | 9.94 | 7 | 30 |
| Sebastes paucispinis | 34 | 2.83 | 2.83 | 8.33 | 7.00 | 6 | 8 |
| Sebastes atrovirens | 17 | 1.42 | 0.57 | 50.00 | 12.35 | 4 | 28 |
| Sebastes serranoides/S. flavidus | 13 | 1.08 | 0.43 | 50.00 | 13.31 | 7 | 27 |
| Oxyjulis californica | 6 | 0.50 | 0.34 | 25.00 | 11.17 | 8 | 15 |
| Rhacochilus vacca | 3 | 0.25 | 0.18 | 16.67 | 28.00 | 26 | 30 |
| Heterostichus rostratus | 1 | 0.08 | 0.08 | 8.33 | 12.00 | 12 | 12 |
| Medialuna californiensis | 1 | 0.08 | 0.08 | 8.33 | 20.00 | 20 | 20 |

**Replicate Transects:** 12
**Total Species:** 11
**Total Abundance:** 511
**Diversity:** 1.709
**Dominance:** 0.212
**Evenness:** 0.713

**Site Number:** 46
**Site:** Pelican
**Location:** Santa Cruz Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Embiotoca jacksoni | 113 | 4.71 | 1.04 | 87.50 | 15.65 | 7 | 33 |
| Paralabrax clathratus | 92 | 3.83 | 0.84 | 87.50 | 19.04 | 4 | 35 |
| Chromis punctipinnis | 87 | 3.63 | 1.49 | 70.83 | 13.49 | 10 | 18 |
| Hypsypops rubicundus | 75 | 3.13 | 0.65 | 83.33 | 23.13 | 16 | 28 |
| Sebastes atrovirens | 47 | 1.96 | 0.75 | 41.67 | 22.02 | 14 | 27 |
| Rhacochilus vacca | 22 | 0.92 | 0.25 | 54.17 | 19.82 | 14 | 25 |
| Oxyjulis californica | 18 | 0.75 | 0.24 | 41.67 | 14.44 | 3 | 20 |
| Oxylebius pictus | 16 | 0.67 | 0.25 | 29.17 | 13.63 | 11 | 16 |
| Semicossyphus pulcher | 12 | 0.50 | 0.13 | 41.67 | 23.25 | 11 | 38 |
| Rhacochilus toxotes | 9 | 0.38 | 0.17 | 20.83 | 30.67 | 23 | 35 |
| Girella nigricans | 7 | 0.29 | 0.09 | 29.17 | 27.29 | 22 | 30 |
| Brachyistius frenatus | 6 | 0.25 | 0.15 | 12.50 | 8.50 | 7 | 11 |
| Halichoeres semicinctus | 5 | 0.21 | 0.12 | 12.50 | 28.00 | 20 | 35 |
| Triakis semifasciata | 5 | 0.21 | 0.21 | 4.17 | 59.00 | 50 | 65 |
| Heterostichus rostratus | 4 | 0.17 | 0.10 | 12.50 | 10.75 | 4 | 25 |
| Sebastes serranoides/S. flavidus | 3 | 0.13 | 0.13 | 4.17 | 21.67 | 20 | 25 |
| Anisotremus davidsonii | 2 | 0.08 | 0.08 | 4.17 | 25.00 | 25 | 25 |
| Sebastes chrysomelas/S. carnatus (yoy) | 2 | 0.08 | 0.08 | 4.17 | 4.00 | 4 | 4 |
| Embiotoca lateralis | 1 | 0.04 | 0.04 | 4.17 | 22.00 | 22 | 22 |
| Hypsurus caryi | 1 | 0.04 | 0.04 | 4.17 | 13.00 | 13 | 13 |
| Medialuna californiensis | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |
| Myliobatis californica | 1 | 0.04 | 0.04 | 4.17 | 95.00 | 95 | 95 |
| Pleuronichthys coenosus | 1 | 0.04 | 0.04 | 4.17 | 24.00 | 24 | 24 |
| Sebastes auriculatus | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |

**Replicate Transects:** 24
**Total Species:** 24
**Total Abundance:** 531
**Diversity:** 2.302
**Dominance:** 0.094
**Evenness:** 0.724

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 97 | 8.08 | 2.76 | 75.00 | 13.01 | 10 | 24 |
| Brachyistius frenatus | 31 | 2.58 | 1.41 | 41.67 | 9.03 | 5 | 17 |
| Rhacochilus vacca | 8 | 0.67 | 0.58 | 16.67 | 31.00 | 17 | 36 |
| Embiotoca lateralis | 6 | 0.50 | 0.42 | 16.67 | 19.33 | 12 | 22 |
| Paralabrax clathratus | 5 | 0.42 | 0.19 | 33.33 | 28.80 | 23 | 35 |
| Sebastes serranoides/S. flavidus | 5 | 0.42 | 0.19 | 33.33 | 16.40 | 8 | 25 |
| Girella nigricans | 4 | 0.33 | 0.33 | 8.33 | 27.25 | 24 | 31 |
| Sebastes atrovirens | 4 | 0.33 | 0.19 | 25.00 | 20.25 | 18 | 23 |
| Oxyjulis californica | 3 | 0.25 | 0.18 | 16.67 | 18.00 | 16 | 20 |
| Embiotoca jacksoni | 2 | 0.17 | 0.11 | 16.67 | 17.00 | 15 | 19 |
| Heterostichus rostratus | 2 | 0.17 | 0.11 | 16.67 | 8.00 | 3 | 13 |
| Sebastes chrysomelas/S. carnatus (yoy) | 2 | 0.17 | 0.17 | 8.33 | 6.00 | 6 | 6 |
| Hypsypops rubicundus | 1 | 0.08 | 0.08 | 8.33 | 20.00 | 20 | 20 |
| Medialuna californiensis | 1 | 0.08 | 0.08 | 8.33 | 15.00 | 15 | 15 |

**Replicate Transects:** 12
**Total Species:** 14
**Total Abundance:** 171
**Diversity:** 1.561
**Dominance:** 0.313
**Evenness:** 0.592

**Site Number:** 47
**Site:** Coche Point
**Location:** Santa Cruz Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 126 | 4.50 | 1.45 | 75.00 | 13.50 | 7 | 19 |
| Girella nigricans | 51 | 1.82 | 0.62 | 50.00 | 23.75 | 12 | 35 |
| Hypsypops rubicundus | 47 | 1.68 | 0.33 | 64.29 | 24.02 | 20 | 31 |
| Embiotoca jacksoni | 39 | 1.39 | 0.35 | 53.57 | 17.03 | 7 | 25 |
| Paralabrax clathratus | 38 | 1.36 | 0.27 | 60.71 | 30.66 | 20 | 48 |
| Chromis punctipinnis | 24 | 0.86 | 0.60 | 14.29 | 6.46 | 3 | 13 |
| Oxylebius pictus | 21 | 0.75 | 0.14 | 60.71 | 12.90 | 9 | 16 |
| Rhacochilus vacca | 15 | 0.54 | 0.16 | 35.71 | 19.67 | 13 | 28 |
| Sebastes serriceps | 13 | 0.46 | 0.14 | 32.14 | 18.31 | 6 | 29 |
| Sebastes serranoides/S. flavidus | 9 | 0.32 | 0.14 | 21.43 | 14.11 | 11 | 18 |
| Semicossyphus pulcher | 7 | 0.25 | 0.11 | 17.86 | 30.29 | 12 | 40 |
| Halichoeres semicinctus | 6 | 0.21 | 0.09 | 17.86 | 23.83 | 21 | 28 |
| Medialuna californiensis | 6 | 0.21 | 0.13 | 10.71 | 16.00 | 12 | 24 |
| Rhacochilus toxotes | 5 | 0.18 | 0.07 | 17.86 | 26.20 | 22 | 31 |
| Sebastes atrovirens | 4 | 0.14 | 0.08 | 10.71 | 24.25 | 21 | 27 |
| Sebastes mystinus | 4 | 0.14 | 0.08 | 10.71 | 12.50 | 12 | 13 |
| Sebastes carnatus | 2 | 0.07 | 0.07 | 3.57 | 16.00 | 14 | 18 |
| Heterodontus francisci | 1 | 0.04 | 0.04 | 3.57 | 62.00 | 62 | 62 |
| Myliobatis californica | 1 | 0.04 | 0.04 | 3.57 | 85.00 | 85 | 85 |
| Sebastes caurinus | 1 | 0.04 | 0.04 | 3.57 | 14.00 | 14 | 14 |

| | |
|---|---|
| **Replicate Transects:** | 28 |
| **Total Species:** | 20 |
| **Total Abundance:** | 420 |
| **Diversity:** | 2.322 |
| **Dominance:** | 0.082 |
| **Evenness:** | 0.775 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 198 | 11.00 | 3.47 | 55.56 | 12.19 | 9 | 18 |
| Paralabrax clathratus | 8 | 0.44 | 0.12 | 44.44 | 28.38 | 25 | 33 |
| Sebastes serranoides/S. flavidus | 4 | 0.22 | 0.13 | 16.67 | 25.75 | 20 | 32 |
| Medialuna californiensis | 2 | 0.11 | 0.08 | 11.11 | 30.50 | 30 | 31 |
| Sebastes mystinus | 2 | 0.11 | 0.11 | 5.56 | 20.00 | 18 | 22 |
| Girella nigricans | 1 | 0.06 | 0.06 | 5.56 | 27.00 | 27 | 27 |

| | |
|---|---|
| **Replicate Transects:** | 18 |
| **Total Species:** | 6 |
| **Total Abundance:** | 215 |
| **Diversity:** | 0.384 |
| **Dominance:** | 0.836 |
| **Evenness:** | 0.215 |

**Site Number:** 48
**Site:** Scorpion
**Location:** Santa Cruz Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 174 | 7.25 | 2.03 | 70.83 | 12.64 | 3 | 18 |
| Girella nigricans | 86 | 3.58 | 2.12 | 37.50 | 28.85 | 21 | 35 |
| Paralabrax clathratus | 72 | 3.00 | 0.61 | 83.33 | 23.49 | 4 | 36 |
| Oxyjulis californica | 66 | 2.75 | 0.60 | 83.33 | 12.88 | 2 | 18 |
| Rhacochilus vacca | 47 | 1.96 | 0.70 | 41.67 | 21.89 | 12 | 28 |
| Oxylebius pictus | 44 | 1.83 | 0.34 | 75.00 | 12.89 | 9 | 16 |
| Embiotoca jacksoni | 43 | 1.79 | 0.42 | 70.83 | 18.91 | 9 | 25 |
| Rhacochilus toxotes | 32 | 1.33 | 0.65 | 16.67 | 27.63 | 22 | 30 |
| Hypsypops rubicundus | 23 | 0.96 | 0.23 | 58.33 | 22.52 | 18 | 27 |
| Semicossyphus pulcher | 19 | 0.79 | 0.24 | 41.67 | 31.74 | 26 | 45 |
| Medialuna californiensis | 13 | 0.54 | 0.34 | 20.83 | 21.85 | 15 | 25 |
| Sebastes mystinus | 7 | 0.29 | 0.15 | 16.67 | 10.00 | 6 | 15 |
| Heterostichus rostratus | 5 | 0.21 | 0.17 | 8.33 | 5.80 | 5 | 9 |
| Sebastes serranoides/S. flavidus | 5 | 0.21 | 0.08 | 20.83 | 14.20 | 9 | 22 |
| Sebastes serriceps | 5 | 0.21 | 0.13 | 12.50 | 12.60 | 6 | 26 |
| Halichoeres semicinctus | 4 | 0.17 | 0.08 | 16.67 | 28.00 | 24 | 30 |
| Caulolatilus princeps | 3 | 0.13 | 0.09 | 8.33 | 34.00 | 25 | 45 |
| Sebastes atrovirens | 3 | 0.13 | 0.07 | 12.50 | 23.33 | 22 | 25 |
| Sebastes chrysomelas | 2 | 0.08 | 0.08 | 4.17 | 20.50 | 15 | 26 |
| Sebastes chrysomelas/S. carnatus (yoy) | 2 | 0.08 | 0.06 | 8.33 | 7.00 | 7 | 7 |
| Brachyistius frenatus | 1 | 0.04 | 0.04 | 4.17 | 16.00 | 16 | 16 |
| Myliobatis californica | 1 | 0.04 | 0.04 | 4.17 | 120.00 | 120 | 120 |
| Ophiodon elongatus | 1 | 0.04 | 0.04 | 4.17 | 52.00 | 52 | 52 |
| Phanerodon furcatus | 1 | 0.04 | 0.04 | 4.17 | 26.00 | 26 | 26 |

**Replicate Transects:** 24
**Total Species:** 24
**Total Abundance:** 659
**Diversity:** 2.395
**Dominance:** 0.095
**Evenness:** 0.753

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Atherinopsidae | 3008 | 167.11 | 166.64 | 11.11 | 10.51 | 8 | 15 |
| Oxyjulis californica | 506 | 28.11 | 21.74 | 50.00 | 6.80 | 5 | 20 |
| Chromis punctipinnis | 93 | 5.17 | 1.43 | 72.22 | 13.51 | 7 | 23 |
| Brachyistius frenatus | 18 | 1.00 | 0.54 | 22.22 | 8.00 | 6 | 12 |
| Heterostichus rostratus | 7 | 0.39 | 0.39 | 5.56 | 3.71 | 3 | 4 |
| Girella nigricans | 6 | 0.33 | 0.23 | 16.67 | 25.50 | 20 | 28 |
| Paralabrax clathratus | 6 | 0.33 | 0.14 | 27.78 | 25.67 | 23 | 29 |
| Medialuna californiensis | 3 | 0.17 | 0.09 | 16.67 | 25.67 | 22 | 31 |
| Sebastes serranoides/S. flavidus | 2 | 0.11 | 0.08 | 11.11 | 18.00 | 12 | 24 |
| Hypsypops rubicundus | 1 | 0.06 | 0.06 | 5.56 | 24.00 | 24 | 24 |
| Sebastes mystinus | 1 | 0.06 | 0.06 | 5.56 | 12.00 | 12 | 12 |

**Replicate Transects:** 18
**Total Species:** 11
**Total Abundance:** 3651
**Diversity:** 0.601
**Dominance:** 0.697
**Evenness:** 0.251

**Site Number:** 49
**Site:** Gull Isle
**Location:** Santa Cruz Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 181 | 7.54 | 2.51 | 62.50 | 11.27 | 2 | 19 |
| Girella nigricans | 172 | 7.17 | 3.09 | 58.33 | 30.13 | 24 | 36 |
| Chromis punctipinnis | 156 | 6.50 | 3.48 | 33.33 | 9.57 | 7 | 20 |
| Embiotoca jacksoni | 81 | 3.38 | 0.71 | 87.50 | 10.98 | 5 | 26 |
| Semicossyphus pulcher | 65 | 2.71 | 0.40 | 87.50 | 28.63 | 9 | 55 |
| Sebastes atrovirens | 37 | 1.54 | 0.51 | 45.83 | 19.38 | 9 | 31 |
| Oxylebius pictus | 32 | 1.33 | 0.26 | 75.00 | 11.09 | 6 | 15 |
| Embiotoca lateralis | 29 | 1.21 | 0.69 | 25.00 | 9.79 | 7 | 22 |
| Paralabrax clathratus | 25 | 1.04 | 0.30 | 54.17 | 26.36 | 5 | 51 |
| Sebastes mystinus | 16 | 0.67 | 0.28 | 33.33 | 12.81 | 8 | 16 |
| Sebastes serranoides/S. flavidus | 14 | 0.58 | 0.27 | 25.00 | 14.14 | 9 | 24 |
| Hypsypops rubicundus | 11 | 0.46 | 0.16 | 33.33 | 20.55 | 17 | 24 |
| Sebastes chrysomelas | 9 | 0.38 | 0.19 | 20.83 | 13.22 | 9 | 22 |
| Rhacochilus vacca | 7 | 0.29 | 0.11 | 25.00 | 21.00 | 9 | 30 |
| Phanerodon furcatus | 6 | 0.25 | 0.25 | 4.17 | 10.33 | 9 | 11 |
| Sebastes serriceps | 6 | 0.25 | 0.11 | 20.83 | 19.83 | 12 | 24 |
| Rhacochilus toxotes | 5 | 0.21 | 0.08 | 20.83 | 24.60 | 12 | 34 |
| Medialuna californiensis | 4 | 0.17 | 0.08 | 16.67 | 31.75 | 29 | 35 |
| Sebastes caurinus | 4 | 0.17 | 0.10 | 12.50 | 17.00 | 10 | 29 |
| Brachyistius frenatus | 3 | 0.13 | 0.09 | 8.33 | 6.67 | 6 | 8 |
| Hypsurus caryi | 3 | 0.13 | 0.13 | 4.17 | 6.33 | 6 | 7 |
| Sebastes carnatus | 3 | 0.13 | 0.07 | 12.50 | 13.00 | 10 | 19 |
| Caulolatilus princeps | 1 | 0.04 | 0.04 | 4.17 | 39.00 | 39 | 39 |
| Halichoeres semicinctus | 1 | 0.04 | 0.04 | 4.17 | 24.00 | 24 | 24 |
| Sebastes auriculatus | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |

**Replicate Transects:** 24
**Total Species:** 25
**Total Abundance:** 872
**Diversity:** 2.349
**Dominance:** 0.110
**Evenness:** 0.730

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 497 | 27.61 | 6.07 | 88.89 | 6.99 | 1 | 18 |
| Chromis punctipinnis | 112 | 6.22 | 3.21 | 50.00 | 12.25 | 0 | 18 |
| Brachyistius frenatus | 102 | 5.67 | 2.09 | 77.78 | 8.16 | 5 | 14 |
| Atherinopsidae | 45 | 2.50 | 1.46 | 16.67 | 17.84 | 15 | 21 |
| Sebastes mystinus | 17 | 0.94 | 0.94 | 5.56 | 14.94 | 9 | 22 |
| Paralabrax clathratus | 14 | 0.78 | 0.47 | 22.22 | 24.57 | 16 | 32 |
| Girella nigricans | 8 | 0.44 | 0.34 | 16.67 | 23.38 | 21 | 26 |
| Medialuna californiensis | 3 | 0.17 | 0.09 | 16.67 | 28.00 | 24 | 31 |
| Sebastes atrovirens | 3 | 0.17 | 0.12 | 11.11 | 23.33 | 20 | 26 |
| Sebastes serranoides/S. flavidus | 3 | 0.17 | 0.12 | 11.11 | 20.33 | 14 | 24 |
| Embiotoca lateralis | 2 | 0.11 | 0.08 | 11.11 | 21.00 | 18 | 24 |
| Sebastes chrysomelas/S. carnatus (yoy) | 1 | 0.06 | 0.06 | 5.56 | 6.00 | 6 | 6 |
| Trachurus symmetricus | 1 | 0.06 | 0.06 | 5.56 | 12.00 | 12 | 12 |

**Replicate Transects:** 18
**Total Species:** 13
**Total Abundance:** 808
**Diversity:** 1.286
**Dominance:** 0.404
**Evenness:** 0.501

**Site Number:** 50
**Site:** Valley
**Location:** Santa Cruz Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 183 | 7.63 | 0.99 | 95.83 | 12.78 | 1 | 21 |
| Chromis punctipinnis | 127 | 5.29 | 2.41 | 29.17 | 3.39 | 1 | 18 |
| Paralabrax clathratus | 65 | 2.71 | 0.54 | 79.17 | 13.92 | 4 | 30 |
| Girella nigricans | 44 | 1.83 | 1.00 | 29.17 | 26.61 | 21 | 31 |
| Atherinopsidae | 37 | 1.54 | 1.54 | 4.17 | 14.00 | 13 | 15 |
| Embiotoca jacksoni | 31 | 1.29 | 0.46 | 41.67 | 18.94 | 10 | 30 |
| Trachurus symmetricus | 30 | 1.25 | 1.25 | 4.17 | 15.50 | 14 | 17 |
| Semicossyphus pulcher | 17 | 0.71 | 0.18 | 50.00 | 24.65 | 16 | 34 |
| Brachyistius frenatus | 12 | 0.50 | 0.17 | 33.33 | 6.75 | 4 | 13 |
| Hypsypops rubicundus | 11 | 0.46 | 0.15 | 33.33 | 20.91 | 17 | 24 |
| Oxylebius pictus | 8 | 0.33 | 0.12 | 29.17 | 13.13 | 10 | 16 |
| Sebastes mystinus | 8 | 0.33 | 0.24 | 8.33 | 15.50 | 14 | 19 |
| Hypsurus caryi | 6 | 0.25 | 0.18 | 8.33 | 11.17 | 6 | 20 |
| Sebastes atrovirens | 4 | 0.17 | 0.17 | 4.17 | 22.50 | 21 | 25 |
| Sebastes carnatus | 3 | 0.13 | 0.13 | 4.17 | 21.00 | 18 | 23 |
| Embiotoca lateralis | 2 | 0.08 | 0.06 | 8.33 | 17.50 | 12 | 23 |
| Halichoeres semicinctus | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Rhacochilus toxotes | 1 | 0.04 | 0.04 | 4.17 | 35.00 | 35 | 35 |
| Sebastes serranoides/S. flavidus | 1 | 0.04 | 0.04 | 4.17 | 16.00 | 16 | 16 |

**Replicate Transects:** 24
**Total Species:** 20
**Total Abundance:** 592
**Diversity:** 2.149
**Dominance:** 0.135
**Evenness:** 0.717

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Trachurus symmetricus | 544 | 45.33 | 41.40 | 33.33 | 14.73 | 12 | 20 |
| Oxyjulis californica | 142 | 11.83 | 3.60 | 91.67 | 8.18 | 2 | 21 |
| Brachyistius frenatus | 46 | 3.83 | 0.58 | 91.67 | 9.43 | 5 | 16 |
| Paralabrax clathratus | 14 | 1.17 | 0.58 | 50.00 | 10.07 | 5 | 35 |
| Heterostichus rostratus | 7 | 0.58 | 0.29 | 33.33 | 14.00 | 7 | 24 |
| Atherinopsidae | 2 | 0.17 | 0.17 | 8.33 | 22.00 | 22 | 22 |
| Chromis punctipinnis | 2 | 0.17 | 0.11 | 16.67 | 15.50 | 13 | 18 |
| Medialuna californiensis | 1 | 0.08 | 0.08 | 8.33 | 26.00 | 26 | 26 |

**Replicate Transects:** 12
**Total Species:** 8
**Total Abundance:** 758
**Diversity:** 0.879
**Dominance:** 0.547
**Evenness:** 0.423

**Site Number:** 51
**Site:** Yellowbanks
**Location:** Santa Cruz Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 265 | 11.04 | 6.63 | 50.00 | 7.23 | 1 | 20 |
| Chromis punctipinnis | 74 | 3.08 | 2.09 | 29.17 | 4.86 | 2 | 16 |
| Paralabrax clathratus | 64 | 2.67 | 0.74 | 79.17 | 22.45 | 6 | 36 |
| Embiotoca jacksoni | 45 | 1.88 | 0.61 | 50.00 | 16.00 | 7 | 26 |
| Sebastes atrovirens | 28 | 1.17 | 0.41 | 29.17 | 14.32 | 8 | 20 |
| Semicossyphus pulcher | 25 | 1.04 | 0.35 | 41.67 | 27.56 | 18 | 38 |
| Oxylebius pictus | 23 | 0.96 | 0.34 | 37.50 | 12.35 | 10 | 14 |
| Girella nigricans | 22 | 0.92 | 0.75 | 16.67 | 28.82 | 27 | 31 |
| Brachyistius frenatus | 18 | 0.75 | 0.46 | 25.00 | 7.11 | 5 | 14 |
| Hypsurus caryi | 15 | 0.63 | 0.43 | 8.33 | 13.60 | 8 | 20 |
| Hypsypops rubicundus | 7 | 0.29 | 0.13 | 20.83 | 22.29 | 19 | 26 |
| Phanerodon furcatus | 7 | 0.29 | 0.29 | 4.17 | 9.14 | 8 | 10 |
| Sebastes serranoides/S. flavidus | 7 | 0.29 | 0.20 | 8.33 | 16.86 | 16 | 18 |
| Rhacochilus vacca | 6 | 0.25 | 0.14 | 16.67 | 14.67 | 10 | 22 |
| Sebastes caurinus | 4 | 0.17 | 0.13 | 8.33 | 15.75 | 13 | 21 |
| Sebastes serriceps | 4 | 0.17 | 0.10 | 12.50 | 14.75 | 8 | 25 |
| Caulolatilus princeps | 3 | 0.13 | 0.07 | 12.50 | 33.67 | 32 | 35 |
| Heterostichus rostratus | 3 | 0.13 | 0.09 | 8.33 | 9.33 | 4 | 16 |
| Scorpaena guttata | 3 | 0.13 | 0.09 | 8.33 | 33.00 | 31 | 34 |
| Embiotoca lateralis | 2 | 0.08 | 0.08 | 4.17 | 11.00 | 10 | 12 |
| Halichoeres semicinctus | 2 | 0.08 | 0.06 | 8.33 | 24.00 | 24 | 24 |
| Paralichthys californicus | 2 | 0.08 | 0.08 | 4.17 | 33.50 | 31 | 36 |
| Sebastes chrysomelas | 2 | 0.08 | 0.08 | 4.17 | 12.50 | 11 | 14 |
| Heterodontus francisci | 1 | 0.04 | 0.04 | 4.17 | 39.00 | 39 | 39 |
| Medialuna californiensis | 1 | 0.04 | 0.04 | 4.17 | 21.00 | 21 | 21 |
| Sebastes carnatus | 1 | 0.04 | 0.04 | 4.17 | 14.00 | 14 | 14 |

**Replicate Transects:** 24
**Total Species:** 26
**Total Abundance:** 634
**Diversity:** 2.163
**Dominance:** 0.181
**Evenness:** 0.664

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 693 | 28.88 | 15.62 | 75.00 | 5.68 | 1 | 20 |
| Engraulidae/Atherinopsidae/Clupeidae | 400 | 16.67 | 16.67 | 4.17 | 7.50 | 7 | 8 |
| Brachyistius frenatus | 216 | 9.00 | 2.43 | 75.00 | 8.01 | 4 | 14 |
| Trachurus symmetricus | 129 | 5.38 | 3.73 | 8.33 | 11.80 | 10 | 20 |
| Scomber japonicus | 70 | 2.92 | 2.92 | 4.17 | 11.50 | 10 | 13 |
| Sardinops sagax | 61 | 2.54 | 1.76 | 8.33 | 11.72 | 7 | 16 |
| Chromis punctipinnis | 57 | 2.38 | 1.00 | 37.50 | 6.51 | 3 | 16 |
| Atherinopsidae | 26 | 1.08 | 0.77 | 8.33 | 12.46 | 7 | 21 |
| Paralabrax clathratus | 8 | 0.33 | 0.12 | 29.17 | 14.88 | 3 | 32 |
| Sebastes serranoides/S. flavidus | 6 | 0.25 | 0.17 | 12.50 | 13.00 | 9 | 16 |
| Heterostichus rostratus | 3 | 0.13 | 0.09 | 8.33 | 6.33 | 2 | 10 |
| Girella nigricans | 2 | 0.08 | 0.06 | 8.33 | 24.50 | 24 | 25 |
| Medialuna californiensis | 1 | 0.04 | 0.04 | 4.17 | 21.00 | 21 | 21 |

**Replicate Transects:** 24
**Total Species:** 13
**Total Abundance:** 1672
**Diversity:** 1.672
**Dominance:** 0.245
**Evenness:** 0.652

**Site Number:** 52
**Site:** Anacapa West Isle
**Location:** Anacapa Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 286 | 11.92 | 3.16 | 66.67 | 8.06 | 2 | 21 |
| Oxyjulis californica | 230 | 9.58 | 5.47 | 41.67 | 8.63 | 2 | 21 |
| Hypsypops rubicundus | 48 | 2.00 | 0.40 | 66.67 | 21.83 | 16 | 27 |
| Embiotoca jacksoni | 39 | 1.63 | 0.46 | 54.17 | 17.46 | 11 | 26 |
| Paralabrax clathratus | 39 | 1.63 | 0.29 | 70.83 | 25.08 | 4 | 36 |
| Girella nigricans | 20 | 0.83 | 0.21 | 50.00 | 24.15 | 16 | 30 |
| Semicossyphus pulcher | 20 | 0.83 | 0.23 | 54.17 | 21.15 | 10 | 38 |
| Oxylebius pictus | 19 | 0.79 | 0.19 | 54.17 | 11.79 | 8 | 15 |
| Medialuna californiensis | 8 | 0.33 | 0.16 | 20.83 | 21.00 | 14 | 30 |
| Sebastes serriceps | 5 | 0.21 | 0.08 | 20.83 | 11.80 | 5 | 26 |
| Caulolatilus princeps | 2 | 0.08 | 0.06 | 8.33 | 24.50 | 22 | 27 |
| Halichoeres semicinctus | 2 | 0.08 | 0.06 | 8.33 | 24.50 | 21 | 28 |
| Scorpaena guttata | 2 | 0.08 | 0.06 | 8.33 | 25.00 | 24 | 26 |
| Sebastes serranoides/S. flavidus | 2 | 0.08 | 0.08 | 4.17 | 15.00 | 15 | 15 |
| Gymnothorax mordax | 1 | 0.04 | 0.04 | 4.17 | 39.00 | 39 | 39 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.17 | 5.00 | 5 | 5 |
| Rhacochilus vacca | 1 | 0.04 | 0.04 | 4.17 | 26.00 | 26 | 26 |
| Scorpaenichthys marmoratus | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 18 |
| **Total Abundance:** | 726 |
| **Diversity:** | 1.703 |
| **Dominance:** | 0.243 |
| **Evenness:** | 0.589 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 99 | 8.25 | 7.00 | 16.67 | 6.94 | 5 | 12 |
| Chromis punctipinnis | 49 | 4.08 | 1.85 | 58.33 | 12.04 | 6 | 21 |
| Hypsypops rubicundus | 1 | 0.08 | 0.08 | 8.33 | 22.00 | 22 | 22 |
| Medialuna californiensis | 1 | 0.08 | 0.08 | 8.33 | 23.00 | 23 | 23 |
| Paralabrax clathratus | 1 | 0.08 | 0.08 | 8.33 | 30.00 | 30 | 30 |
| Sebastes mystinus | 1 | 0.08 | 0.08 | 8.33 | 14.00 | 14 | 14 |
| Semicossyphus pulcher | 1 | 0.08 | 0.08 | 8.33 | 37.00 | 37 | 37 |

| | |
|---|---|
| **Replicate Transects:** | 12 |
| **Total Species:** | 7 |
| **Total Abundance:** | 153 |
| **Diversity:** | 0.811 |
| **Dominance:** | 0.481 |
| **Evenness:** | 0.417 |

**Site Number:** 53
**Site:** Anacapa Middle Isle
**Location:** Anacapa Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 1051 | 43.79 | 9.70 | 91.67 | 10.58 | 2 | 18 |
| Trachurus symmetricus | 250 | 10.42 | 10.42 | 4.17 | 9.60 | 8 | 11 |
| Oxyjulis californica | 129 | 5.38 | 2.71 | 29.17 | 8.85 | 7 | 18 |
| Embiotoca jacksoni | 50 | 2.08 | 0.73 | 50.00 | 16.28 | 6 | 28 |
| Hypsypops rubicundus | 47 | 1.96 | 0.59 | 66.67 | 22.17 | 15 | 30 |
| Paralabrax clathratus | 24 | 1.00 | 0.19 | 62.50 | 24.00 | 14 | 35 |
| Sebastes serriceps | 23 | 0.96 | 0.42 | 25.00 | 9.35 | 6 | 24 |
| Girella nigricans | 22 | 0.92 | 0.22 | 58.33 | 26.09 | 15 | 30 |
| Oxylebius pictus | 14 | 0.58 | 0.19 | 37.50 | 12.50 | 10 | 14 |
| Semicossyphus pulcher | 11 | 0.46 | 0.13 | 37.50 | 20.18 | 10 | 32 |
| Caulolatilus princeps | 10 | 0.42 | 0.18 | 25.00 | 34.30 | 30 | 39 |
| Halichoeres semicinctus | 5 | 0.21 | 0.08 | 20.83 | 23.80 | 16 | 28 |
| Medialuna californiensis | 5 | 0.21 | 0.10 | 16.67 | 25.00 | 17 | 30 |
| Paralichthys californicus | 2 | 0.08 | 0.06 | 8.33 | 45.00 | 45 | 45 |
| Scorpaenichthys marmoratus | 1 | 0.04 | 0.04 | 4.17 | 34.00 | 34 | 34 |
| Sebastes mystinus | 1 | 0.04 | 0.04 | 4.17 | 12.00 | 12 | 12 |

**Replicate Transects:** 24
**Total Species:** 16
**Total Abundance:** 1645
**Diversity:** 1.317
**Dominance:** 0.432
**Evenness:** 0.475

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 196 | 12.25 | 4.09 | 62.50 | 12.94 | 8 | 18 |
| Medialuna californiensis | 5 | 0.31 | 0.18 | 18.75 | 25.60 | 25 | 26 |

**Replicate Transects:** 16
**Total Species:** 2
**Total Abundance:** 201
**Diversity:** 0.116
**Dominance:** 0.947
**Evenness:** 0.168

**Site Number:** 54
**Site:** Anacapa East Isle
**Location:** Anacapa Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 394 | 16.42 | 6.58 | 54.17 | 11.18 | 2 | 17 |
| Cymatogaster aggregata | 223 | 9.29 | 8.34 | 12.50 | 7.92 | 6 | 10 |
| Oxyjulis californica | 205 | 8.54 | 3.61 | 87.50 | 6.80 | 2 | 20 |
| Embiotoca jacksoni | 113 | 4.71 | 0.64 | 91.67 | 14.16 | 6 | 30 |
| Brachyistius frenatus | 94 | 3.92 | 1.05 | 70.83 | 11.00 | 5 | 14 |
| Heterostichus rostratus | 56 | 2.33 | 1.10 | 45.83 | 5.98 | 3 | 12 |
| Rhacochilus vacca | 54 | 2.25 | 0.90 | 58.33 | 18.43 | 5 | 28 |
| Paralabrax clathratus | 53 | 2.21 | 0.51 | 66.67 | 22.49 | 4 | 45 |
| Hypsypops rubicundus | 37 | 1.54 | 0.33 | 62.50 | 20.27 | 14 | 26 |
| Sebastes chrysomelas/S. carnatus (yoy) | 35 | 1.46 | 1.42 | 8.33 | 5.83 | 5 | 6 |
| Semicossyphus pulcher | 28 | 1.17 | 0.27 | 58.33 | 26.96 | 9 | 41 |
| Girella nigricans | 24 | 1.00 | 0.29 | 50.00 | 25.33 | 16 | 30 |
| Caulolatilus princeps | 23 | 0.96 | 0.84 | 8.33 | 21.70 | 18 | 30 |
| Oxylebius pictus | 11 | 0.46 | 0.17 | 29.17 | 12.09 | 9 | 14 |
| Halichoeres semicinctus | 10 | 0.42 | 0.13 | 33.33 | 22.90 | 16 | 30 |
| Medialuna californiensis | 6 | 0.25 | 0.25 | 4.17 | 22.50 | 20 | 25 |
| Sebastes serriceps | 4 | 0.17 | 0.10 | 12.50 | 21.00 | 8 | 28 |
| Sebastes atrovirens | 2 | 0.08 | 0.06 | 8.33 | 22.00 | 16 | 28 |
| Sebastes serranoides/S. flavidus | 2 | 0.08 | 0.06 | 8.33 | 20.50 | 13 | 28 |
| Myliobatis californica | 1 | 0.04 | 0.04 | 4.17 | 80.00 | 80 | 80 |
| Rhacochilus toxotes | 1 | 0.04 | 0.04 | 4.17 | 35.00 | 35 | 35 |
| Scorpaena guttata | 1 | 0.04 | 0.04 | 4.17 | 22.00 | 22 | 22 |
| Sebastes chrysomelas | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Stereolepis gigas | 1 | 0.04 | 0.04 | 4.17 | 110.00 | 110 | 110 |

**Replicate Transects:** 24
**Total Species:** 24
**Total Abundance:** 1379
**Diversity:** 2.274
**Dominance:** 0.133
**Evenness:** 0.716

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 122 | 10.17 | 6.13 | 66.67 | 9.66 | 7 | 17 |
| Chromis punctipinnis | 68 | 5.67 | 2.00 | 58.33 | 13.54 | 8 | 21 |
| Heterostichus rostratus | 15 | 1.25 | 0.79 | 25.00 | 6.40 | 4 | 10 |
| Paralabrax clathratus | 15 | 1.25 | 0.54 | 50.00 | 28.47 | 6 | 40 |
| Girella nigricans | 14 | 1.17 | 0.53 | 50.00 | 24.43 | 19 | 31 |
| Atherinopsidae | 10 | 0.83 | 0.83 | 8.33 | 21.00 | 20 | 22 |
| Brachyistius frenatus | 10 | 0.83 | 0.41 | 33.33 | 10.90 | 8 | 13 |
| Medialuna californiensis | 3 | 0.25 | 0.18 | 16.67 | 25.33 | 21 | 30 |
| Rhacochilus vacca | 2 | 0.17 | 0.17 | 8.33 | 28.00 | 27 | 29 |
| Sebastes atrovirens | 2 | 0.17 | 0.17 | 8.33 | 27.50 | 27 | 28 |
| Sebastes chrysomelas/S. carnatus (yoy) | 1 | 0.08 | 0.08 | 8.33 | 5.00 | 5 | 5 |
| Sebastes serranoides/S. flavidus | 1 | 0.08 | 0.08 | 8.33 | 18.00 | 18 | 18 |

**Replicate Transects:** 12
**Total Species:** 12
**Total Abundance:** 263
**Diversity:** 1.605
**Dominance:** 0.261
**Evenness:** 0.646

**Site Number:** 55
**Site:** Cat Rock
**Location:** Anacapa Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 384 | 16.00 | 2.62 | 95.83 | 11.53 | 3 | 25 |
| Rhinogobiops nicholsi | 38 | 1.58 | 0.49 | 50.00 | 9.16 | 6 | 14 |
| Chromis punctipinnis | 31 | 1.29 | 1.21 | 8.33 | 6.16 | 4 | 7 |
| Oxylebius pictus | 28 | 1.17 | 0.32 | 54.17 | 9.54 | 6 | 14 |
| Hypsypops rubicundus | 24 | 1.00 | 0.28 | 45.83 | 25.50 | 14 | 35 |
| Embiotoca jacksoni | 17 | 0.71 | 0.32 | 33.33 | 24.71 | 15 | 40 |
| Paralabrax clathratus | 14 | 0.58 | 0.20 | 29.17 | 11.29 | 3 | 26 |
| Brachyistius frenatus | 8 | 0.33 | 0.16 | 20.83 | 10.25 | 8 | 14 |
| Hypsurus caryi | 4 | 0.17 | 0.12 | 8.33 | 20.00 | 15 | 25 |
| Semicossyphus pulcher | 3 | 0.13 | 0.07 | 12.50 | 23.00 | 4 | 35 |
| Rhacochilus vacca | 2 | 0.08 | 0.06 | 8.33 | 17.50 | 10 | 25 |
| Citharichthys stigmaeus | 1 | 0.04 | 0.04 | 4.17 | 6.00 | 6 | 6 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.17 | 10.00 | 10 | 10 |
| Medialuna californiensis | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |

**Replicate Transects:** 24
**Total Species:** 14
**Total Abundance:** 556
**Diversity:** 1.265
**Dominance:** 0.468
**Evenness:** 0.479

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 120 | 5.00 | 1.54 | 66.67 | 5.74 | 2 | 25 |
| Brachyistius frenatus | 55 | 2.29 | 1.02 | 50.00 | 11.16 | 6 | 16 |
| Chromis punctipinnis | 31 | 1.29 | 1.25 | 8.33 | 3.87 | 3 | 30 |
| Trachurus symmetricus | 15 | 0.63 | 0.41 | 12.50 | 33.00 | 30 | 35 |
| Sebastes atrovirens | 8 | 0.33 | 0.26 | 8.33 | 8.63 | 6 | 17 |
| Medialuna californiensis | 4 | 0.17 | 0.08 | 16.67 | 22.00 | 18 | 25 |
| Embiotoca jacksoni | 2 | 0.08 | 0.08 | 4.17 | 25.00 | 25 | 25 |
| Atherinopsidae | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Girella nigricans | 1 | 0.04 | 0.04 | 4.17 | 35.00 | 35 | 35 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.17 | 10.00 | 10 | 10 |
| Paralabrax clathratus | 1 | 0.04 | 0.04 | 4.17 | 6.00 | 6 | 6 |

**Replicate Transects:** 24
**Total Species:** 11
**Total Abundance:** 239
**Diversity:** 1.437
**Dominance:** 0.252
**Evenness:** 0.599

**Site Number:** 56
**Site:** Southwest Lighthouse
**Location:** Anacapa Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 369 | 15.38 | 4.62 | 62.50 | 9.40 | 2 | 26 |
| Chromis punctipinnis | 287 | 11.96 | 6.64 | 25.00 | 3.40 | 2 | 25 |
| Girella nigricans | 93 | 3.88 | 1.27 | 54.17 | 22.77 | 10 | 45 |
| Embiotoca jacksoni | 60 | 2.50 | 0.93 | 54.17 | 22.33 | 10 | 35 |
| Hypsypops rubicundus | 30 | 1.25 | 0.34 | 50.00 | 29.83 | 15 | 35 |
| Paralabrax clathratus | 23 | 0.96 | 0.50 | 41.67 | 26.61 | 20 | 45 |
| Rhacochilus vacca | 21 | 0.88 | 0.33 | 29.17 | 20.62 | 8 | 29 |
| Rhinogobiops nicholsi | 9 | 0.38 | 0.30 | 8.33 | 10.00 | 8 | 12 |
| Semicossyphus pulcher | 7 | 0.29 | 0.21 | 12.50 | 28.57 | 10 | 36 |
| Oxylebius pictus | 5 | 0.21 | 0.10 | 16.67 | 12.00 | 8 | 14 |
| Brachyistius frenatus | 4 | 0.17 | 0.10 | 12.50 | 11.50 | 10 | 12 |
| Alloclinus holderi | 1 | 0.04 | 0.04 | 4.17 | 8.00 | 8 | 8 |
| Anisotremus davidsonii | 1 | 0.04 | 0.04 | 4.17 | 26.00 | 26 | 26 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.17 | 8.00 | 8 | 8 |
| Hypsurus caryi | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Medialuna californiensis | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Myliobatis californica | 1 | 0.04 | 0.04 | 4.17 | 100.00 | 100 | 100 |
| Platyrhinoidis triseriata | 1 | 0.04 | 0.04 | 4.17 | 60.00 | 60 | 60 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 18 |
| **Total Abundance:** | 915 |
| **Diversity:** | 1.619 |
| **Dominance:** | 0.259 |
| **Evenness:** | 0.560 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Atherinopsidae | 553 | 23.04 | 5.24 | 70.83 | 15.76 | 7 | 30 |
| Chromis punctipinnis | 178 | 7.42 | 2.76 | 37.50 | 6.12 | 3 | 25 |
| Oxyjulis californica | 53 | 2.21 | 2.08 | 12.50 | 3.28 | 3 | 10 |
| Brachyistius frenatus | 18 | 0.75 | 0.27 | 37.50 | 8.78 | 1 | 15 |
| Cymatogaster aggregata | 10 | 0.42 | 0.42 | 4.17 | 7.00 | 7 | 7 |
| Medialuna californiensis | 9 | 0.38 | 0.22 | 20.83 | 20.78 | 14 | 25 |
| Girella nigricans | 3 | 0.13 | 0.07 | 12.50 | 21.33 | 15 | 30 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.17 | 8.00 | 8 | 8 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 8 |
| **Total Abundance:** | 825 |
| **Diversity:** | 0.990 |
| **Dominance:** | 0.486 |
| **Evenness:** | 0.476 |

**Site Number:** 57
**Site:** Malibu
**Location:** Los Angeles

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 576 | 48.00 | 12.47 | 100.00 | 16.57 | 3 | 25 |
| Paralabrax clathratus | 33 | 2.75 | 0.59 | 83.33 | 20.70 | 4 | 25 |
| Paralabrax nebulifer | 12 | 1.00 | 0.58 | 25.00 | 27.50 | 20 | 35 |
| Phanerodon furcatus | 12 | 1.00 | 0.33 | 50.00 | 18.33 | 15 | 20 |
| Rhacochilus toxotes | 12 | 1.00 | 1.00 | 8.33 | 27.50 | 25 | 30 |
| Halichoeres semicinctus | 6 | 0.50 | 0.29 | 25.00 | 21.67 | 20 | 25 |
| Hypsurus caryi | 6 | 0.50 | 0.34 | 25.00 | 16.67 | 10 | 20 |
| Rhacochilus vacca | 4 | 0.33 | 0.22 | 16.67 | 18.75 | 15 | 25 |
| Brachyistius frenatus | 2 | 0.17 | 0.11 | 16.67 | 8.00 | 8 | 8 |
| Embiotoca jacksoni | 2 | 0.17 | 0.11 | 16.67 | 16.00 | 12 | 20 |
| Medialuna californiensis | 2 | 0.17 | 0.11 | 16.67 | 20.00 | 15 | 25 |

| | |
|---|---|
| **Replicate Transects:** | 12 |
| **Total Species:** | 11 |
| **Total Abundance:** | 667 |
| **Diversity:** | 0.660 |
| **Dominance:** | 0.745 |
| **Evenness:** | 0.275 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 342 | 28.50 | 9.15 | 91.67 | 8.71 | 3 | 20 |
| Atherinopsidae | 150 | 12.50 | 6.01 | 33.33 | 21.00 | 15 | 30 |
| Brachyistius frenatus | 73 | 6.08 | 3.28 | 58.33 | 8.56 | 5 | 15 |
| Paralabrax clathratus | 4 | 0.33 | 0.22 | 16.67 | 32.50 | 25 | 40 |

| | |
|---|---|
| **Replicate Transects:** | 12 |
| **Total Species:** | 4 |
| **Total Abundance:** | 569 |
| **Diversity:** | 0.956 |
| **Dominance:** | 0.435 |
| **Evenness:** | 0.689 |

**Site Number:** 58
**Site:** King Harbor
**Location:** Los Angeles

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 806 | 27.79 | 8.68 | 72.41 | 5.91 | 1 | 25 |
| Oxyjulis californica | 531 | 18.31 | 3.73 | 72.41 | 7.89 | 1 | 25 |
| Xenistius californiensis | 500 | 17.24 | 17.24 | 3.45 | 14.00 | 14 | 14 |
| Embiotoca jacksoni | 310 | 10.69 | 1.21 | 100.00 | 16.76 | 5 | 30 |
| Atherinopsidae | 97 | 3.34 | 1.67 | 13.79 | 10.41 | 7 | 15 |
| Rhacochilus vacca | 66 | 2.28 | 0.66 | 48.28 | 18.42 | 7 | 35 |
| Paralabrax clathratus | 59 | 2.03 | 0.43 | 65.52 | 19.47 | 3 | 25 |
| Paralabrax nebulifer | 53 | 1.83 | 0.47 | 55.17 | 24.19 | 12 | 35 |
| Girella nigricans | 51 | 1.76 | 0.70 | 31.03 | 11.33 | 3 | 35 |
| Hypsypops rubicundus | 44 | 1.52 | 0.37 | 51.72 | 21.80 | 2 | 30 |
| Hypsurus caryi | 35 | 1.21 | 0.30 | 51.72 | 14.83 | 6 | 20 |
| Heterostichus rostratus | 34 | 1.17 | 0.60 | 37.93 | 6.74 | 3 | 20 |
| Rhacochilus toxotes | 26 | 0.90 | 0.53 | 24.14 | 27.65 | 9 | 40 |
| Phanerodon furcatus | 25 | 0.86 | 0.46 | 31.03 | 17.80 | 15 | 25 |
| Semicossyphus pulcher | 20 | 0.69 | 0.21 | 34.48 | 23.80 | 8 | 35 |
| Halichoeres semicinctus | 15 | 0.52 | 0.18 | 31.03 | 19.53 | 6 | 25 |
| Sebastes serranoides/S. flavidus | 8 | 0.28 | 0.14 | 13.79 | 18.38 | 12 | 25 |
| Oxylebius pictus | 7 | 0.24 | 0.12 | 13.79 | 14.71 | 7 | 20 |
| Rhinogobiops nicholsi | 5 | 0.17 | 0.09 | 13.79 | 8.20 | 6 | 12 |
| Medialuna californiensis | 4 | 0.14 | 0.08 | 10.34 | 23.75 | 20 | 25 |
| Anisotremus davidsonii | 3 | 0.10 | 0.08 | 6.90 | 25.00 | 20 | 30 |
| Scorpaenichthys marmoratus | 2 | 0.07 | 0.05 | 6.90 | 30.00 | 30 | 30 |
| Gibbonsia elegans | 1 | 0.03 | 0.03 | 3.45 | 15.00 | 15 | 15 |
| Myctoperca xenarcha | 1 | 0.03 | 0.03 | 3.45 | 75.00 | 75 | 75 |
| Paralichthys californicus | 1 | 0.03 | 0.03 | 3.45 | 50.00 | 50 | 50 |
| Pleuronichthys coenosus | 1 | 0.03 | 0.03 | 3.45 | 25.00 | 25 | 25 |
| Pleuronichthys ritteri | 1 | 0.03 | 0.03 | 3.45 | 25.00 | 25 | 25 |

**Replicate Transects:** 29
**Total Species:** 27
**Total Abundance:** 2706
**Diversity:** 2.098
**Dominance:** 0.170
**Evenness:** 0.637

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Xenistius californiensis | 500 | 125.00 | 125.00 | 25.00 | 15.00 | 15 | 15 |
| Atherinopsidae | 33 | 8.25 | 8.25 | 25.00 | 4.73 | 4 | 10 |
| Paralabrax clathratus | 13 | 3.25 | 3.25 | 25.00 | 20.00 | 20 | 20 |
| Oxyjulis californica | 3 | 0.75 | 0.75 | 25.00 | 15.00 | 15 | 15 |

**Replicate Transects:** 4
**Total Species:** 4
**Total Abundance:** 549
**Diversity:** 0.371
**Dominance:** 0.832
**Evenness:** 0.268

**Site Number:** 59
**Site:** Rocky Point
**Location:** Los Angeles

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 258 | 10.75 | 4.54 | 75.00 | 9.69 | 3 | 20 |
| Paralabrax clathratus | 64 | 2.67 | 0.59 | 79.17 | 20.86 | 15 | 30 |
| Chromis punctipinnis | 56 | 2.33 | 2.08 | 16.67 | 8.11 | 7 | 10 |
| Semicossyphus pulcher | 49 | 2.04 | 0.41 | 75.00 | 26.12 | 10 | 50 |
| Hypsypops rubicundus | 48 | 2.00 | 0.34 | 83.33 | 20.63 | 15 | 25 |
| Embiotoca jacksoni | 37 | 1.54 | 0.37 | 62.50 | 16.35 | 10 | 25 |
| Halichoeres semicinctus | 31 | 1.29 | 0.40 | 45.83 | 21.29 | 15 | 30 |
| Rhinogobiops nicholsi | 21 | 0.88 | 0.34 | 33.33 | 7.90 | 3 | 10 |
| Paralabrax nebulifer | 11 | 0.46 | 0.17 | 29.17 | 21.82 | 20 | 25 |
| Girella nigricans | 9 | 0.38 | 0.19 | 20.83 | 15.78 | 12 | 25 |
| Hypsurus caryi | 8 | 0.33 | 0.16 | 20.83 | 14.88 | 10 | 25 |
| Caulolatilus princeps | 7 | 0.29 | 0.20 | 8.33 | 17.14 | 15 | 20 |
| Oxylebius pictus | 5 | 0.21 | 0.10 | 16.67 | 16.40 | 12 | 20 |
| Brachyistius frenatus | 4 | 0.17 | 0.08 | 16.67 | 8.00 | 5 | 11 |
| Rhacochilus toxotes | 2 | 0.08 | 0.06 | 8.33 | 27.50 | 25 | 30 |
| Rhacochilus vacca | 2 | 0.08 | 0.06 | 8.33 | 17.50 | 10 | 25 |
| Sebastes atrovirens | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |

**Replicate Transects:** 24
**Total Species:** 17
**Total Abundance:** 613
**Diversity:** 2.018
**Dominance:** 0.185
**Evenness:** 0.712

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 312 | 13.00 | 4.58 | 75.00 | 8.54 | 2 | 20 |
| Chromis punctipinnis | 203 | 8.46 | 6.50 | 12.50 | 11.51 | 10 | 13 |
| Girella nigricans | 139 | 5.79 | 3.51 | 20.83 | 19.14 | 15 | 30 |
| Atherinopsidae | 138 | 5.75 | 3.83 | 12.50 | 3.22 | 3 | 5 |
| Brachyistius frenatus | 50 | 2.08 | 1.08 | 33.33 | 7.20 | 3 | 13 |
| Paralabrax clathratus | 40 | 1.67 | 0.43 | 54.17 | 18.40 | 13 | 25 |
| Heterostichus rostratus | 27 | 1.13 | 1.04 | 12.50 | 5.67 | 5 | 15 |
| Medialuna californiensis | 3 | 0.13 | 0.09 | 8.33 | 23.33 | 20 | 25 |
| Phanerodon furcatus | 3 | 0.13 | 0.13 | 4.17 | 20.00 | 20 | 20 |

**Replicate Transects:** 24
**Total Species:** 9
**Total Abundance:** 915
**Diversity:** 1.710
**Dominance:** 0.196
**Evenness:** 0.778

**Site Number:** 60
**Site:** Point Vicente
**Location:** Los Angeles

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 420 | 17.50 | 8.54 | 50.00 | 5.09 | 2 | 20 |
| Chromis punctipinnis | 279 | 11.63 | 10.38 | 33.33 | 4.03 | 2 | 15 |
| Rhinogobiops nicholsi | 142 | 5.92 | 1.57 | 75.00 | 6.83 | 2 | 13 |
| Paralabrax clathratus | 67 | 2.79 | 0.46 | 83.33 | 17.79 | 7 | 25 |
| Paralabrax nebulifer | 60 | 2.50 | 0.45 | 83.33 | 21.22 | 12 | 35 |
| Semicossyphus pulcher | 31 | 1.29 | 0.41 | 45.83 | 18.00 | 8 | 30 |
| Halichoeres semicinctus | 21 | 0.88 | 0.27 | 41.67 | 16.43 | 2 | 25 |
| Hypsypops rubicundus | 17 | 0.71 | 0.27 | 37.50 | 19.82 | 12 | 30 |
| Embiotoca jacksoni | 8 | 0.33 | 0.14 | 20.83 | 15.50 | 8 | 20 |
| Oxylebius pictus | 7 | 0.29 | 0.19 | 12.50 | 7.43 | 4 | 10 |
| Anisotremus davidsonii | 5 | 0.21 | 0.17 | 8.33 | 13.40 | 13 | 15 |
| Medialuna californiensis | 5 | 0.21 | 0.13 | 12.50 | 15.20 | 12 | 20 |
| Rhacochilus vacca | 2 | 0.08 | 0.06 | 8.33 | 20.00 | 20 | 20 |
| Sebastes serriceps | 2 | 0.08 | 0.08 | 4.17 | 6.00 | 5 | 7 |
| Alloclinus holderi | 1 | 0.04 | 0.04 | 4.17 | 7.00 | 7 | 7 |
| Girella nigricans | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Hypsurus caryi | 1 | 0.04 | 0.04 | 4.17 | 13.00 | 13 | 13 |

**Replicate Transects:** 24
**Total Species:** 17
**Total Abundance:** 1069
**Diversity:** 1.730
**Dominance:** 0.232
**Evenness:** 0.610

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Atherinopsidae | 1780 | 74.17 | 62.62 | 12.50 | 8.01 | 3 | 10 |
| Chromis punctipinnis | 33 | 1.38 | 0.87 | 16.67 | 12.61 | 10 | 15 |
| Paralabrax clathratus | 20 | 0.83 | 0.21 | 54.17 | 19.60 | 11 | 25 |
| Rhinogobiops nicholsi | 14 | 0.58 | 0.58 | 4.17 | 7.57 | 4 | 10 |
| Oxyjulis californica | 5 | 0.21 | 0.17 | 8.33 | 13.40 | 13 | 15 |
| Paralabrax nebulifer | 4 | 0.17 | 0.17 | 4.17 | 21.25 | 20 | 25 |
| Seriola lalandi | 4 | 0.17 | 0.13 | 8.33 | 45.00 | 40 | 60 |
| Oxylebius pictus | 3 | 0.13 | 0.13 | 4.17 | 10.67 | 10 | 11 |
| Embiotoca jacksoni | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Halichoeres semicinctus | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Rhacochilus vacca | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |

**Replicate Transects:** 24
**Total Species:** 11
**Total Abundance:** 1866
**Diversity:** 0.266
**Dominance:** 0.909
**Evenness:** 0.111

**Site Number:** 61
**Site:** Dana Point
**Location:** Orange

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 207 | 8.63 | 3.55 | 50.00 | 6.39 | 2 | 18 |
| Halichoeres semicinctus | 146 | 6.08 | 2.14 | 41.67 | 3.78 | 2 | 18 |
| Paralabrax clathratus | 56 | 2.33 | 1.25 | 50.00 | 14.07 | 5 | 37 |
| Semicossyphus pulcher | 29 | 1.21 | 0.35 | 54.17 | 23.83 | 7 | 55 |
| Chromis punctipinnis | 24 | 1.00 | 0.59 | 12.50 | 7.58 | 3 | 12 |
| Rhacochilus vacca | 21 | 0.88 | 0.83 | 8.33 | 4.43 | 3 | 33 |
| Paralabrax nebulifer | 20 | 0.83 | 0.23 | 54.17 | 25.55 | 10 | 37 |
| Embiotoca jacksoni | 9 | 0.38 | 0.24 | 12.50 | 21.00 | 7 | 45 |
| Hypsypops rubicundus | 4 | 0.17 | 0.13 | 8.33 | 24.50 | 17 | 29 |
| Girella nigricans | 1 | 0.04 | 0.04 | 4.17 | 40.00 | 40 | 40 |
| Ophiodon elongatus | 1 | 0.04 | 0.04 | 4.17 | 40.00 | 40 | 40 |
| Rhacochilus toxotes | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Squatina californica | 1 | 0.04 | 0.04 | 4.17 | 86.00 | 86 | 86 |
| unidentified fish | 1 | 0.04 | 0.04 | 4.17 | 40.00 | 40 | 40 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 14 |
| **Total Abundance:** | 521 |
| **Diversity:** | 1.688 |
| **Dominance:** | 0.221 |
| **Evenness:** | 0.639 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 167 | 6.96 | 3.68 | 37.50 | 9.83 | 6 | 16 |
| Sardinops sagax | 75 | 3.13 | 3.13 | 4.17 | 14.00 | 14 | 14 |
| Chromis punctipinnis | 47 | 1.96 | 1.67 | 12.50 | 15.23 | 10 | 16 |
| Brachyistius frenatus | 17 | 0.71 | 0.71 | 4.17 | 7.41 | 7 | 8 |
| Medialuna californiensis | 16 | 0.67 | 0.46 | 8.33 | 30.50 | 28 | 32 |
| Paralabrax clathratus | 12 | 0.50 | 0.27 | 16.67 | 29.67 | 24 | 45 |
| Anisotremus davidsonii | 2 | 0.08 | 0.08 | 4.17 | 33.00 | 32 | 34 |
| Sebastes atrovirens | 1 | 0.04 | 0.04 | 4.17 | 32.00 | 32 | 32 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 8 |
| **Total Abundance:** | 337 |
| **Diversity:** | 1.419 |
| **Dominance:** | 0.269 |
| **Evenness:** | 0.682 |

**Site Number:** 62
**Site:** San Mateo
**Location:** Orange

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 111 | 5.29 | 2.43 | 33.33 | 7.76 | 4 | 18 |
| Paralabrax nebulifer | 14 | 0.67 | 0.17 | 47.62 | 22.21 | 15 | 34 |
| Xenistius californiensis | 11 | 0.52 | 0.40 | 9.52 | 5.00 | 5 | 5 |
| Paralabrax clathratus | 6 | 0.29 | 0.16 | 19.05 | 18.00 | 15 | 25 |
| Embiotoca jacksoni | 2 | 0.10 | 0.07 | 9.52 | 11.50 | 8 | 15 |
| Hypsurus caryi | 1 | 0.05 | 0.05 | 4.76 | 13.00 | 13 | 13 |
| Rhacochilus vacca | 1 | 0.05 | 0.05 | 4.76 | 20.00 | 20 | 20 |

| | |
|---|---|
| **Replicate Transects:** | 21 |
| **Total Species:** | 7 |
| **Total Abundance:** | 146 |
| **Diversity:** | 0.886 |
| **Dominance:** | 0.527 |
| **Evenness:** | 0.455 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 7 | 0.33 | 0.33 | 4.76 | 12.14 | 10 | 15 |
| Brachyistius frenatus | 1 | 0.05 | 0.05 | 4.76 | 6.00 | 6 | 6 |
| Paralabrax clathratus | 1 | 0.05 | 0.05 | 4.76 | 15.00 | 15 | 15 |
| Phanerodon furcatus | 1 | 0.05 | 0.05 | 4.76 | 15.00 | 15 | 15 |

| | |
|---|---|
| **Replicate Transects:** | 21 |
| **Total Species:** | 4 |
| **Total Abundance:** | 10 |
| **Diversity:** | 0.940 |
| **Dominance:** | 0.520 |
| **Evenness:** | 0.678 |

**Site Number:** 63
**Site:** San Onofre
**Location:** San Diego

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 37 | 1.85 | 0.59 | 45.00 | 7.27 | 4 | 17 |
| Paralabrax clathratus | 19 | 0.95 | 0.37 | 40.00 | 29.47 | 5 | 39 |
| Paralabrax nebulifer | 11 | 0.55 | 0.20 | 35.00 | 26.82 | 18 | 36 |
| Semicossyphus pulcher | 11 | 0.55 | 0.29 | 20.00 | 35.36 | 18 | 50 |
| Cymatogaster aggregata | 10 | 0.50 | 0.31 | 20.00 | 14.80 | 10 | 17 |
| Chromis punctipinnis | 4 | 0.20 | 0.20 | 5.00 | 15.00 | 14 | 16 |
| Embiotoca jacksoni | 1 | 0.05 | 0.05 | 5.00 | 10.00 | 10 | 10 |
| Hypsypops rubicundus | 1 | 0.05 | 0.05 | 5.00 | 15.00 | 15 | 15 |
| Rhacochilus toxotes | 1 | 0.05 | 0.05 | 5.00 | 22.00 | 22 | 22 |

**Replicate Transects:** 20
**Total Species:** 9
**Total Abundance:** 95
**Diversity:** 1.703
**Dominance:** 0.027
**Evenness:** 0.775

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 46 | 2.30 | 1.27 | 40.00 | 14.63 | 8 | 20 |
| Trachurus symmetricus | 35 | 1.75 | 1.75 | 5.00 | 12.00 | 12 | 12 |
| Paralabrax clathratus | 15 | 0.75 | 0.43 | 25.00 | 29.60 | 24 | 45 |
| Chromis punctipinnis | 9 | 0.45 | 0.36 | 10.00 | 15.56 | 12 | 20 |
| Medialuna californiensis | 7 | 0.35 | 0.30 | 10.00 | 30.00 | 20 | 35 |
| Brachyistius frenatus | 3 | 0.15 | 0.11 | 10.00 | 11.33 | 10 | 12 |
| Cymatogaster aggregata | 3 | 0.15 | 0.15 | 5.00 | 16.67 | 15 | 20 |
| Rhacochilus vacca | 3 | 0.15 | 0.11 | 10.00 | 26.67 | 20 | 30 |
| Phanerodon furcatus | 1 | 0.05 | 0.05 | 5.00 | 35.00 | 35 | 35 |

**Replicate Transects:** 20
**Total Species:** 9
**Total Abundance:** 122
**Diversity:** 1.653
**Dominance:** 0.103
**Evenness:** 0.752

**Site Number:** 64
**Site:** Barn Kelp
**Location:** San Diego

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 21 | 5.25 | 4.27 | 75.00 | 17.38 | 10 | 20 |
| Chromis punctipinnis | 13 | 3.25 | 1.70 | 75.00 | 8.15 | 7 | 10 |
| Semicossyphus pulcher | 12 | 3.00 | 1.47 | 75.00 | 19.17 | 10 | 30 |
| Brachyistius frenatus | 5 | 1.25 | 1.25 | 25.00 | 10.00 | 10 | 10 |
| Paralabrax clathratus | 3 | 0.75 | 0.48 | 50.00 | 14.00 | 12 | 15 |
| Sebastes rastrelliger | 3 | 0.75 | 0.75 | 25.00 | 22.00 | 22 | 22 |
| Paralabrax nebulifer | 2 | 0.50 | 0.29 | 50.00 | 25.00 | 25 | 25 |
| Hypsypops rubicundus | 1 | 0.25 | 0.25 | 25.00 | 30.00 | 30 | 30 |

| | |
|---|---|
| **Replicate Transects:** | 4 |
| **Total Species:** | 8 |
| **Total Abundance:** | 60 |
| **Diversity:** | 1.709 |
| **Dominance:** | 0.167 |
| **Evenness:** | 0.822 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 12 | 3.00 | 2.38 | 50.00 | 11.67 | 10 | 12 |
| Chromis punctipinnis | 4 | 1.00 | 1.00 | 25.00 | 15.00 | 15 | 15 |

| | |
|---|---|
| **Replicate Transects:** | 4 |
| **Total Species:** | 2 |
| **Total Abundance:** | 16 |
| **Diversity:** | 0.562 |
| **Dominance:** | 0.500 |
| **Evenness:** | 0.811 |

**Site Number:** 65
**Site:** Carlsbad
**Location:** San Diego

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Trachurus symmetricus | 75 | 3.13 | 3.13 | 4.17 | 8.67 | 8 | 10 |
| Oxyjulis californica | 69 | 2.88 | 1.60 | 25.00 | 4.42 | 3 | 16 |
| Cymatogaster aggregata | 40 | 1.67 | 1.02 | 16.67 | 13.25 | 4 | 22 |
| Embiotoca jacksoni | 24 | 1.00 | 0.36 | 29.17 | 11.33 | 8 | 15 |
| Xenistius californiensis | 16 | 0.67 | 0.67 | 4.17 | 9.13 | 4 | 13 |
| Rhacochilus vacca | 10 | 0.42 | 0.38 | 8.33 | 17.80 | 12 | 23 |
| Anisotremus davidsonii | 8 | 0.33 | 0.33 | 4.17 | 20.00 | 20 | 20 |
| Paralabrax clathratus | 8 | 0.33 | 0.13 | 25.00 | 20.50 | 12 | 36 |
| Paralabrax nebulifer | 6 | 0.25 | 0.14 | 16.67 | 25.50 | 18 | 35 |
| Hypsypops rubicundus | 4 | 0.17 | 0.17 | 4.17 | 16.00 | 16 | 16 |
| Atherinopsidae | 3 | 0.13 | 0.13 | 4.17 | 20.00 | 20 | 20 |
| Semicossyphus pulcher | 3 | 0.13 | 0.09 | 8.33 | 23.33 | 20 | 30 |
| Halichoeres semicinctus | 2 | 0.08 | 0.06 | 8.33 | 15.00 | 12 | 18 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 13 |
| **Total Abundance:** | 268 |
| **Diversity:** | 1.991 |
| **Dominance:** | 0.102 |
| **Evenness:** | 0.776 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 11 | 0.46 | 0.42 | 8.33 | 5.91 | 5 | 15 |
| Paralabrax clathratus | 4 | 0.17 | 0.10 | 12.50 | 16.25 | 9 | 35 |
| Paralabrax nebulifer | 4 | 0.17 | 0.10 | 12.50 | 20.25 | 12 | 34 |
| Brachyistius frenatus | 2 | 0.08 | 0.08 | 4.17 | 10.00 | 10 | 10 |
| Rhacochilus vacca | 2 | 0.08 | 0.06 | 8.33 | 29.00 | 18 | 40 |
| Anisotremus davidsonii | 1 | 0.04 | 0.04 | 4.17 | 12.00 | 12 | 12 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 6 |
| **Total Abundance:** | 24 |
| **Diversity:** | 1.501 |
| **Dominance:** | 0.281 |
| **Evenness:** | 0.838 |

**Site Number:** 66
**Site:** Encinitas
**Location:** San Diego

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 558 | 23.25 | 7.84 | 45.83 | 7.33 | 1 | 24 |
| Xenistius californiensis | 36 | 1.50 | 1.02 | 12.50 | 20.83 | 18 | 21 |
| Chromis punctipinnis | 31 | 1.29 | 1.06 | 8.33 | 10.45 | 4 | 12 |
| Cymatogaster aggregata | 28 | 1.17 | 0.42 | 33.33 | 9.07 | 4 | 24 |
| Embiotoca jacksoni | 25 | 1.04 | 0.49 | 25.00 | 6.96 | 4 | 16 |
| Paralabrax clathratus | 25 | 1.04 | 0.25 | 58.33 | 23.68 | 6 | 60 |
| Semicossyphus pulcher | 17 | 0.71 | 0.29 | 29.17 | 28.41 | 4 | 45 |
| Anisotremus davidsonii | 11 | 0.46 | 0.29 | 12.50 | 6.27 | 3 | 10 |
| Hypsypops rubicundus | 9 | 0.38 | 0.29 | 12.50 | 19.56 | 10 | 28 |
| Paralabrax nebulifer | 9 | 0.38 | 0.15 | 25.00 | 31.33 | 22 | 39 |
| Girella nigricans | 5 | 0.21 | 0.21 | 4.17 | 31.80 | 27 | 35 |
| Sebastes spp. | 4 | 0.17 | 0.17 | 4.17 | 3.00 | 3 | 3 |
| Rhacochilus vacca | 2 | 0.08 | 0.06 | 8.33 | 15.00 | 12 | 18 |
| Brachyistius frenatus | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Halichoeres semicinctus | 1 | 0.04 | 0.04 | 4.17 | 10.00 | 10 | 10 |
| Stereolepis gigas | 1 | 0.04 | 0.04 | 4.17 | 180.00 | 180 | 180 |

**Replicate Transects:** 24
**Total Species:** 16
**Total Abundance:** 763
**Diversity:** 1.201
**Dominance:** 0.528
**Evenness:** 0.433

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Trachurus symmetricus | 100 | 4.17 | 4.17 | 4.17 | 5.00 | 5 | 5 |
| Oxyjulis californica | 91 | 3.79 | 1.98 | 20.83 | 5.57 | 3 | 22 |
| Paralabrax clathratus | 16 | 0.67 | 0.33 | 29.17 | 14.69 | 6 | 36 |
| Embiotoca jacksoni | 7 | 0.29 | 0.29 | 4.17 | 6.00 | 6 | 6 |
| Anisotremus davidsonii | 2 | 0.08 | 0.08 | 4.17 | 34.00 | 34 | 34 |

**Replicate Transects:** 24
**Total Species:** 5
**Total Abundance:** 216
**Diversity:** 1.068
**Dominance:** 0.323
**Evenness:** 0.664

**Site Number:** 67
**Site:** Cardiff
**Location:** San Diego

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 243 | 10.13 | 4.65 | 45.83 | 2.42 | 2 | 16 |
| Paralabrax clathratus | 197 | 8.21 | 1.92 | 79.17 | 23.62 | 2 | 50 |
| Paralabrax nebulifer | 185 | 7.71 | 1.74 | 83.33 | 23.56 | 14 | 39 |
| Chromis punctipinnis | 117 | 4.88 | 2.68 | 20.83 | 5.08 | 2 | 15 |
| Trachurus symmetricus | 96 | 4.00 | 2.43 | 12.50 | 9.33 | 6 | 10 |
| Embiotoca jacksoni | 79 | 3.29 | 1.22 | 37.50 | 11.51 | 8 | 16 |
| Anisotremus davidsonii | 48 | 2.00 | 1.50 | 12.50 | 16.25 | 12 | 18 |
| Semicossyphus pulcher | 47 | 1.96 | 0.49 | 62.50 | 25.00 | 14 | 42 |
| Hypsypops rubicundus | 26 | 1.08 | 0.39 | 41.67 | 18.50 | 8 | 30 |
| Halichoeres semicinctus | 10 | 0.42 | 0.38 | 8.33 | 3.00 | 3 | 3 |
| Rhacochilus toxotes | 6 | 0.25 | 0.15 | 12.50 | 20.83 | 19 | 22 |
| Girella nigricans | 5 | 0.21 | 0.17 | 8.33 | 25.40 | 22 | 30 |
| Sebastes atrovirens | 5 | 0.21 | 0.12 | 12.50 | 18.00 | 16 | 20 |
| Sebastes rastrelliger | 1 | 0.04 | 0.04 | 4.17 | 23.00 | 23 | 23 |
| Squatina californica | 1 | 0.04 | 0.04 | 4.17 | 180.00 | 180 | 180 |
| Stereolepis gigas | 1 | 0.04 | 0.04 | 4.17 | 180.00 | 180 | 180 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 16 |
| **Total Abundance:** | 1067 |
| **Diversity:** | 2.115 |
| **Dominance:** | 0.127 |
| **Evenness:** | 0.763 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Trachurus symmetricus | 201 | 8.38 | 3.58 | 20.83 | 14.23 | 12 | 15 |
| Chromis punctipinnis | 156 | 6.50 | 2.68 | 29.17 | 11.35 | 8 | 15 |
| Oxyjulis californica | 84 | 3.50 | 1.56 | 33.33 | 12.87 | 8 | 15 |
| Paralabrax clathratus | 46 | 1.92 | 0.63 | 58.33 | 25.76 | 12 | 52 |
| Anisotremus davidsonii | 7 | 0.29 | 0.29 | 4.17 | 20.00 | 20 | 20 |
| Medialuna californiensis | 3 | 0.13 | 0.13 | 4.17 | 23.00 | 23 | 23 |
| Paralabrax nebulifer | 3 | 0.13 | 0.13 | 4.17 | 24.33 | 23 | 25 |
| Semicossyphus pulcher | 1 | 0.04 | 0.04 | 4.17 | 12.00 | 12 | 12 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 8 |
| **Total Abundance:** | 501 |
| **Diversity:** | 1.382 |
| **Dominance:** | 0.259 |
| **Evenness:** | 0.664 |

**Site Number:** 68
**Site:** La Jolla
**Location:** San Diego

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Brachyistius frenatus | 63 | 2.63 | 2.50 | 12.50 | 4.10 | 3 | 10 |
| Oxyjulis californica | 58 | 2.42 | 1.59 | 16.67 | 2.14 | 1 | 12 |
| Semicossyphus pulcher | 18 | 0.75 | 0.47 | 25.00 | 16.83 | 8 | 50 |
| Embiotoca jacksoni | 13 | 0.54 | 0.42 | 12.50 | 6.62 | 6 | 10 |
| Paralabrax clathratus | 12 | 0.50 | 0.20 | 29.17 | 14.50 | 5 | 24 |
| Chromis punctipinnis | 9 | 0.38 | 0.22 | 16.67 | 6.67 | 4 | 12 |
| Girella nigricans | 9 | 0.38 | 0.26 | 12.50 | 24.67 | 12 | 30 |
| Hypsypops rubicundus | 2 | 0.08 | 0.06 | 8.33 | 10.50 | 10 | 11 |
| Paralabrax nebulifer | 2 | 0.08 | 0.06 | 8.33 | 14.00 | 12 | 16 |
| Halichoeres semicinctus | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Sebastes atrovirens | 1 | 0.04 | 0.04 | 4.17 | 14.00 | 14 | 14 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 11 |
| **Total Abundance:** | 188 |
| **Diversity:** | 1.758 |
| **Dominance:** | 0.118 |
| **Evenness:** | 0.733 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 140 | 5.83 | 3.69 | 16.67 | 7.13 | 4 | 30 |
| Brachyistius frenatus | 36 | 1.50 | 1.50 | 4.17 | 5.61 | 5 | 12 |
| Paralabrax clathratus | 16 | 0.67 | 0.25 | 29.17 | 16.06 | 6 | 32 |
| Chromis punctipinnis | 4 | 0.17 | 0.17 | 4.17 | 10.00 | 10 | 10 |
| Embiotoca jacksoni | 3 | 0.13 | 0.13 | 4.17 | 9.33 | 8 | 10 |
| Medialuna californiensis | 3 | 0.13 | 0.09 | 8.33 | 22.67 | 18 | 32 |
| Seriola lalandi | 2 | 0.08 | 0.08 | 4.17 | 40.00 | 40 | 40 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 7 |
| **Total Abundance:** | 204 |
| **Diversity:** | 1.011 |
| **Dominance:** | 0.444 |
| **Evenness:** | 0.519 |

**Site Number:** 69
**Site:** Point Loma North
**Location:** San Diego

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Paralabrax nebulifer | 43 | 1.79 | 1.51 | 12.50 | 24.77 | 15 | 40 |
| Paralabrax clathratus | 30 | 1.25 | 0.30 | 62.50 | 21.33 | 2 | 40 |
| Rhacochilus vacca | 25 | 1.04 | 0.84 | 12.50 | 21.60 | 6 | 25 |
| Brachyistius frenatus | 21 | 0.88 | 0.41 | 29.17 | 5.00 | 2 | 10 |
| Oxyjulis californica | 8 | 0.33 | 0.13 | 25.00 | 10.75 | 4 | 15 |
| Hypsypops rubicundus | 4 | 0.17 | 0.10 | 12.50 | 19.50 | 15 | 23 |
| Semicossyphus pulcher | 4 | 0.17 | 0.08 | 16.67 | 32.50 | 25 | 50 |
| Embiotoca jacksoni | 3 | 0.13 | 0.07 | 12.50 | 13.67 | 6 | 20 |
| Phanerodon furcatus | 2 | 0.08 | 0.06 | 8.33 | 6.00 | 6 | 6 |
| Anisotremus davidsonii | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Girella nigricans | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |
| Sebastes atrovirens | 1 | 0.04 | 0.04 | 4.17 | 22.00 | 22 | 22 |
| Sebastes auriculatus | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |

**Replicate Transects:** 24
**Total Species:** 13
**Total Abundance:** 144
**Diversity:** 1.910
**Dominance:** 0.027
**Evenness:** 0.745

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 2 | 0.08 | 0.08 | 4.17 | 8.00 | 4 | 12 |
| Paralabrax clathratus | 1 | 0.04 | 0.04 | 4.17 | 35.00 | 35 | 35 |
| Sebastes atrovirens | 1 | 0.04 | 0.04 | 4.17 | 22.00 | 22 | 22 |

**Replicate Transects:** 24
**Total Species:** 3
**Total Abundance:** 4
**Diversity:** 1.040
**Dominance:** 0.375
**Evenness:** 0.946

**Site Number:** 70
**Site:** Point Loma South
**Location:** San Diego

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 426 | 17.75 | 5.58 | 62.50 | 4.55 | 1 | 18 |
| Chromis punctipinnis | 30 | 1.25 | 0.92 | 8.33 | 4.00 | 4 | 4 |
| Paralabrax clathratus | 11 | 0.46 | 0.26 | 20.83 | 17.82 | 5 | 28 |
| Paralabrax nebulifer | 6 | 0.25 | 0.12 | 16.67 | 28.33 | 20 | 35 |
| Semicossyphus pulcher | 4 | 0.17 | 0.17 | 4.17 | 17.00 | 15 | 20 |
| Embiotoca jacksoni | 3 | 0.13 | 0.13 | 4.17 | 14.00 | 14 | 14 |
| Hypsypops rubicundus | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 7 |
| **Total Abundance:** | 481 |
| **Diversity:** | 0.506 |
| **Dominance:** | 0.778 |
| **Evenness:** | 0.260 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 38 | 1.58 | 1.33 | 12.50 | 10.03 | 7 | 20 |
| Brachyistius frenatus | 6 | 0.25 | 0.21 | 8.33 | 7.83 | 5 | 10 |
| Paralabrax clathratus | 2 | 0.08 | 0.06 | 8.33 | 20.00 | 17 | 23 |
| Paralabrax nebulifer | 2 | 0.08 | 0.06 | 8.33 | 20.00 | 20 | 20 |
| Sebastes atrovirens | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 5 |
| **Total Abundance:** | 49 |
| **Diversity:** | 0.795 |
| **Dominance:** | 0.256 |
| **Evenness:** | 0.494 |

**Site Number:** 71
**Site:** Sand Spit
**Location:** San Nicolas Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 106 | 8.83 | 2.41 | 91.67 | 11.44 | 6 | 20 |
| Chromis punctipinnis | 91 | 7.58 | 2.60 | 58.33 | 19.80 | 7 | 20 |
| Girella nigricans | 59 | 4.92 | 2.80 | 58.33 | 31.53 | 25 | 40 |
| Semicossyphus pulcher | 27 | 2.25 | 0.54 | 83.33 | 36.85 | 30 | 45 |
| Embiotoca lateralis | 25 | 2.08 | 1.33 | 41.67 | 17.64 | 11 | 30 |
| Medialuna californiensis | 23 | 1.92 | 0.71 | 58.33 | 28.48 | 20 | 40 |
| Hypsypops rubicundus | 21 | 1.75 | 0.52 | 75.00 | 25.24 | 20 | 30 |
| Embiotoca jacksoni | 19 | 1.58 | 0.45 | 75.00 | 22.26 | 10 | 30 |
| Sebastes atrovirens | 14 | 1.17 | 0.53 | 50.00 | 25.36 | 20 | 30 |
| Rhacochilus vacca | 11 | 0.92 | 0.43 | 41.67 | 31.36 | 25 | 35 |
| Brachyistius frenatus | 10 | 0.83 | 0.34 | 41.67 | 6.90 | 5 | 9 |
| Paralabrax clathratus | 10 | 0.83 | 0.34 | 41.67 | 36.00 | 20 | 45 |
| Sebastes mystinus | 9 | 0.75 | 0.30 | 41.67 | 27.22 | 25 | 30 |
| Sebastes serranoides/S. flavidus | 5 | 0.42 | 0.26 | 25.00 | 33.00 | 30 | 40 |
| Oxylebius pictus | 4 | 0.33 | 0.26 | 16.67 | 18.75 | 15 | 20 |
| Rhacochilus toxotes | 3 | 0.25 | 0.18 | 16.67 | 30.00 | 30 | 30 |
| Caulolatilus princeps | 2 | 0.17 | 0.17 | 8.33 | 40.00 | 40 | 40 |
| Aulorhynchus flavidus | 1 | 0.08 | 0.08 | 8.33 | 20.00 | 20 | 20 |
| Torpedo californica | 1 | 0.08 | 0.08 | 8.33 | 90.00 | 90 | 90 |

| | |
|---|---|
| **Replicate Transects:** | 12 |
| **Total Species:** | 19 |
| **Total Abundance:** | 441 |
| **Diversity:** | 2.338 |
| **Dominance:** | 0.111 |
| **Evenness:** | 0.794 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 17 | 1.42 | 0.73 | 41.67 | 13.53 | 10 | 20 |
| Oxyjulis californica | 17 | 1.42 | 0.47 | 50.00 | 10.18 | 3 | 15 |
| Engraulis mordax | 11 | 0.92 | 0.92 | 8.33 | 5.36 | 5 | 6 |
| Brachyistius frenatus | 8 | 0.67 | 0.33 | 33.33 | 8.88 | 5 | 11 |
| Sebastes mystinus | 8 | 0.67 | 0.43 | 25.00 | 21.25 | 20 | 25 |
| Sebastes serranoides/S. flavidus | 4 | 0.33 | 0.26 | 16.67 | 30.00 | 20 | 40 |
| Embiotoca lateralis | 3 | 0.25 | 0.18 | 16.67 | 16.67 | 15 | 20 |
| Medialuna californiensis | 2 | 0.17 | 0.11 | 16.67 | 22.50 | 20 | 25 |

| | |
|---|---|
| **Replicate Transects:** | 12 |
| **Total Species:** | 8 |
| **Total Abundance:** | 70 |
| **Diversity:** | 1.874 |
| **Dominance:** | 0.004 |
| **Evenness:** | 0.901 |

**Site Number:** 72
**Site:** Dutch Harbor
**Location:** San Nicolas Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Engraulis mordax | 47500 | 1979.17 | 692.53 | 54.17 | 6.41 | 5 | 10 |
| Oxyjulis californica | 179 | 7.46 | 1.78 | 87.50 | 11.63 | 5 | 20 |
| Chromis punctipinnis | 61 | 2.54 | 1.15 | 33.33 | 14.03 | 8 | 25 |
| Semicossyphus pulcher | 55 | 2.29 | 0.40 | 87.50 | 29.45 | 3 | 40 |
| Embiotoca jacksoni | 42 | 1.75 | 0.30 | 83.33 | 20.88 | 7 | 30 |
| Girella nigricans | 38 | 1.58 | 0.83 | 50.00 | 32.50 | 30 | 35 |
| Sebastes atrovirens | 37 | 1.54 | 0.36 | 58.33 | 21.43 | 5 | 40 |
| Sebastes mystinus | 35 | 1.46 | 0.50 | 37.50 | 20.49 | 6 | 30 |
| Embiotoca lateralis | 26 | 1.08 | 0.29 | 58.33 | 15.15 | 6 | 30 |
| Sebastes serranoides/S. flavidus | 26 | 1.08 | 0.39 | 37.50 | 23.88 | 9 | 40 |
| Medialuna californiensis | 25 | 1.04 | 0.66 | 12.50 | 13.88 | 8 | 25 |
| Brachyistius frenatus | 22 | 0.92 | 0.22 | 54.17 | 7.73 | 5 | 12 |
| Oxylebius pictus | 14 | 0.58 | 0.22 | 29.17 | 12.86 | 9 | 15 |
| Rhacochilus vacca | 10 | 0.42 | 0.19 | 25.00 | 24.80 | 13 | 30 |
| Hypsypops rubicundus | 7 | 0.29 | 0.11 | 25.00 | 23.57 | 20 | 25 |
| Scorpaenichthys marmoratus | 7 | 0.29 | 0.29 | 4.17 | 25.71 | 15 | 30 |
| Hypsurus caryi | 4 | 0.17 | 0.08 | 16.67 | 13.75 | 8 | 25 |
| Heterostichus rostratus | 3 | 0.13 | 0.09 | 8.33 | 9.33 | 9 | 10 |
| Sebastes chrysomelas | 3 | 0.13 | 0.07 | 12.50 | 18.33 | 15 | 20 |
| Rhinogobiops nicholsi | 1 | 0.04 | 0.04 | 4.17 | 7.00 | 7 | 7 |
| Sebastes dalli | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Sebastes paucispinis | 1 | 0.04 | 0.04 | 4.17 | 11.00 | 11 | 11 |
| Stereolepis gigas | 1 | 0.04 | 0.04 | 4.17 | 150.00 | 150 | 150 |

**Replicate Transects:** 24
**Total Species:** 23
**Total Abundance:** 48098
**Diversity:** 0.097
**Dominance:** 0.975
**Evenness:** 0.031

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Engraulis mordax | 58600 | 2441.67 | 1081.95 | 41.67 | 6.12 | 5 | 10 |
| Oxyjulis californica | 116 | 4.83 | 1.36 | 70.83 | 8.95 | 2 | 20 |
| Chromis punctipinnis | 74 | 3.08 | 1.90 | 25.00 | 11.80 | 8 | 25 |
| Brachyistius frenatus | 13 | 0.54 | 0.18 | 33.33 | 7.54 | 5 | 12 |
| Sebastes serranoides/S. flavidus | 5 | 0.21 | 0.12 | 12.50 | 21.40 | 13 | 30 |
| Embiotoca jacksoni | 4 | 0.17 | 0.13 | 8.33 | 11.25 | 8 | 15 |
| Sebastes atrovirens | 4 | 0.17 | 0.08 | 16.67 | 13.75 | 10 | 15 |
| Sebastes mystinus | 4 | 0.17 | 0.13 | 8.33 | 23.75 | 15 | 30 |
| Medialuna californiensis | 2 | 0.08 | 0.08 | 4.17 | 17.50 | 15 | 20 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.17 | 13.00 | 13 | 13 |
| Hypsypops rubicundus | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Oxylebius pictus | 1 | 0.04 | 0.04 | 4.17 | 9.00 | 9 | 9 |
| Rhacochilus toxotes | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |

**Replicate Transects:** 24
**Total Species:** 13
**Total Abundance:** 58826
**Diversity:** 0.030
**Dominance:** 0.992
**Evenness:** 0.012

**Site Number:** 73
**Site:** Arch Point
**Location:** Santa Barbara Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 3967 | 165.29 | 81.29 | 83.33 | 3.58 | 3 | 20 |
| Chromis punctipinnis | 489 | 20.38 | 6.96 | 58.33 | 4.30 | 2 | 13 |
| Hypsypops rubicundus | 75 | 3.13 | 0.38 | 87.50 | 23.60 | 20 | 25 |
| Girella nigricans | 73 | 3.04 | 1.40 | 37.50 | 23.97 | 20 | 25 |
| Rhinogobiops nicholsi | 35 | 1.46 | 0.50 | 45.83 | 5.46 | 3 | 9 |
| Embiotoca jacksoni | 23 | 0.96 | 0.24 | 50.00 | 17.65 | 9 | 30 |
| Semicossyphus pulcher | 16 | 0.67 | 0.22 | 37.50 | 24.69 | 2 | 40 |
| Oxylebius pictus | 14 | 0.58 | 0.22 | 33.33 | 13.14 | 10 | 15 |
| Paralabrax clathratus | 13 | 0.54 | 0.20 | 33.33 | 24.85 | 7 | 35 |
| Medialuna californiensis | 4 | 0.17 | 0.08 | 16.67 | 23.75 | 20 | 25 |
| Alloclinus holderi | 3 | 0.13 | 0.07 | 12.50 | 6.67 | 6 | 8 |
| Myliobatis californica | 1 | 0.04 | 0.04 | 4.17 | 150.00 | 150 | 150 |
| Sebastes rastrelliger | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 13 |
| **Total Abundance:** | 4714 |
| **Diversity:** | 0.640 |
| **Dominance:** | 0.718 |
| **Evenness:** | 0.250 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 1031 | 42.96 | 41.62 | 29.17 | 3.15 | 3 | 15 |
| Oxyjulis californica | 700 | 29.17 | 29.17 | 4.17 | 3.00 | 3 | 3 |
| Girella nigricans | 3 | 0.13 | 0.13 | 4.17 | 18.33 | 15 | 20 |
| Medialuna californiensis | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Semicossyphus pulcher | 1 | 0.04 | 0.04 | 4.17 | 40.00 | 40 | 40 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 5 |
| **Total Abundance:** | 1736 |
| **Diversity:** | 0.695 |
| **Dominance:** | 0.509 |
| **Evenness:** | 0.432 |

**Site Number:** 74
**Site:** South Kelp
**Location:** Santa Barbara Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 916 | 38.17 | 12.40 | 83.33 | 4.87 | 2 | 20 |
| Chromis punctipinnis | 327 | 13.63 | 7.00 | 33.33 | 7.40 | 2 | 13 |
| Embiotoca jacksoni | 35 | 1.46 | 0.45 | 41.67 | 19.86 | 8 | 30 |
| Girella nigricans | 17 | 0.71 | 0.28 | 37.50 | 24.41 | 20 | 25 |
| Hypsypops rubicundus | 15 | 0.63 | 0.22 | 37.50 | 24.67 | 20 | 25 |
| Paralabrax clathratus | 14 | 0.58 | 0.17 | 37.50 | 28.93 | 20 | 45 |
| Medialuna californiensis | 12 | 0.50 | 0.22 | 25.00 | 24.58 | 20 | 25 |
| Rhacochilus vacca | 8 | 0.33 | 0.13 | 25.00 | 17.13 | 8 | 25 |
| Semicossyphus pulcher | 7 | 0.29 | 0.19 | 12.50 | 26.43 | 25 | 30 |
| Brachyistius frenatus | 2 | 0.08 | 0.06 | 8.33 | 10.00 | 10 | 10 |
| Myliobatis californica | 2 | 0.08 | 0.06 | 8.33 | 100.00 | 100 | 100 |
| Oxylebius pictus | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Rhacochilus toxotes | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |
| Stereolepis gigas | 1 | 0.04 | 0.04 | 4.17 | 180.00 | 180 | 180 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 14 |
| **Total Abundance:** | 1358 |
| **Diversity:** | 0.989 |
| **Dominance:** | 0.505 |
| **Evenness:** | 0.375 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 668 | 27.83 | 18.80 | 37.50 | 3.18 | 2 | 13 |
| Brachyistius frenatus | 5 | 0.21 | 0.17 | 8.33 | 9.80 | 9 | 10 |
| Chromis punctipinnis | 2 | 0.08 | 0.08 | 4.17 | 10.50 | 8 | 13 |
| Hypsypops rubicundus | 1 | 0.04 | 0.04 | 4.17 | 14.00 | 14 | 14 |
| Medialuna californiensis | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 5 |
| **Total Abundance:** | 677 |
| **Diversity:** | 0.086 |
| **Dominance:** | 0.973 |
| **Evenness:** | 0.053 |

**Site Number:** 75
**Site:** West Kelp
**Location:** Santa Catalina Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 213 | 8.88 | 3.59 | 62.50 | 12.25 | 4 | 20 |
| Chromis punctipinnis | 128 | 5.33 | 1.86 | 50.00 | 8.10 | 3 | 25 |
| Semicossyphus pulcher | 61 | 2.54 | 0.37 | 91.67 | 26.08 | 12 | 45 |
| Paralabrax clathratus | 47 | 1.96 | 0.38 | 70.83 | 23.57 | 7 | 40 |
| Hypsypops rubicundus | 38 | 1.58 | 0.29 | 83.33 | 25.13 | 15 | 30 |
| Medialuna californiensis | 30 | 1.25 | 0.95 | 33.33 | 19.07 | 10 | 25 |
| Embiotoca jacksoni | 23 | 0.96 | 0.19 | 66.67 | 20.09 | 10 | 25 |
| Brachyistius frenatus | 22 | 0.92 | 0.60 | 12.50 | 12.23 | 10 | 25 |
| Girella nigricans | 15 | 0.63 | 0.22 | 33.33 | 29.33 | 25 | 30 |
| Halichoeres semicinctus | 7 | 0.29 | 0.11 | 25.00 | 13.00 | 6 | 25 |
| Rhacochilus toxotes | 2 | 0.08 | 0.08 | 4.17 | 35.00 | 35 | 35 |
| Rhacochilus vacca | 2 | 0.08 | 0.08 | 4.17 | 11.00 | 11 | 11 |
| Sebastes atrovirens | 2 | 0.08 | 0.06 | 8.33 | 32.50 | 30 | 35 |

**Replicate Transects:** 24
**Total Species:** 13
**Total Abundance:** 590
**Diversity:** 1.917
**Dominance:** 0.171
**Evenness:** 0.747

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 96 | 6.40 | 2.76 | 40.00 | 16.03 | 6 | 20 |
| Oxyjulis californica | 38 | 2.53 | 1.54 | 40.00 | 13.50 | 8 | 15 |
| Brachyistius frenatus | 4 | 0.27 | 0.21 | 13.33 | 6.75 | 5 | 10 |
| Medialuna californiensis | 3 | 0.20 | 0.14 | 13.33 | 16.00 | 14 | 20 |
| Girella nigricans | 1 | 0.07 | 0.07 | 6.67 | 20.00 | 20 | 20 |
| Paralabrax clathratus | 1 | 0.07 | 0.07 | 6.67 | 13.00 | 13 | 13 |

**Replicate Transects:** 15
**Total Species:** 6
**Total Abundance:** 143
**Diversity:** 0.870
**Dominance:** 0.467
**Evenness:** 0.486

**Site Number:** 76
**Site:** Johnson's Rocks
**Location:** Santa Catalina Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 1853 | 77.21 | 21.06 | 58.33 | 13.30 | 3 | 25 |
| Paralabrax clathratus | 71 | 2.96 | 0.53 | 83.33 | 12.73 | 4 | 30 |
| Oxyjulis californica | 61 | 2.54 | 0.61 | 75.00 | 9.54 | 3 | 25 |
| Hypsypops rubicundus | 48 | 2.00 | 0.39 | 83.33 | 23.54 | 2 | 30 |
| Brachyistius frenatus | 38 | 1.58 | 0.44 | 58.33 | 9.34 | 4 | 15 |
| Semicossyphus pulcher | 36 | 1.50 | 0.45 | 62.50 | 19.36 | 4 | 30 |
| Embiotoca jacksoni | 29 | 1.21 | 0.42 | 41.67 | 15.79 | 9 | 25 |
| Halichoeres semicinctus | 23 | 0.96 | 0.25 | 58.33 | 12.09 | 4 | 25 |
| Medialuna californiensis | 23 | 0.96 | 0.48 | 20.83 | 20.26 | 12 | 30 |
| Lythrypnus dalli | 6 | 0.25 | 0.15 | 12.50 | 2.00 | 1 | 4 |
| Sebastes atrovirens | 4 | 0.17 | 0.10 | 12.50 | 25.00 | 25 | 25 |
| Rhacochilus vacca | 3 | 0.13 | 0.09 | 8.33 | 13.67 | 8 | 20 |
| Rhacochilus toxotes | 2 | 0.08 | 0.08 | 4.17 | 35.00 | 35 | 35 |
| Sebastes serriceps | 2 | 0.08 | 0.06 | 8.33 | 22.50 | 15 | 30 |
| Girella nigricans | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |
| Scorpaena guttata | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |

**Replicate Transects:** 24
**Total Species:** 16
**Total Abundance:** 2201
**Diversity:** 0.784
**Dominance:** 0.709
**Evenness:** 0.283

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 285 | 11.88 | 4.86 | 45.83 | 15.55 | 5 | 20 |
| Scomber japonicus | 200 | 8.33 | 8.33 | 4.17 | 25.00 | 25 | 25 |
| Trachurus symmetricus | 170 | 7.08 | 4.98 | 8.33 | 20.88 | 15 | 25 |
| Brachyistius frenatus | 117 | 4.88 | 2.81 | 37.50 | 9.16 | 4 | 15 |
| Oxyjulis californica | 69 | 2.88 | 0.99 | 45.83 | 7.35 | 4 | 15 |
| Paralabrax clathratus | 4 | 0.17 | 0.08 | 16.67 | 28.75 | 25 | 30 |
| Medialuna californiensis | 2 | 0.08 | 0.06 | 8.33 | 22.50 | 20 | 25 |
| Girella nigricans | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |

**Replicate Transects:** 24
**Total Species:** 8
**Total Abundance:** 848
**Diversity:** 1.554
**Dominance:** 0.212
**Evenness:** 0.747

**Site Number:** 77
**Site:** Isthmus Reef
**Location:** Santa Catalina Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 531 | 22.13 | 6.21 | 87.50 | 6.13 | 4 | 20 |
| Brachyistius frenatus | 225 | 9.38 | 1.99 | 87.50 | 7.81 | 5 | 15 |
| Chromis punctipinnis | 219 | 9.13 | 2.22 | 62.50 | 9.91 | 3 | 16 |
| Paralabrax clathratus | 117 | 4.88 | 0.90 | 91.67 | 12.07 | 3 | 40 |
| Semicossyphus pulcher | 54 | 2.25 | 0.51 | 62.50 | 16.50 | 8 | 30 |
| Hypsypops rubicundus | 35 | 1.46 | 0.34 | 62.50 | 20.40 | 11 | 25 |
| Girella nigricans | 29 | 1.21 | 0.78 | 37.50 | 12.93 | 4 | 30 |
| Halichoeres semicinctus | 14 | 0.58 | 0.16 | 41.67 | 18.79 | 15 | 28 |
| Medialuna californiensis | 13 | 0.54 | 0.40 | 8.33 | 16.54 | 8 | 20 |
| Sebastes serriceps | 1 | 0.04 | 0.04 | 4.17 | 13.00 | 13 | 13 |

**Replicate Transects:** 24
**Total Species:** 10
**Total Abundance:** 1238
**Diversity:** 1.632
**Dominance:** 0.246
**Evenness:** 0.709

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 438 | 18.25 | 4.34 | 83.33 | 9.27 | 3 | 18 |
| Oxyjulis californica | 317 | 13.21 | 3.83 | 66.67 | 6.87 | 4 | 20 |
| Brachyistius frenatus | 99 | 4.13 | 1.66 | 58.33 | 8.39 | 4 | 12 |
| Paralabrax clathratus | 61 | 2.54 | 0.90 | 58.33 | 10.15 | 4 | 24 |
| Trachurus symmetricus | 45 | 1.88 | 1.31 | 8.33 | 13.56 | 13 | 14 |
| Hypsypops rubicundus | 9 | 0.38 | 0.15 | 25.00 | 20.56 | 18 | 25 |
| Girella nigricans | 2 | 0.08 | 0.06 | 8.33 | 25.00 | 23 | 27 |
| Atherinopsidae | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Halichoeres semicinctus | 1 | 0.04 | 0.04 | 4.17 | 18.00 | 18 | 18 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.17 | 18.00 | 18 | 18 |

**Replicate Transects:** 24
**Total Species:** 10
**Total Abundance:** 974
**Diversity:** 1.350
**Dominance:** 0.308
**Evenness:** 0.586

**Site Number:** 78
**Site:** Intakes
**Location:** Santa Catalina Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 633 | 26.38 | 8.13 | 83.33 | 5.61 | 2 | 22 |
| Brachyistius frenatus | 184 | 7.67 | 2.30 | 79.17 | 7.49 | 2 | 17 |
| Semicossyphus pulcher | 151 | 6.29 | 2.97 | 91.67 | 23.07 | 6 | 46 |
| Chromis punctipinnis | 133 | 5.54 | 3.03 | 37.50 | 5.26 | 3 | 12 |
| Paralabrax clathratus | 99 | 4.13 | 0.81 | 91.67 | 16.31 | 2 | 55 |
| Halichoeres semicinctus | 20 | 0.83 | 0.21 | 50.00 | 17.45 | 14 | 23 |
| Hypsypops rubicundus | 20 | 0.83 | 0.27 | 45.83 | 19.45 | 11 | 48 |
| Girella nigricans | 14 | 0.58 | 0.22 | 29.17 | 24.21 | 11 | 41 |
| Cymatogaster aggregata | 12 | 0.50 | 0.39 | 8.33 | 7.58 | 6 | 8 |
| Medialuna californiensis | 8 | 0.33 | 0.24 | 8.33 | 10.25 | 9 | 12 |
| Embiotoca jacksoni | 7 | 0.29 | 0.13 | 20.83 | 14.29 | 7 | 26 |
| Sebastes atrovirens | 3 | 0.13 | 0.13 | 4.17 | 12.33 | 5 | 16 |
| Heterostichus rostratus | 2 | 0.08 | 0.06 | 8.33 | 16.50 | 7 | 26 |
| Rhacochilus vacca | 1 | 0.04 | 0.04 | 4.17 | 8.00 | 8 | 8 |
| Sebastes serriceps | 1 | 0.04 | 0.04 | 4.17 | 6.00 | 6 | 6 |

**Replicate Transects:** 24
**Total Species:** 15
**Total Abundance:** 1288
**Diversity:** 1.627
**Dominance:** 0.280
**Evenness:** 0.601

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 986 | 41.08 | 14.44 | 62.50 | 6.32 | 2 | 15 |
| Chromis punctipinnis | 142 | 5.92 | 2.58 | 37.50 | 10.23 | 6 | 14 |
| Paralabrax clathratus | 83 | 3.46 | 1.01 | 87.50 | 14.98 | 1 | 41 |
| Medialuna californiensis | 55 | 2.29 | 2.16 | 16.67 | 10.36 | 9 | 27 |
| Brachyistius frenatus | 45 | 1.88 | 0.53 | 58.33 | 8.07 | 3 | 16 |
| Hypsypops rubicundus | 9 | 0.38 | 0.13 | 29.17 | 17.33 | 14 | 24 |
| Cymatogaster aggregata | 8 | 0.33 | 0.33 | 4.17 | 3.38 | 3 | 4 |
| Girella nigricans | 4 | 0.17 | 0.08 | 16.67 | 21.25 | 21 | 22 |
| Halichoeres semicinctus | 4 | 0.17 | 0.13 | 8.33 | 12.75 | 10 | 15 |
| Embiotoca jacksoni | 2 | 0.08 | 0.08 | 4.17 | 12.50 | 10 | 15 |
| Anisotremus davidsonii | 1 | 0.04 | 0.04 | 4.17 | 21.00 | 21 | 21 |
| Caulolatilus princeps | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |

**Replicate Transects:** 24
**Total Species:** 12
**Total Abundance:** 1340
**Diversity:** 1.000
**Dominance:** 0.551
**Evenness:** 0.403

**Site Number:** 79
**Site:** West Quarry
**Location:** Santa Catalina Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 2593 | 108.04 | 19.37 | 95.83 | 4.92 | 2 | 15 |
| Lythrypnus dalli | 1012 | 42.17 | 7.15 | 91.67 | 2.78 | 1 | 5 |
| Hypsypops rubicundus | 247 | 10.29 | 7.05 | 95.83 | 8.60 | 4 | 25 |
| Paralabrax clathratus | 181 | 7.54 | 0.87 | 100.00 | 11.44 | 2 | 40 |
| Brachyistius frenatus | 115 | 4.79 | 0.50 | 100.00 | 7.63 | 3 | 15 |
| Semicossyphus pulcher | 92 | 3.83 | 0.43 | 100.00 | 15.57 | 2 | 35 |
| Rhinogobiops nicholsi | 87 | 3.63 | 0.80 | 75.00 | 4.80 | 2 | 9 |
| Girella nigricans | 37 | 1.54 | 0.40 | 50.00 | 17.38 | 8 | 25 |
| Embiotoca jacksoni | 33 | 1.38 | 0.34 | 66.67 | 14.33 | 5 | 25 |
| Oxyjulis californica | 22 | 0.92 | 0.32 | 45.83 | 6.50 | 3 | 15 |
| Halichoeres semicinctus | 18 | 0.75 | 0.28 | 41.67 | 14.22 | 6 | 20 |
| Sebastes atrovirens | 9 | 0.38 | 0.13 | 29.17 | 18.56 | 7 | 25 |
| Medialuna californiensis | 2 | 0.08 | 0.06 | 8.33 | 20.00 | 15 | 25 |
| Rhacochilus vacca | 2 | 0.08 | 0.06 | 8.33 | 15.00 | 10 | 20 |
| Sebastes serriceps | 2 | 0.08 | 0.06 | 8.33 | 15.00 | 10 | 20 |
| Alloclinus holderi | 1 | 0.04 | 0.04 | 4.17 | 10.00 | 10 | 10 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |

**Replicate Transects:** 24
**Total Species:** 17
**Total Abundance:** 4454
**Diversity:** 1.345
**Dominance:** 0.394
**Evenness:** 0.475

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 3152 | 131.33 | 33.85 | 95.83 | 3.74 | 1 | 15 |
| Brachyistius frenatus | 122 | 5.08 | 0.65 | 100.00 | 7.72 | 3 | 15 |
| Oxyjulis californica | 117 | 4.88 | 1.77 | 54.17 | 4.10 | 1 | 13 |
| Girella nigricans | 25 | 1.04 | 0.31 | 45.83 | 16.68 | 8 | 25 |
| Paralabrax clathratus | 17 | 0.71 | 0.19 | 50.00 | 10.47 | 3 | 25 |
| Medialuna californiensis | 7 | 0.29 | 0.13 | 20.83 | 15.86 | 6 | 20 |
| Hypsypops rubicundus | 6 | 0.25 | 0.11 | 20.83 | 13.83 | 8 | 20 |
| Halichoeres semicinctus | 4 | 0.17 | 0.13 | 8.33 | 13.50 | 12 | 14 |
| Embiotoca jacksoni | 2 | 0.08 | 0.06 | 8.33 | 11.00 | 7 | 15 |
| Sebastes atrovirens | 2 | 0.08 | 0.06 | 8.33 | 14.50 | 14 | 15 |
| Semicossyphus pulcher | 1 | 0.04 | 0.04 | 4.17 | 10.00 | 10 | 10 |

**Replicate Transects:** 24
**Total Species:** 11
**Total Abundance:** 3455
**Diversity:** 0.421
**Dominance:** 0.834
**Evenness:** 0.175

**Site Number:** 80
**Site:** Ripper's Cove
**Location:** Santa Catalina Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 841 | 76.45 | 53.42 | 81.82 | 1.95 | 1 | 15 |
| Brachyistius frenatus | 44 | 4.00 | 1.74 | 72.73 | 6.11 | 2 | 12 |
| Chromis punctipinnis | 38 | 3.45 | 1.74 | 36.36 | 7.95 | 2 | 15 |
| Cymatogaster aggregata | 33 | 3.00 | 2.01 | 27.27 | 2.39 | 2 | 3 |
| Paralabrax clathratus | 32 | 2.91 | 0.79 | 81.82 | 13.25 | 1 | 25 |
| Halichoeres semicinctus | 16 | 1.45 | 0.45 | 72.73 | 15.81 | 10 | 20 |
| Hypsypops rubicundus | 13 | 1.18 | 0.46 | 54.55 | 19.08 | 8 | 20 |
| Rhacochilus vacca | 5 | 0.45 | 0.21 | 36.36 | 5.40 | 5 | 7 |
| Semicossyphus pulcher | 4 | 0.36 | 0.15 | 36.36 | 22.50 | 20 | 25 |
| Girella nigricans | 3 | 0.27 | 0.14 | 27.27 | 30.00 | 30 | 30 |
| Embiotoca jacksoni | 2 | 0.18 | 0.12 | 18.18 | 10.50 | 6 | 15 |
| Rhinogobiops nicholsi | 1 | 0.09 | 0.09 | 9.09 | 2.00 | 2 | 2 |
| Scorpaena guttata | 1 | 0.09 | 0.09 | 9.09 | 15.00 | 15 | 15 |
| Trachurus symmetricus | 1 | 0.09 | 0.09 | 9.09 | 4.00 | 4 | 4 |
| Urolophus halleri | 1 | 0.09 | 0.09 | 9.09 | 25.00 | 25 | 25 |

**Replicate Transects:** 11
**Total Species:** 15
**Total Abundance:** 1035
**Diversity:** 0.864
**Dominance:** 0.662
**Evenness:** 0.319

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 943 | 85.73 | 40.53 | 90.91 | 2.50 | 2 | 15 |
| Trachurus symmetricus | 70 | 6.36 | 4.72 | 18.18 | 8.14 | 7 | 11 |
| Brachyistius frenatus | 32 | 2.91 | 1.87 | 45.45 | 6.41 | 3 | 13 |
| Atherinopsidae | 25 | 2.27 | 2.27 | 9.09 | 11.00 | 11 | 11 |
| Paralabrax clathratus | 11 | 1.00 | 0.33 | 54.55 | 8.36 | 2 | 15 |
| Hypsypops rubicundus | 5 | 0.45 | 0.28 | 27.27 | 21.00 | 20 | 25 |
| Chromis punctipinnis | 3 | 0.27 | 0.27 | 9.09 | 13.67 | 12 | 15 |
| Halichoeres semicinctus | 1 | 0.09 | 0.09 | 9.09 | 4.00 | 4 | 4 |

**Replicate Transects:** 11
**Total Species:** 8
**Total Abundance:** 1090
**Diversity:** 0.586
**Dominance:** 0.752
**Evenness:** 0.282

**Site Number:** 81
**Site:** East Quarry
**Location:** Santa Catalina Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 3960 | 165.00 | 38.57 | 91.67 | 4.10 | 1 | 20 |
| Paralabrax clathratus | 291 | 12.13 | 1.72 | 100.00 | 20.46 | 3 | 45 |
| Semicossyphus pulcher | 156 | 6.50 | 0.90 | 100.00 | 20.04 | 7 | 35 |
| Hypsypops rubicundus | 97 | 4.04 | 0.41 | 100.00 | 18.91 | 14 | 25 |
| Rhinogobiops nicholsi | 55 | 2.29 | 0.66 | 58.33 | 6.25 | 3 | 9 |
| Embiotoca jacksoni | 47 | 1.96 | 0.44 | 62.50 | 17.06 | 10 | 25 |
| Medialuna californiensis | 32 | 1.33 | 0.62 | 29.17 | 24.38 | 20 | 30 |
| Lythrypnus dalli | 27 | 1.13 | 0.75 | 12.50 | 3.41 | 3 | 4 |
| Oxyjulis californica | 23 | 0.96 | 0.37 | 37.50 | 7.70 | 1 | 15 |
| Brachyistius frenatus | 20 | 0.83 | 0.37 | 33.33 | 12.10 | 9 | 15 |
| Girella nigricans | 18 | 0.75 | 0.23 | 41.67 | 20.83 | 10 | 30 |
| Halichoeres semicinctus | 15 | 0.63 | 0.17 | 41.67 | 19.00 | 15 | 20 |
| Anisotremus davidsonii | 8 | 0.33 | 0.33 | 4.17 | 25.00 | 25 | 25 |
| Heterostichus rostratus | 6 | 0.25 | 0.12 | 16.67 | 17.83 | 7 | 25 |
| Rhacochilus vacca | 5 | 0.21 | 0.13 | 12.50 | 9.80 | 5 | 25 |
| Prognathodes falcifer | 3 | 0.13 | 0.13 | 4.17 | 13.00 | 13 | 13 |
| Oxylebius pictus | 2 | 0.08 | 0.08 | 4.17 | 4.00 | 4 | 4 |
| Sebastes serriceps | 2 | 0.08 | 0.06 | 8.33 | 13.50 | 7 | 20 |
| Hermosilla azurea | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |
| Rhacochilus toxotes | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Scorpaenichthys marmoratus | 1 | 0.04 | 0.04 | 4.17 | 40.00 | 40 | 40 |
| Sebastes rastrelliger | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |
| Triakis semifasciata | 1 | 0.04 | 0.04 | 4.17 | 120.00 | 120 | 120 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 23 |
| **Total Abundance:** | 4772 |
| **Diversity:** | 0.810 |
| **Dominance:** | 0.693 |
| **Evenness:** | 0.258 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 4941 | 205.88 | 78.37 | 83.33 | 3.29 | 1 | 12 |
| Oxyjulis californica | 256 | 10.67 | 5.73 | 58.33 | 5.11 | 1 | 25 |
| Brachyistius frenatus | 33 | 1.38 | 0.39 | 54.17 | 6.61 | 2 | 20 |
| Atherinopsidae | 30 | 1.25 | 0.59 | 16.67 | 7.67 | 6 | 10 |
| Anisotremus davidsonii | 20 | 0.83 | 0.83 | 4.17 | 35.00 | 30 | 40 |
| Medialuna californiensis | 7 | 0.29 | 0.11 | 25.00 | 14.43 | 8 | 25 |
| Paralabrax clathratus | 6 | 0.25 | 0.09 | 25.00 | 12.67 | 8 | 25 |
| Girella nigricans | 4 | 0.17 | 0.13 | 8.33 | 15.75 | 11 | 30 |
| Hypsypops rubicundus | 4 | 0.17 | 0.10 | 12.50 | 13.25 | 8 | 15 |
| Embiotoca jacksoni | 2 | 0.08 | 0.06 | 8.33 | 15.00 | 10 | 20 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.17 | 5.00 | 5 | 5 |
| Semicossyphus pulcher | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Triakis semifasciata | 1 | 0.04 | 0.04 | 4.17 | 75.00 | 75 | 75 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 13 |
| **Total Abundance:** | 5306 |
| **Diversity:** | 0.330 |
| **Dominance:** | 0.869 |
| **Evenness:** | 0.129 |

**Site Number:** 82
**Site:** Lobster Bay
**Location:** Santa Catalina Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 227 | 9.46 | 3.58 | 79.17 | 7.12 | 5 | 15 |
| Semicossyphus pulcher | 112 | 4.67 | 0.64 | 91.67 | 23.59 | 10 | 45 |
| Hypsypops rubicundus | 105 | 4.38 | 0.68 | 83.33 | 19.50 | 7 | 25 |
| Embiotoca jacksoni | 44 | 1.83 | 1.36 | 41.67 | 12.48 | 9 | 26 |
| Paralabrax clathratus | 40 | 1.67 | 0.40 | 66.67 | 19.32 | 12 | 39 |
| Chromis punctipinnis | 26 | 1.08 | 0.51 | 33.33 | 10.19 | 4 | 13 |
| Rhacochilus vacca | 26 | 1.08 | 1.04 | 8.33 | 20.19 | 20 | 25 |
| Brachyistius frenatus | 12 | 0.50 | 0.23 | 20.83 | 9.42 | 7 | 12 |
| Halichoeres semicinctus | 11 | 0.46 | 0.16 | 33.33 | 19.27 | 18 | 22 |
| Hermosilla azurea | 5 | 0.21 | 0.21 | 4.17 | 10.00 | 10 | 10 |
| Girella nigricans | 3 | 0.13 | 0.09 | 8.33 | 22.33 | 20 | 25 |
| Rhacochilus toxotes | 3 | 0.13 | 0.09 | 8.33 | 28.33 | 25 | 30 |
| Anisotremus davidsonii | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |
| Hypsurus caryi | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Sebastes atrovirens | 1 | 0.04 | 0.04 | 4.17 | 17.00 | 17 | 17 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 15 |
| **Total Abundance:** | 617 |
| **Diversity:** | 1.882 |
| **Dominance:** | 0.179 |
| **Evenness:** | 0.695 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 355 | 17.75 | 5.57 | 55.00 | 6.20 | 4 | 17 |
| Chromis punctipinnis | 106 | 5.30 | 2.11 | 50.00 | 10.98 | 8 | 14 |
| Semicossyphus pulcher | 35 | 1.75 | 1.08 | 30.00 | 28.71 | 20 | 35 |
| Brachyistius frenatus | 31 | 1.55 | 0.74 | 35.00 | 9.13 | 5 | 15 |
| Hypsypops rubicundus | 31 | 1.55 | 0.46 | 50.00 | 21.00 | 15 | 30 |
| Paralabrax clathratus | 28 | 1.40 | 0.36 | 65.00 | 18.50 | 10 | 32 |
| Girella nigricans | 26 | 1.30 | 0.50 | 35.00 | 23.85 | 15 | 30 |
| Embiotoca jacksoni | 17 | 0.85 | 0.60 | 20.00 | 11.53 | 10 | 25 |
| Medialuna californiensis | 3 | 0.15 | 0.08 | 15.00 | 18.67 | 17 | 22 |
| Heterostichus rostratus | 1 | 0.05 | 0.05 | 5.00 | 10.00 | 10 | 10 |
| Sebastes rastrelliger | 1 | 0.05 | 0.05 | 5.00 | 23.00 | 23 | 23 |

| | |
|---|---|
| **Replicate Transects:** | 20 |
| **Total Species:** | 11 |
| **Total Abundance:** | 634 |
| **Diversity:** | 1.490 |
| **Dominance:** | 0.333 |
| **Evenness:** | 0.622 |

**Site Number:** 83
**Site:** Catalina Harbor
**Location:** Santa Catalina Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 634 | 52.83 | 14.25 | 83.33 | 6.98 | 4 | 14 |
| Paralabrax clathratus | 154 | 12.83 | 2.40 | 100.00 | 17.42 | 4 | 45 |
| Oxyjulis californica | 44 | 3.67 | 1.33 | 75.00 | 7.48 | 2 | 20 |
| Semicossyphus pulcher | 42 | 3.50 | 0.90 | 83.33 | 21.02 | 6 | 45 |
| Lythrypnus dalli | 19 | 1.58 | 1.07 | 16.67 | 3.95 | 2 | 5 |
| Halichoeres semicinctus | 15 | 1.25 | 0.43 | 50.00 | 10.33 | 4 | 20 |
| Hypsypops rubicundus | 12 | 1.00 | 0.52 | 41.67 | 19.50 | 14 | 30 |
| Medialuna californiensis | 10 | 0.83 | 0.75 | 16.67 | 11.10 | 10 | 15 |
| Girella nigricans | 7 | 0.58 | 0.31 | 25.00 | 25.71 | 20 | 35 |
| Rhinogobiops nicholsi | 7 | 0.58 | 0.29 | 33.33 | 7.71 | 6 | 8 |
| Embiotoca jacksoni | 4 | 0.33 | 0.19 | 25.00 | 12.50 | 10 | 15 |
| Hypsurus caryi | 1 | 0.08 | 0.08 | 8.33 | 12.00 | 12 | 12 |
| Paralabrax nebulifer | 1 | 0.08 | 0.08 | 8.33 | 40.00 | 40 | 40 |

**Replicate Transects:** 12
**Total Species:** 13
**Total Abundance:** 950
**Diversity:** 1.202
**Dominance:** 0.470
**Evenness:** 0.469

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 858 | 71.50 | 24.62 | 58.33 | 7.34 | 5 | 13 |
| Paralabrax clathratus | 50 | 4.17 | 0.92 | 83.33 | 22.08 | 6 | 45 |
| Oxyjulis californica | 47 | 3.92 | 1.59 | 50.00 | 9.19 | 6 | 14 |
| Sphyraena argentea | 11 | 0.92 | 0.69 | 16.67 | 102.73 | 100 | 110 |
| Rhacochilus toxotes | 10 | 0.83 | 0.51 | 25.00 | 25.00 | 25 | 25 |
| Hypsypops rubicundus | 5 | 0.42 | 0.34 | 16.67 | 21.00 | 20 | 25 |
| Semicossyphus pulcher | 3 | 0.25 | 0.18 | 16.67 | 18.33 | 15 | 20 |
| Girella nigricans | 2 | 0.17 | 0.17 | 8.33 | 15.00 | 15 | 15 |
| Medialuna californiensis | 2 | 0.17 | 0.11 | 16.67 | 14.00 | 13 | 15 |
| Embiotoca jacksoni | 1 | 0.08 | 0.08 | 8.33 | 14.00 | 14 | 14 |
| Gibbonsia elegans | 1 | 0.08 | 0.08 | 8.33 | 10.00 | 10 | 10 |

**Replicate Transects:** 12
**Total Species:** 11
**Total Abundance:** 990
**Diversity:** 0.599
**Dominance:** 0.753
**Evenness:** 0.250

**Site Number:** 84
**Site:** Pin Rock
**Location:** Santa Catalina Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 351 | 29.25 | 14.61 | 50.00 | 6.08 | 4 | 12 |
| Oxyjulis californica | 266 | 22.17 | 7.82 | 83.33 | 8.77 | 2 | 20 |
| Semicossyphus pulcher | 81 | 6.75 | 1.43 | 100.00 | 17.88 | 4 | 40 |
| Brachyistius frenatus | 68 | 5.67 | 4.12 | 33.33 | 8.15 | 8 | 10 |
| Hypsypops rubicundus | 42 | 3.50 | 1.04 | 91.67 | 18.12 | 12 | 25 |
| Anisotremus davidsonii | 34 | 2.83 | 1.79 | 25.00 | 21.03 | 20 | 25 |
| Paralabrax clathratus | 25 | 2.08 | 0.74 | 66.67 | 19.52 | 6 | 45 |
| Girella nigricans | 24 | 2.00 | 0.74 | 58.33 | 17.00 | 4 | 20 |
| Embiotoca jacksoni | 9 | 0.75 | 0.41 | 25.00 | 11.67 | 10 | 15 |
| Hypsurus caryi | 5 | 0.42 | 0.34 | 16.67 | 8.80 | 8 | 12 |
| Halichoeres semicinctus | 4 | 0.33 | 0.19 | 25.00 | 12.75 | 6 | 15 |
| Medialuna californiensis | 3 | 0.25 | 0.18 | 16.67 | 16.33 | 14 | 20 |
| Paralabrax nebulifer | 3 | 0.25 | 0.18 | 16.67 | 43.33 | 40 | 45 |
| Rhacochilus vacca | 3 | 0.25 | 0.18 | 16.67 | 28.33 | 25 | 30 |
| Sebastes serranoides/S. flavidus | 3 | 0.25 | 0.25 | 8.33 | 16.00 | 14 | 20 |
| Rhacochilus toxotes | 2 | 0.17 | 0.11 | 16.67 | 22.50 | 20 | 25 |
| Cheilotrema saturnum | 1 | 0.08 | 0.08 | 8.33 | 3.00 | 3 | 3 |
| Seriola lalandi | 1 | 0.08 | 0.08 | 8.33 | 50.00 | 50 | 50 |

**Replicate Transects:** 12
**Total Species:** 18
**Total Abundance:** 925
**Diversity:** 1.785
**Dominance:** 0.235
**Evenness:** 0.617

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 218 | 18.17 | 11.50 | 50.00 | 8.34 | 6 | 10 |
| Brachyistius frenatus | 118 | 9.83 | 9.56 | 16.67 | 7.69 | 6 | 8 |
| Oxyjulis californica | 23 | 1.92 | 0.90 | 41.67 | 8.70 | 6 | 10 |
| Paralabrax clathratus | 10 | 0.83 | 0.39 | 41.67 | 22.20 | 12 | 40 |
| Semicossyphus pulcher | 7 | 0.58 | 0.23 | 41.67 | 27.14 | 20 | 30 |
| Anisotremus davidsonii | 4 | 0.33 | 0.26 | 16.67 | 18.75 | 15 | 25 |
| Girella nigricans | 4 | 0.33 | 0.14 | 33.33 | 20.00 | 20 | 20 |
| Hypsypops rubicundus | 4 | 0.33 | 0.14 | 33.33 | 18.00 | 12 | 25 |
| Medialuna californiensis | 3 | 0.25 | 0.13 | 25.00 | 23.33 | 15 | 30 |
| Rhacochilus toxotes | 1 | 0.08 | 0.08 | 8.33 | 12.00 | 12 | 12 |

**Replicate Transects:** 12
**Total Species:** 10
**Total Abundance:** 392
**Diversity:** 1.212
**Dominance:** 0.386
**Evenness:** 0.527

**Site Number:** 85
**Site:** Little Harbor
**Location:** Santa Catalina Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Hypsypops rubicundus | 51 | 2.13 | 0.31 | 87.50 | 18.88 | 10 | 28 |
| Semicossyphus pulcher | 50 | 2.08 | 0.40 | 83.33 | 24.20 | 8 | 38 |
| Oxyjulis californica | 36 | 1.50 | 1.25 | 20.83 | 5.89 | 3 | 26 |
| Embiotoca jacksoni | 25 | 1.04 | 0.32 | 58.33 | 10.88 | 4 | 18 |
| Chromis punctipinnis | 23 | 0.96 | 0.92 | 8.33 | 8.35 | 6 | 10 |
| Paralabrax clathratus | 22 | 0.92 | 0.22 | 54.17 | 25.18 | 6 | 40 |
| Girella nigricans | 19 | 0.79 | 0.47 | 16.67 | 22.11 | 12 | 30 |
| Halichoeres semicinctus | 16 | 0.67 | 0.21 | 37.50 | 13.63 | 10 | 22 |
| Brachyistius frenatus | 2 | 0.08 | 0.08 | 4.17 | 4.00 | 3 | 5 |
| Caulolatilus princeps | 1 | 0.04 | 0.04 | 4.17 | 14.00 | 14 | 14 |
| Rhacochilus toxotes | 1 | 0.04 | 0.04 | 4.17 | 28.00 | 28 | 28 |
| Sebastes rastrelliger | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |

**Replicate Transects:** 24
**Total Species:** 12
**Total Abundance:** 247
**Diversity:** 2.079
**Dominance:** 0.050
**Evenness:** 0.836

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 97 | 4.04 | 2.25 | 29.17 | 5.02 | 2 | 18 |
| Atherinopsidae | 35 | 1.46 | 1.26 | 8.33 | 5.71 | 5 | 10 |
| Paralabrax clathratus | 21 | 0.88 | 0.31 | 41.67 | 14.24 | 3 | 33 |
| Chromis punctipinnis | 15 | 0.63 | 0.63 | 4.17 | 10.00 | 10 | 10 |
| Brachyistius frenatus | 12 | 0.50 | 0.28 | 20.83 | 8.50 | 8 | 11 |
| Hypsypops rubicundus | 12 | 0.50 | 0.19 | 29.17 | 20.92 | 15 | 27 |
| Girella nigricans | 7 | 0.29 | 0.13 | 20.83 | 21.29 | 12 | 30 |
| Semicossyphus pulcher | 6 | 0.25 | 0.11 | 20.83 | 20.83 | 15 | 30 |
| Heterostichus rostratus | 4 | 0.17 | 0.17 | 4.17 | 6.00 | 6 | 6 |
| Halichoeres semicinctus | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Hermosilla azurea | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |
| Medialuna californiensis | 1 | 0.04 | 0.04 | 4.17 | 25.00 | 25 | 25 |

**Replicate Transects:** 24
**Total Species:** 12
**Total Abundance:** 212
**Diversity:** 1.761
**Dominance:** 0.166
**Evenness:** 0.709

**Site Number:** 86
**Site:** Little Flower
**Location:** San Clemente Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 2522 | 105.08 | 29.55 | 62.50 | 3.62 | 1 | 13 |
| Oxyjulis californica | 1315 | 54.79 | 23.67 | 91.67 | 5.98 | 1 | 20 |
| Paralabrax clathratus | 149 | 6.21 | 0.72 | 95.83 | 13.26 | 3 | 25 |
| Semicossyphus pulcher | 124 | 5.17 | 0.80 | 95.83 | 22.15 | 7 | 35 |
| Lythrypnus dalli | 106 | 4.42 | 1.50 | 41.67 | 4.14 | 2 | 6 |
| Trachurus symmetricus | 100 | 4.17 | 4.17 | 4.17 | 10.00 | 10 | 10 |
| Hypsypops rubicundus | 77 | 3.21 | 0.45 | 87.50 | 19.34 | 2 | 30 |
| Brachyistius frenatus | 43 | 1.79 | 0.55 | 66.67 | 7.86 | 5 | 15 |
| Halichoeres semicinctus | 43 | 1.79 | 0.42 | 70.83 | 18.58 | 10 | 25 |
| Rhinogobiops nicholsi | 24 | 1.00 | 0.37 | 37.50 | 4.96 | 2 | 9 |
| Medialuna californiensis | 9 | 0.38 | 0.16 | 25.00 | 20.56 | 15 | 25 |
| Embiotoca jacksoni | 5 | 0.21 | 0.08 | 20.83 | 18.00 | 15 | 20 |
| Girella nigricans | 4 | 0.17 | 0.08 | 16.67 | 18.75 | 15 | 20 |
| Heterostichus rostratus | 4 | 0.17 | 0.12 | 8.33 | 8.50 | 4 | 15 |
| Sebastes atrovirens | 2 | 0.08 | 0.06 | 8.33 | 9.50 | 4 | 15 |
| Gymnothorax mordax | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |
| Pleuronichthys coenosus | 1 | 0.04 | 0.04 | 4.17 | 30.00 | 30 | 30 |

**Replicate Transects:** 24
**Total Species:** 17
**Total Abundance:** 4529
**Diversity:** 1.293
**Dominance:** 0.395
**Evenness:** 0.456

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Chromis punctipinnis | 1953 | 81.38 | 20.09 | 58.33 | 4.65 | 2 | 15 |
| Atherinopsidae | 1659 | 69.13 | 40.13 | 45.83 | 11.04 | 4 | 20 |
| Oxyjulis californica | 1343 | 55.96 | 16.83 | 83.33 | 5.14 | 1 | 30 |
| Sardinops sagax | 345 | 14.38 | 10.00 | 8.33 | 11.33 | 8 | 15 |
| Paralabrax clathratus | 36 | 1.50 | 0.38 | 62.50 | 12.14 | 2 | 35 |
| Medialuna californiensis | 29 | 1.21 | 1.04 | 16.67 | 28.97 | 15 | 35 |
| Brachyistius frenatus | 20 | 0.83 | 0.32 | 41.67 | 11.40 | 5 | 20 |
| Hypsypops rubicundus | 18 | 0.75 | 0.24 | 45.83 | 19.72 | 12 | 45 |
| Girella nigricans | 2 | 0.08 | 0.08 | 4.17 | 27.50 | 25 | 30 |
| Heterostichus rostratus | 2 | 0.08 | 0.06 | 8.33 | 12.50 | 5 | 20 |
| Semicossyphus pulcher | 1 | 0.04 | 0.04 | 4.17 | 20.00 | 20 | 20 |

**Replicate Transects:** 24
**Total Species:** 11
**Total Abundance:** 5408
**Diversity:** 1.360
**Dominance:** 0.287
**Evenness:** 0.567

**Site Number:** 87
**Site:** Pyramid Cove
**Location:** San Clemente Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Hyperprosopon argenteum | 200 | 8.33 | 8.33 | 4.17 | 17.50 | 15 | 20 |
| Chromis punctipinnis | 175 | 7.29 | 3.53 | 29.17 | 3.53 | 1 | 7 |
| Paralabrax clathratus | 117 | 4.88 | 3.41 | 70.83 | 8.56 | 4 | 30 |
| Semicossyphus pulcher | 107 | 4.46 | 0.58 | 91.67 | 21.97 | 7 | 40 |
| Oxyjulis californica | 48 | 2.00 | 0.95 | 54.17 | 6.40 | 1 | 20 |
| Hypsypops rubicundus | 34 | 1.42 | 0.36 | 66.67 | 17.47 | 10 | 25 |
| Halichoeres semicinctus | 22 | 0.92 | 0.29 | 41.67 | 18.68 | 12 | 25 |
| Brachyistius frenatus | 21 | 0.88 | 0.26 | 41.67 | 9.33 | 5 | 15 |
| Embiotoca jacksoni | 8 | 0.33 | 0.16 | 20.83 | 16.75 | 7 | 25 |
| Girella nigricans | 3 | 0.13 | 0.07 | 12.50 | 23.33 | 20 | 30 |
| Heterostichus rostratus | 3 | 0.13 | 0.07 | 12.50 | 16.67 | 5 | 30 |
| Medialuna californiensis | 3 | 0.13 | 0.09 | 8.33 | 20.00 | 15 | 25 |
| Caulolatilus princeps | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 13 |
| **Total Abundance:** | 742 |
| **Diversity:** | 1.913 |
| **Dominance:** | 0.155 |
| **Evenness:** | 0.746 |

**Level:** Midwater

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 165 | 6.88 | 2.72 | 50.00 | 4.07 | 1 | 20 |
| Chromis punctipinnis | 42 | 1.75 | 1.02 | 16.67 | 7.12 | 2 | 13 |
| Paralabrax clathratus | 11 | 0.46 | 0.13 | 37.50 | 18.91 | 12 | 30 |
| Hypsypops rubicundus | 6 | 0.25 | 0.15 | 12.50 | 20.33 | 12 | 30 |
| Semicossyphus pulcher | 5 | 0.21 | 0.21 | 4.17 | 18.00 | 15 | 20 |
| Brachyistius frenatus | 4 | 0.17 | 0.13 | 8.33 | 6.50 | 4 | 8 |
| Girella nigricans | 4 | 0.17 | 0.10 | 12.50 | 27.50 | 20 | 35 |
| Medialuna californiensis | 2 | 0.08 | 0.06 | 8.33 | 17.50 | 15 | 20 |
| Heterostichus rostratus | 1 | 0.04 | 0.04 | 4.17 | 7.00 | 7 | 7 |

| | |
|---|---|
| **Replicate Transects:** | 24 |
| **Total Species:** | 9 |
| **Total Abundance:** | 240 |
| **Diversity:** | 1.076 |
| **Dominance:** | 0.452 |
| **Evenness:** | 0.490 |

**Site Number:** 88
**Site:** China Point
**Location:** San Clemente Island

**Level:** Benthic

| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 790 | 32.92 | 13.68 | 75.00 | 3.54 | 2 | 20 |
| Chromis punctipinnis | 175 | 7.29 | 6.29 | 8.33 | 3.14 | 3 | 4 |
| Semicossyphus pulcher | 80 | 3.33 | 0.65 | 75.00 | 25.38 | 15 | 45 |
| Hypsypops rubicundus | 70 | 2.92 | 0.44 | 83.33 | 20.93 | 15 | 30 |
| Paralabrax clathratus | 41 | 1.71 | 0.41 | 70.83 | 18.37 | 3 | 35 |
| Brachyistius frenatus | 23 | 0.96 | 0.33 | 37.50 | 11.48 | 7 | 15 |
| Halichoeres semicinctus | 11 | 0.46 | 0.17 | 29.17 | 18.91 | 13 | 25 |
| Heterostichus rostratus | 8 | 0.33 | 0.16 | 20.83 | 20.13 | 9 | 30 |
| Embiotoca jacksoni | 4 | 0.17 | 0.08 | 16.67 | 12.50 | 5 | 20 |
| Sebastes serranoides/S. flavidus | 3 | 0.13 | 0.07 | 12.50 | 18.33 | 15 | 20 |
| Girella nigricans | 2 | 0.08 | 0.06 | 8.33 | 17.50 | 15 | 20 |
| Alloclinus holderi | 1 | 0.04 | 0.04 | 4.17 | 7.00 | 7 | 7 |
| Caulolatilus princeps | 1 | 0.04 | 0.04 | 4.17 | 40.00 | 40 | 40 |
| Hyperprosopon argenteum | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Medialuna californiensis | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |

**Replicate Transects:** 24
**Total Species:** 15
**Total Abundance:** 1211
**Diversity:** 1.236
**Dominance:** 0.445
**Evenness:** 0.456

**Level:** Midwater

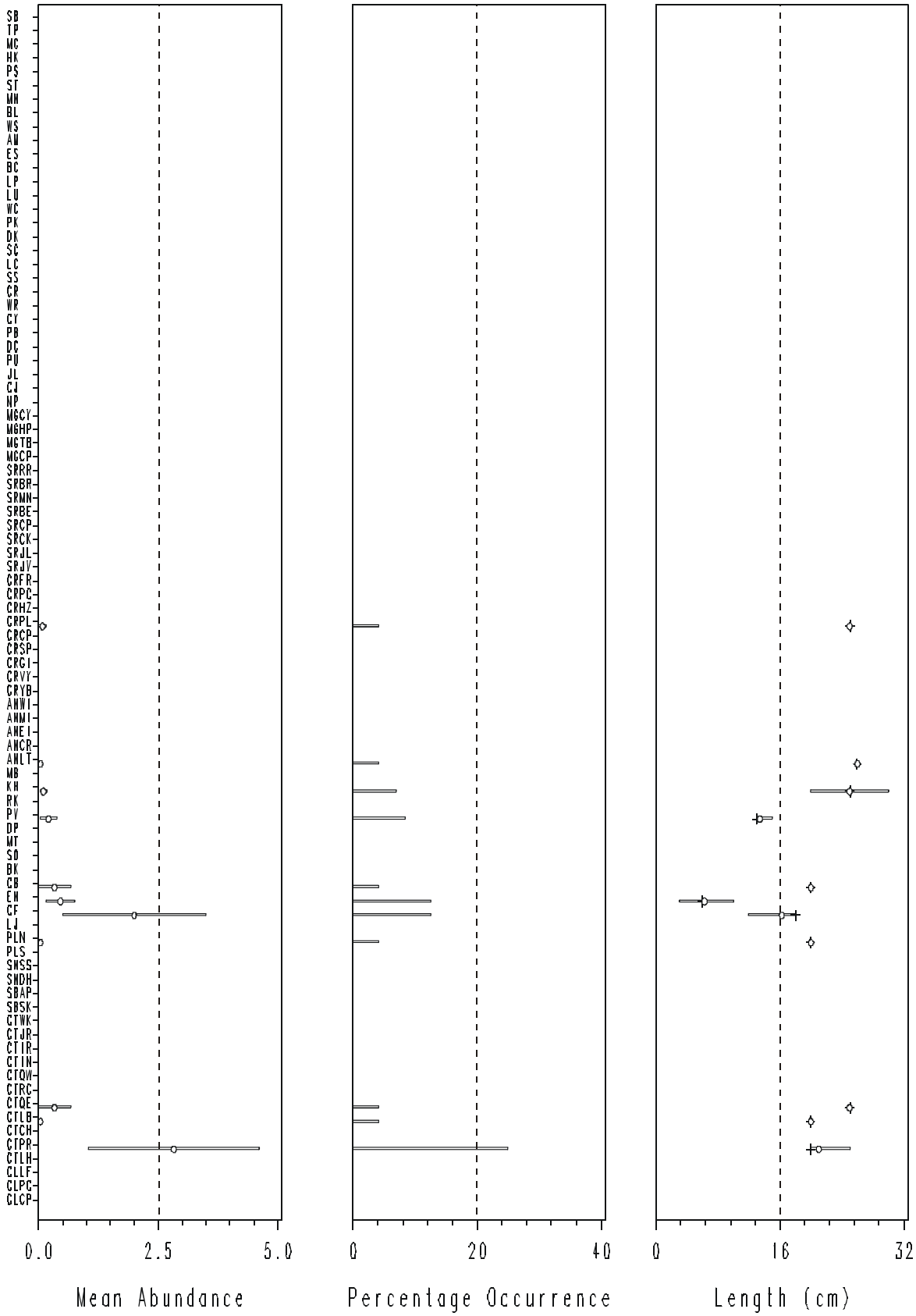
| Taxon | Abundance | Mean Density | Standard Error | Percent Freq Occ | Mean Size | Minimum Length | Maximum Length |
|---|---|---|---|---|---|---|---|
| Oxyjulis californica | 2264 | 94.33 | 44.79 | 66.67 | 4.53 | 2 | 45 |
| Chromis punctipinnis | 1135 | 47.29 | 27.29 | 37.50 | 5.20 | 2 | 20 |
| Atherinopsidae | 270 | 11.25 | 7.83 | 8.33 | 5.85 | 3 | 7 |
| Trachurus symmetricus | 200 | 8.33 | 8.33 | 4.17 | 12.00 | 12 | 12 |
| Semicossyphus pulcher | 17 | 0.71 | 0.46 | 12.50 | 22.88 | 14 | 60 |
| Paralabrax clathratus | 14 | 0.58 | 0.25 | 29.17 | 21.71 | 12 | 35 |
| Hypsypops rubicundus | 9 | 0.38 | 0.21 | 16.67 | 20.56 | 15 | 40 |
| Brachyistius frenatus | 7 | 0.29 | 0.21 | 12.50 | 11.71 | 8 | 15 |
| Caulolatilus princeps | 1 | 0.04 | 0.04 | 4.17 | 15.00 | 15 | 15 |
| Halichoeres semicinctus | 1 | 0.04 | 0.04 | 4.17 | 10.00 | 10 | 10 |

**Replicate Transects:** 24
**Total Species:** 10
**Total Abundance:** 3918
**Diversity:** 1.085
**Dominance:** 0.422
**Evenness:** 0.471

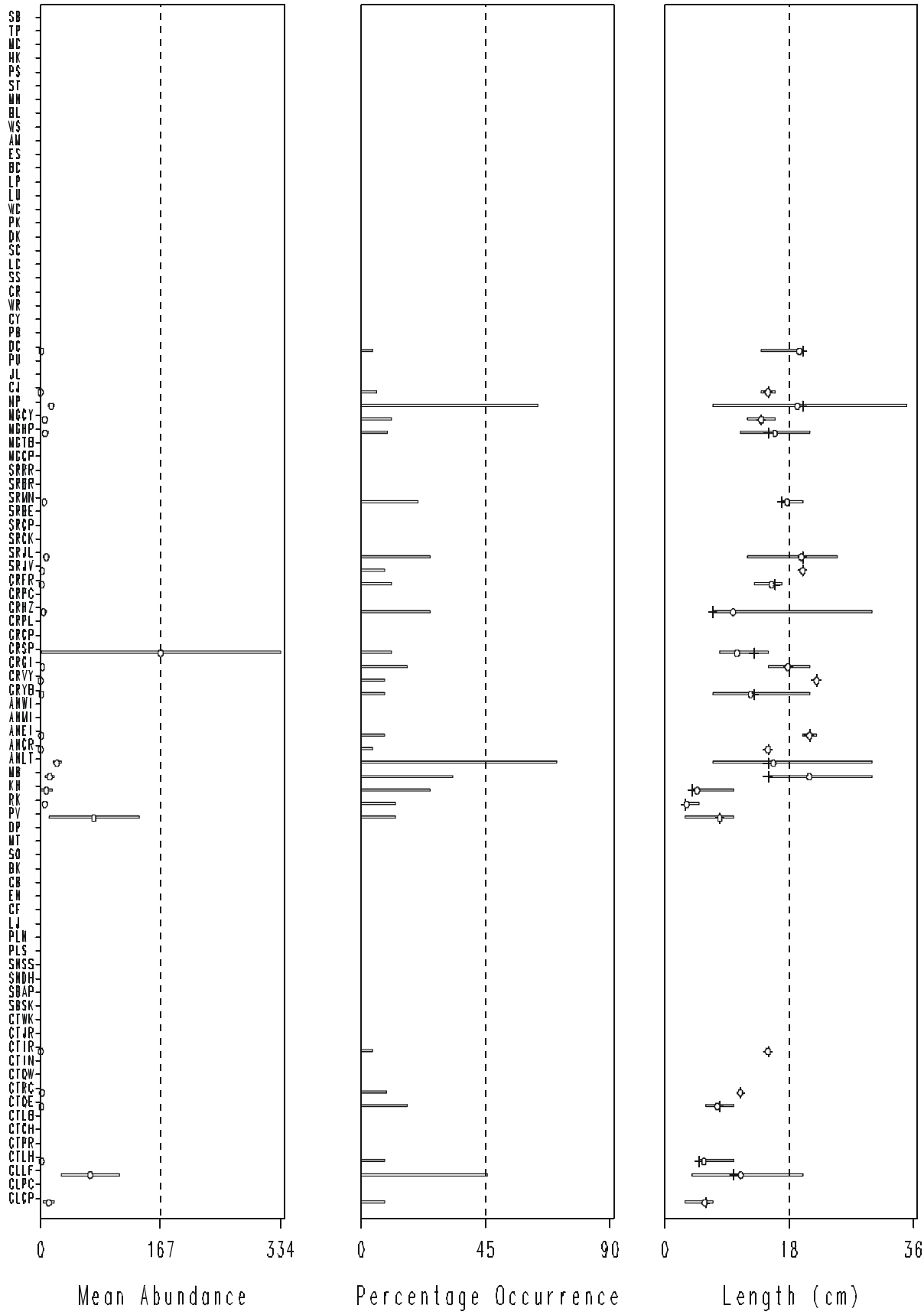
**Table C3**. Site abbreviation legend for species summary plots.

| Code | Site Name | County or Island | Code | Site Name | County or Island |
|---|---|---|---|---|---|
| **SB** | Sandhill Bluff | Santa Cruz | **CRHZ** | Hazards | Santa Cruz Island |
| **TP** | Terrace Point | Santa Cruz | **CRPL** | Pelican | Santa Cruz Island |
| **MC** | MacAbee | Monterey | **CRCP** | Coche Point | Santa Cruz Island |
| **HK** | Hopkins | Monterey | **CRSP** | Scorpion | Santa Cruz Island |
| **PS** | Pescadero | Monterey | **CRGI** | Gull Isle | Santa Cruz Island |
| **ST** | Stillwater Cove | Monterey | **CRVY** | Valley | Santa Cruz Island |
| **MN** | Monastery | Monterey | **CRYB** | Yellowbanks | Santa Cruz Island |
| **BL** | Bluefish Cove | Monterey | **ANWI** | Anacapa West Isle | Anacapa Island |
| **WS** | Weston | Monterey | **ANMI** | Anacapa Middle Isle | Anacapa Island |
| **AM** | Andrew Molera | Monterey | **ANEI** | Anacapa East Isle | Anacapa Island |
| **ES** | Esalen | Monterey | **ANCR** | Cat Rock | Anacapa Island |
| **BC** | Big Creek | Monterey | **ANLT** | Southwest Lighthouse | Anacapa Island |
| **LP** | Lopez Rock | Monterey | **MB** | Malibu | Los Angeles |
| **LU** | Lucia | Monterey | **KH** | King Harbor | Los Angeles |
| **WC** | Wild Cattle | Monterey | **RK** | Rocky Point | Los Angeles |
| **PK** | Plaskett Rock | Monterey | **PV** | Point Vicente | Los Angeles |
| **DK** | Duck Pond | Monterey | **DP** | Dana Point | Orange |
| **SC** | Salmon Creek | Monterey | **MT** | San Mateo | Orange |
| **LC** | La Cruz | San Luis Obispo | **SO** | San Onofre | San Diego |
| **SS** | San Simeon | San Luis Obispo | **BK** | Barn Kelp | San Diego |
| **CR** | Cambria Rock | San Luis Obispo | **CB** | Carlsbad | San Diego |
| **WR** | White Rock | San Luis Obispo | **EN** | Encinitas | San Diego |
| **CY** | Cayucos | San Luis Obispo | **CF** | Cardiff | San Diego |
| **PB** | Point Buchon | San Luis Obispo | **LJ** | La Jolla | San Diego |
| **DC** | Diablo Canyon | San Luis Obispo | **PLN** | Point Loma North | San Diego |
| **SL** | Sal | Santa Barbara | **PLS** | Point Loma South | San Diego |
| **PU** | Purisima | Santa Barbara | **SNSS** | Sand Spit | San Nicolas Island |
| **JL** | Jalama | Santa Barbara | **SNDH** | Dutch Harbor | San Nicolas Island |
| **CJ** | Cojo | Santa Barbara | **SBAP** | Arch Point | Santa Barbara Island |
| **NP** | Naples | Santa Barbara | **SBSK** | South Kelp | Santa Barbara Island |
| **MGCY** | Cuyler | San Miguel Island | **CTWK** | West Kelp | Santa Catalina Island |
| **MGHP** | Harris Point | San Miguel Island | **CTJR** | Johnson's Rocks | Santa Catalina Island |
| **MGTB** | Tyler Bight | San Miguel Island | **CTIR** | Isthmus Reef | Santa Catalina Island |
| **MGCP** | Crook Point | San Miguel Island | **CTIN** | Intakes | Santa Catalina Island |
| **SRRR** | Rodes Reef | Santa Rosa Island | **CTQW** | West Quarry | Santa Catalina Island |
| **SRBR** | Beacon Reef | Santa Rosa Island | **CTRC** | Ripper's Cove | Santa Catalina Island |
| **SRMN** | Monacos | Santa Rosa Island | **CTQE** | East Quarry | Santa Catalina Island |
| **SRBE** | Bee Rock | Santa Rosa Island | **CTLB** | Lobster Bay | Santa Catalina Island |
| **SRCP** | Cluster Point | Santa Rosa Island | **CTCH** | Catalina Harbor | Santa Catalina Island |
| **SRCK** | Chickasaw | Santa Rosa Island | **CTPR** | Pin Rock | Santa Catalina Island |
| **SRJL** | Johnsons Lee | Santa Rosa Island | **CTLH** | Little Harbor | Santa Catalina Island |
| **SRJV** | Jolla Vieja | Santa Rosa Island | **CLLF** | Little Flower | San Clemente Island |
| **CRFR** | Forney | Santa Cruz Island | **CLPC** | Pyramid Cove | San Clemente Island |
| **CRPC** | Painted Cave | Santa Cruz Island | **CLCP** | China Point | San Clemente Island |

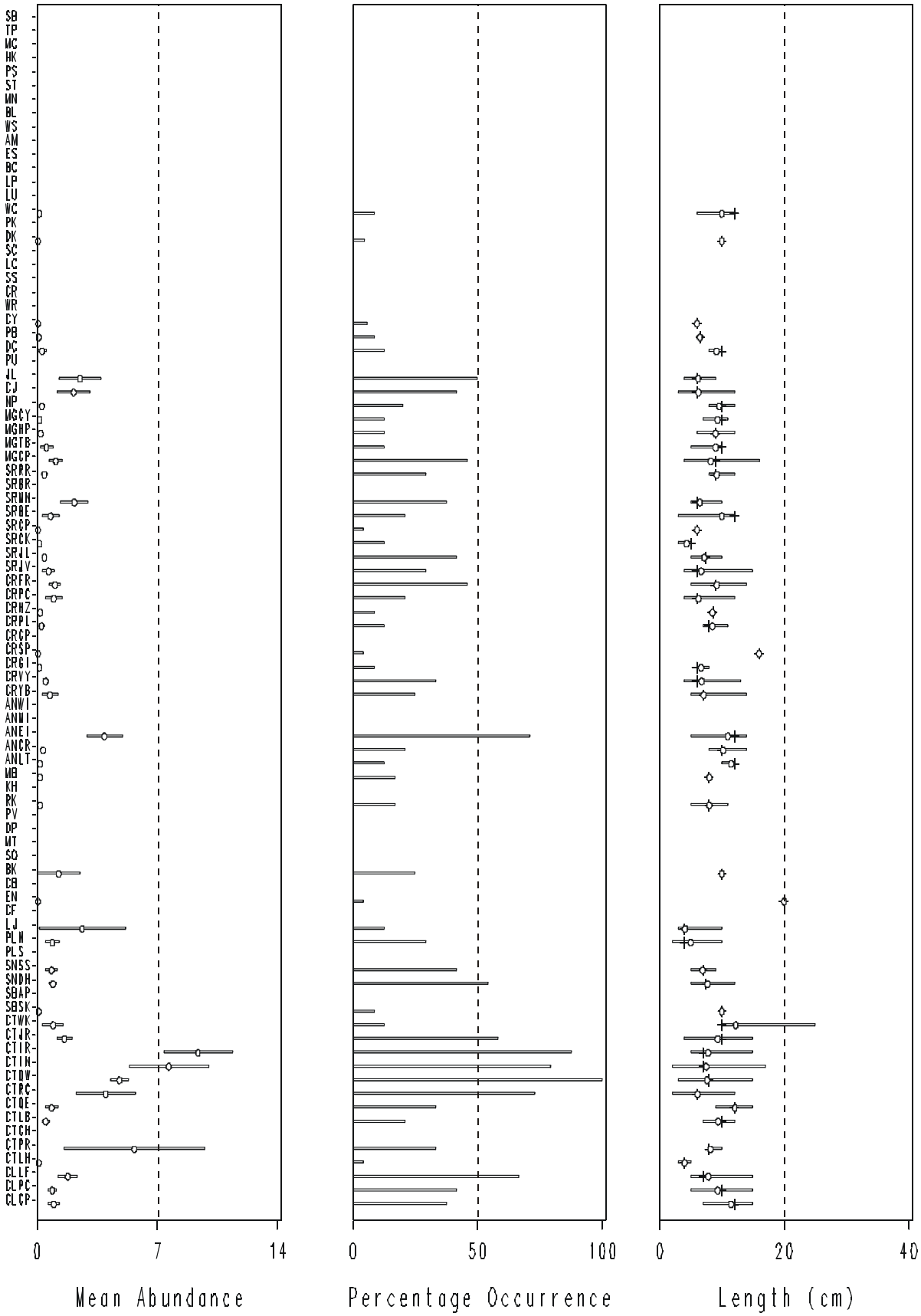
## Anisotremus davidsoni - Sargo



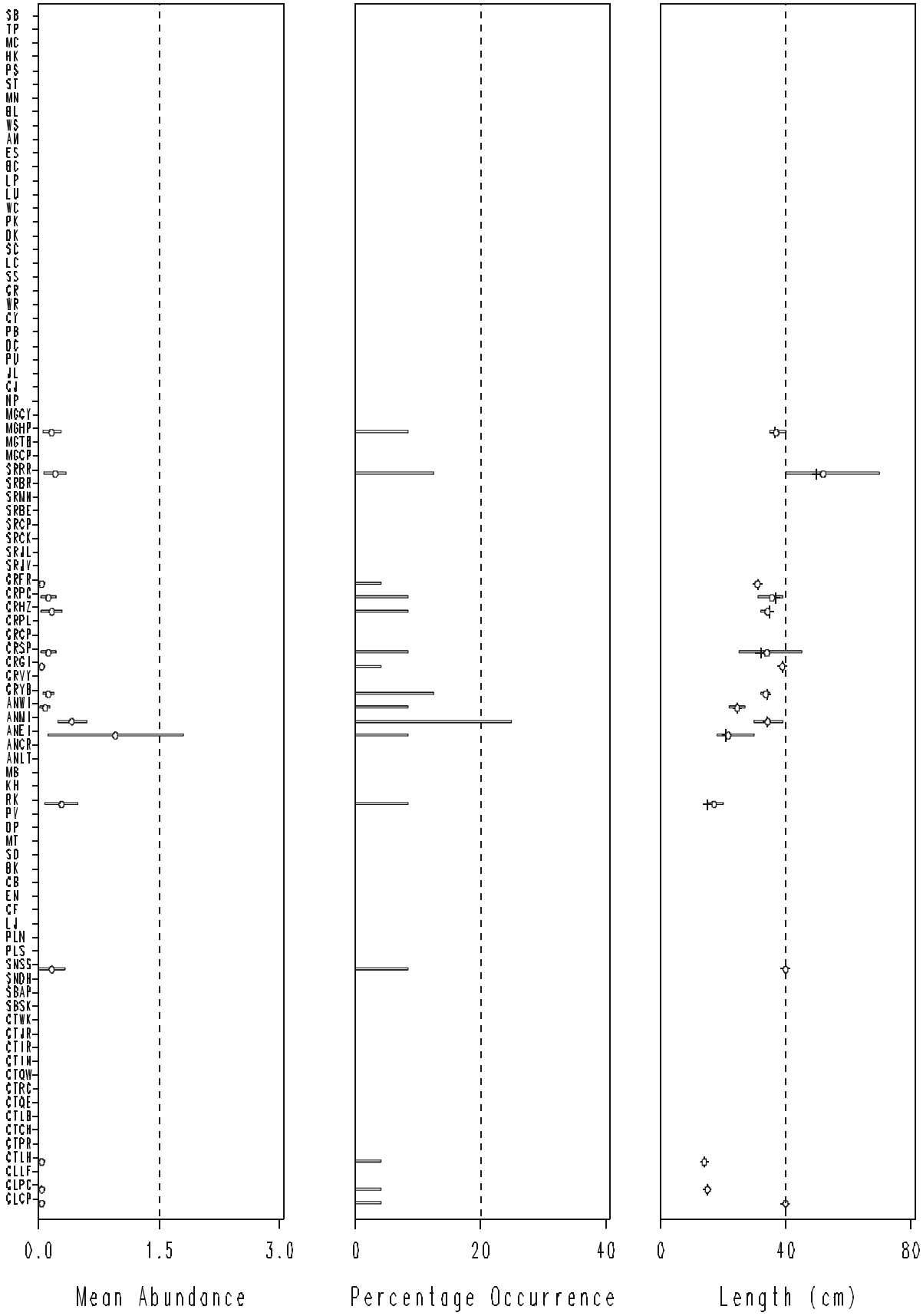
Atherinopsidae - Silversides (midwater; no Monterey-PISCO site data)



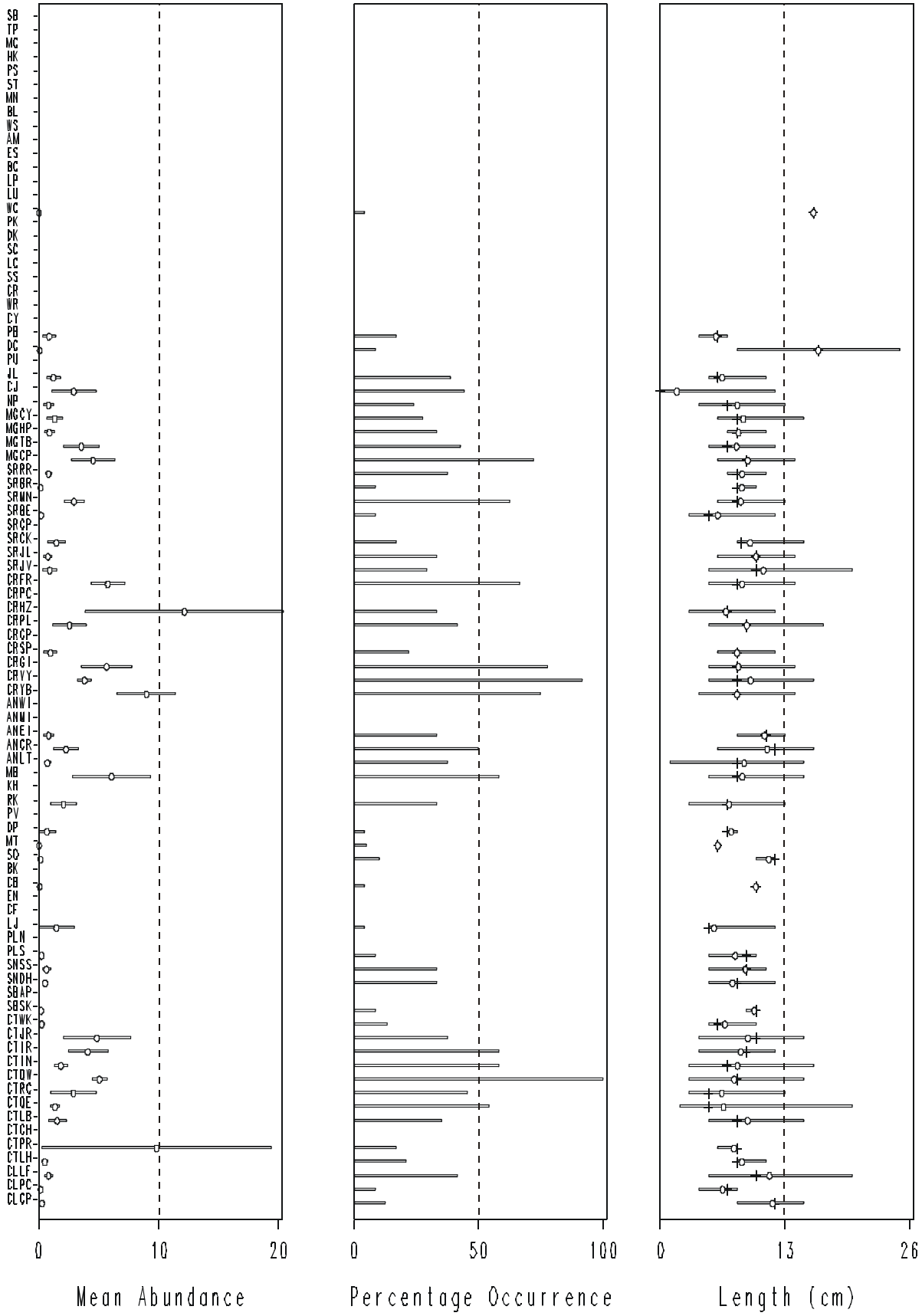
Brachyistius frenatus - Kelp surfperch (no Monterey-PISCO site data)



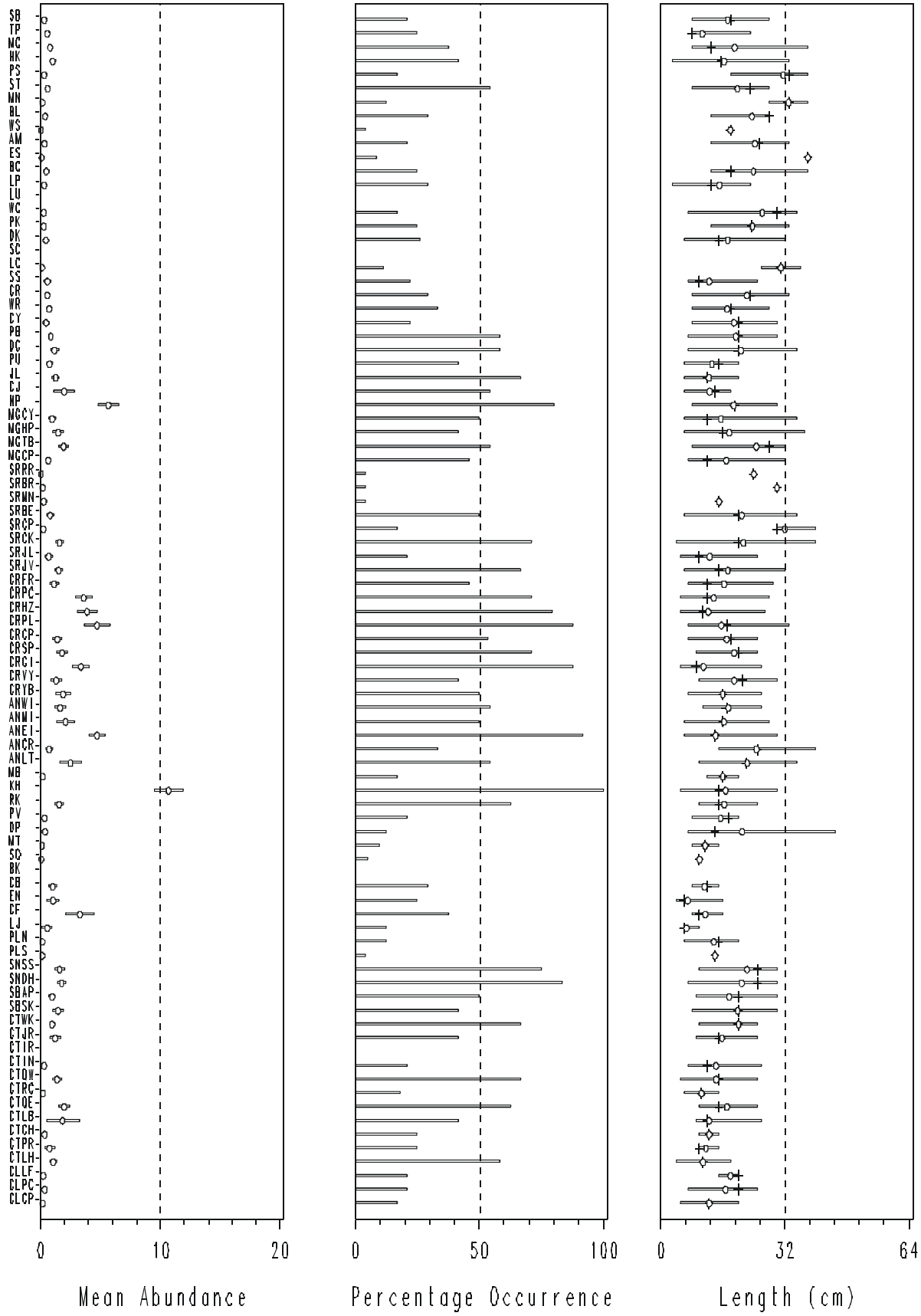
## Caulolatilus princeps - Ocean whitefish



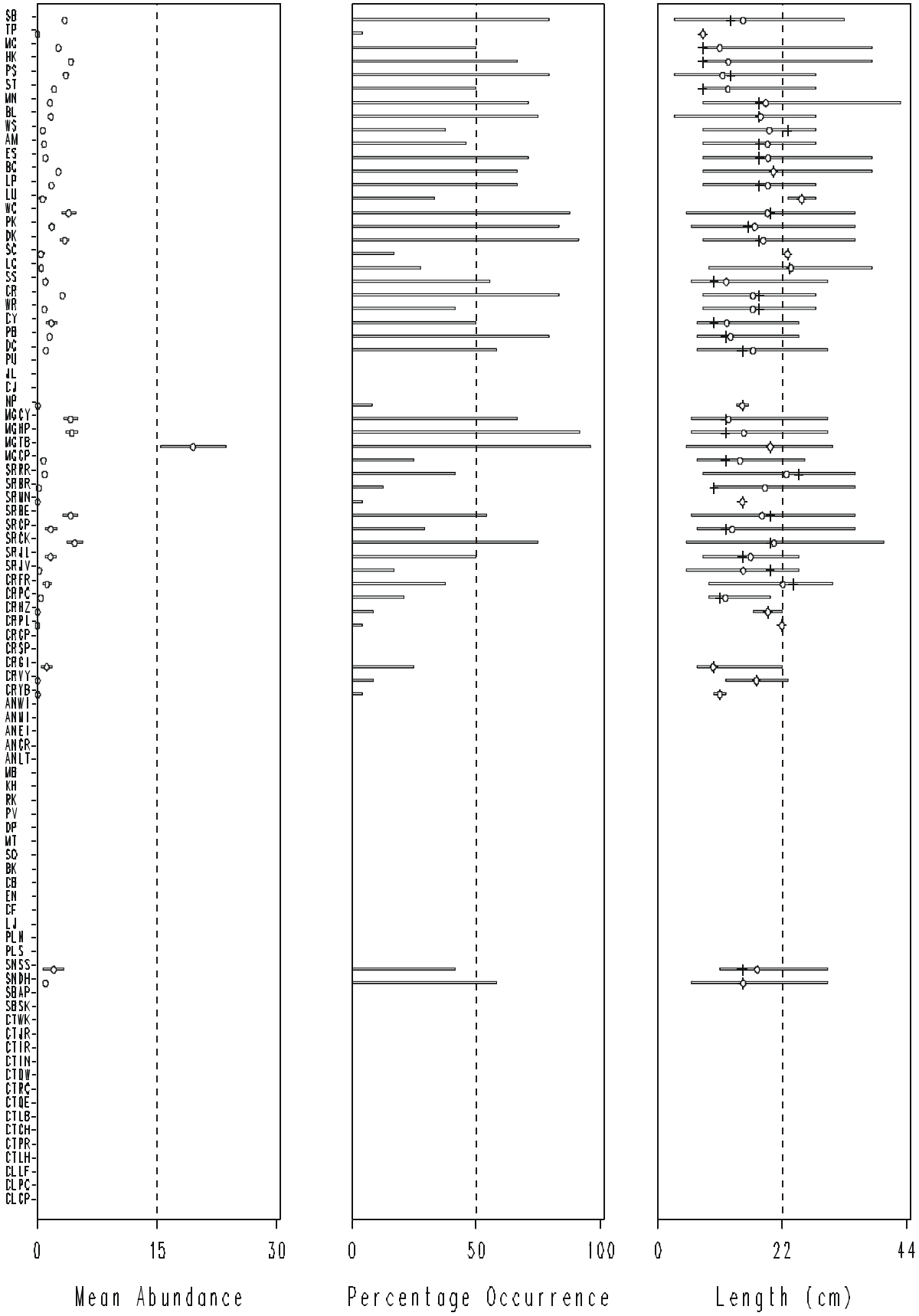
## Chromis punctipinnis - Blacksmith (midwater)



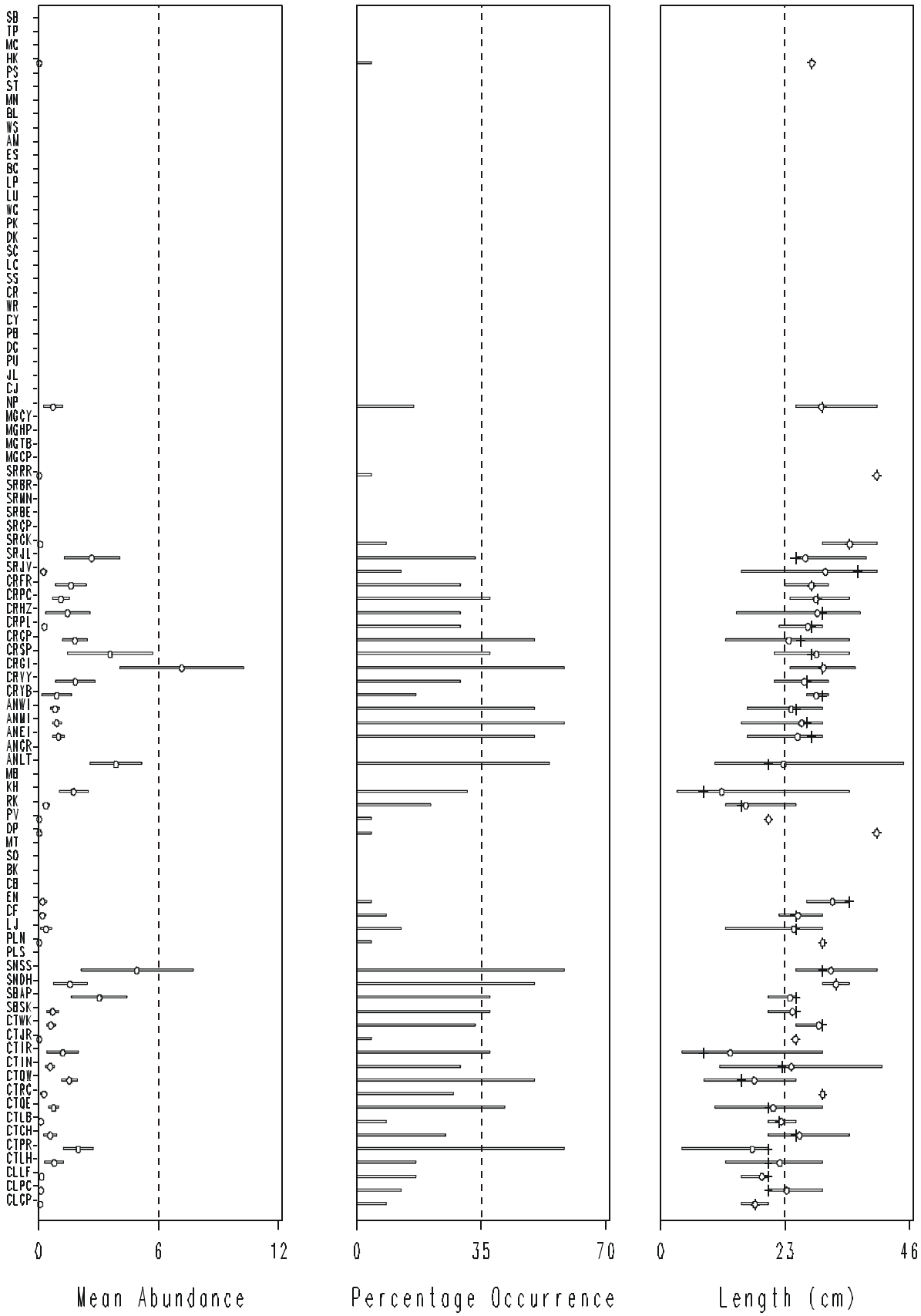
## Embiotoca jacksoni - Black surfperch



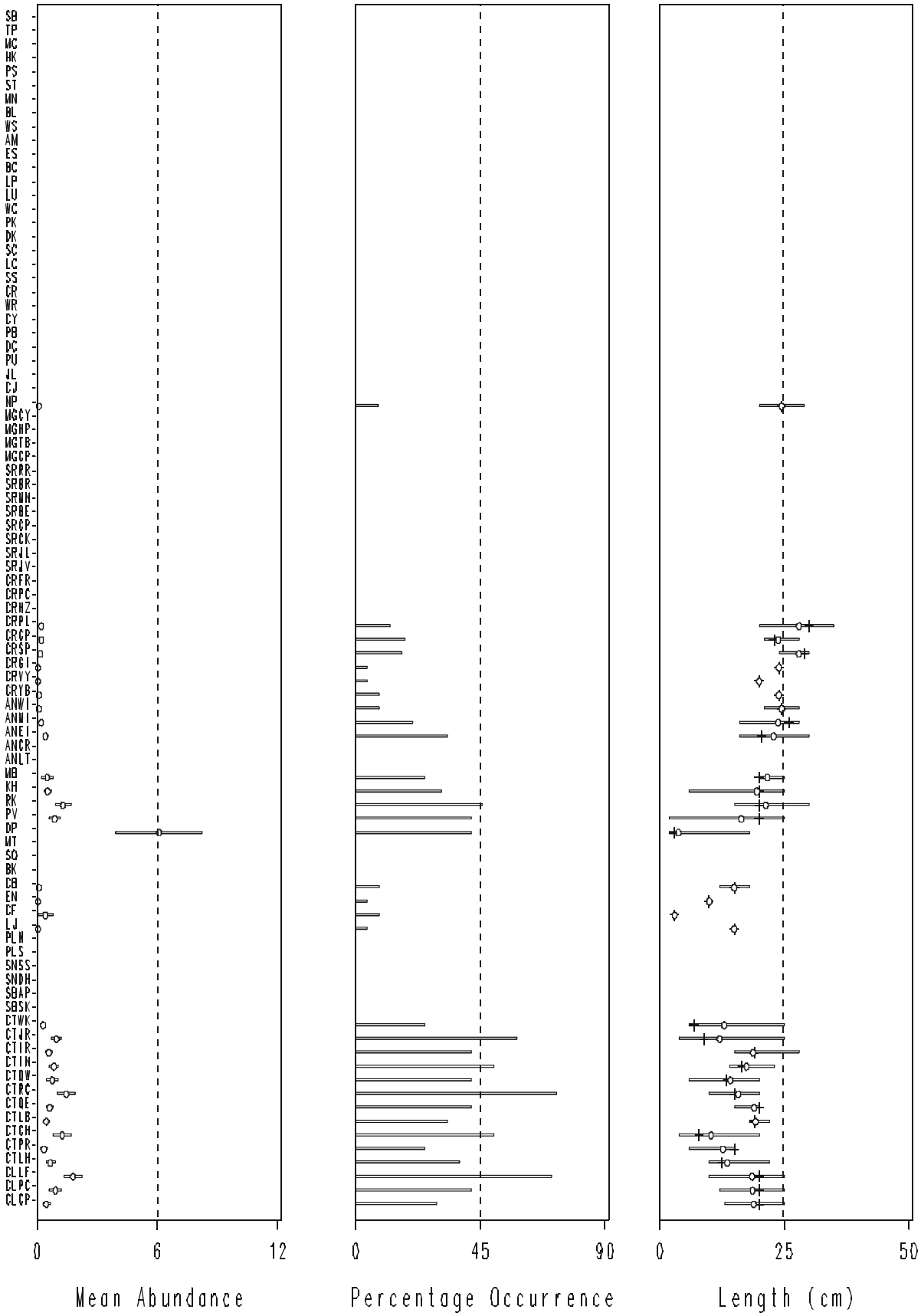
## Embiotoca lateralis - Striped surfperch



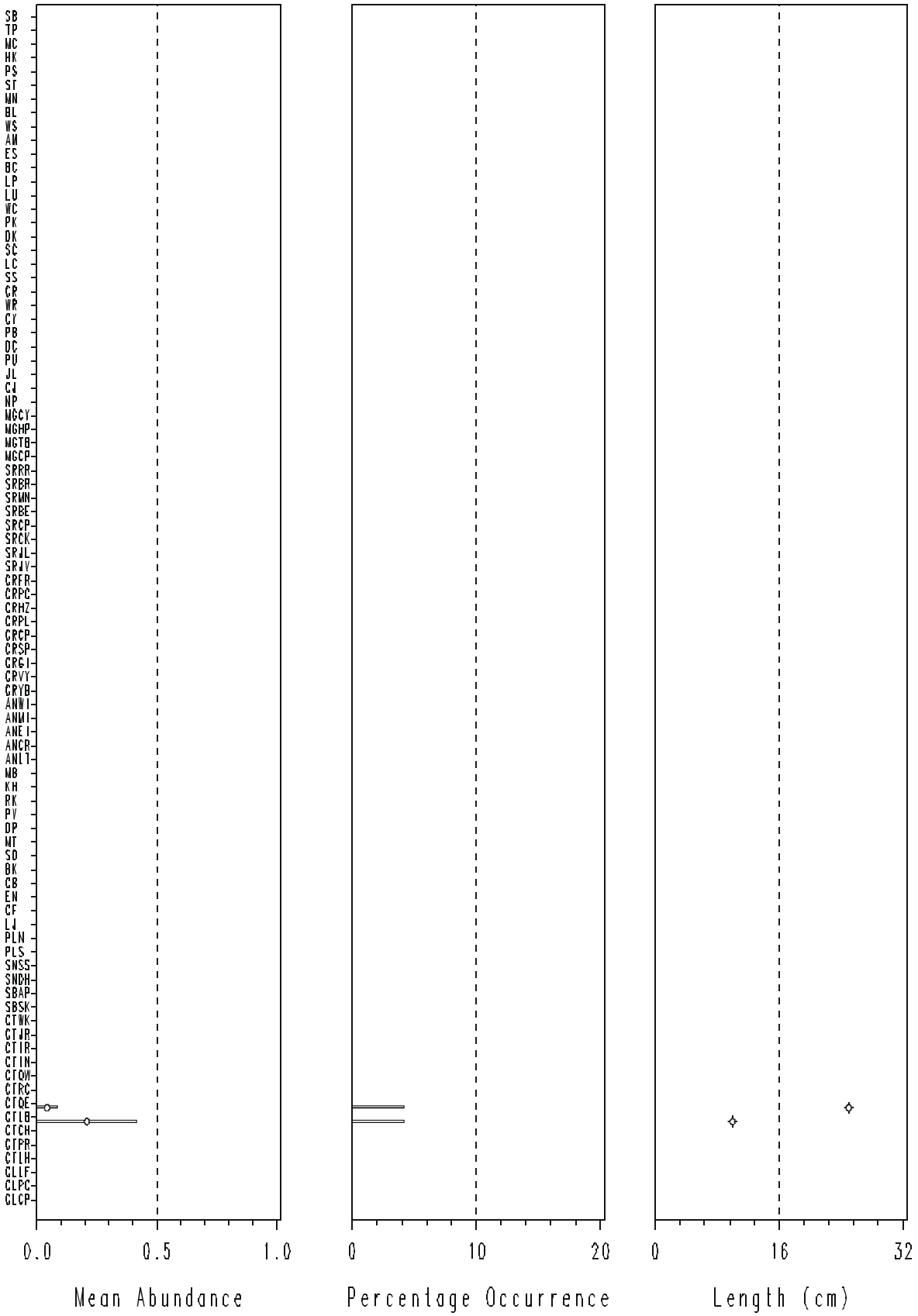
## Girella nigricans - Opaleye



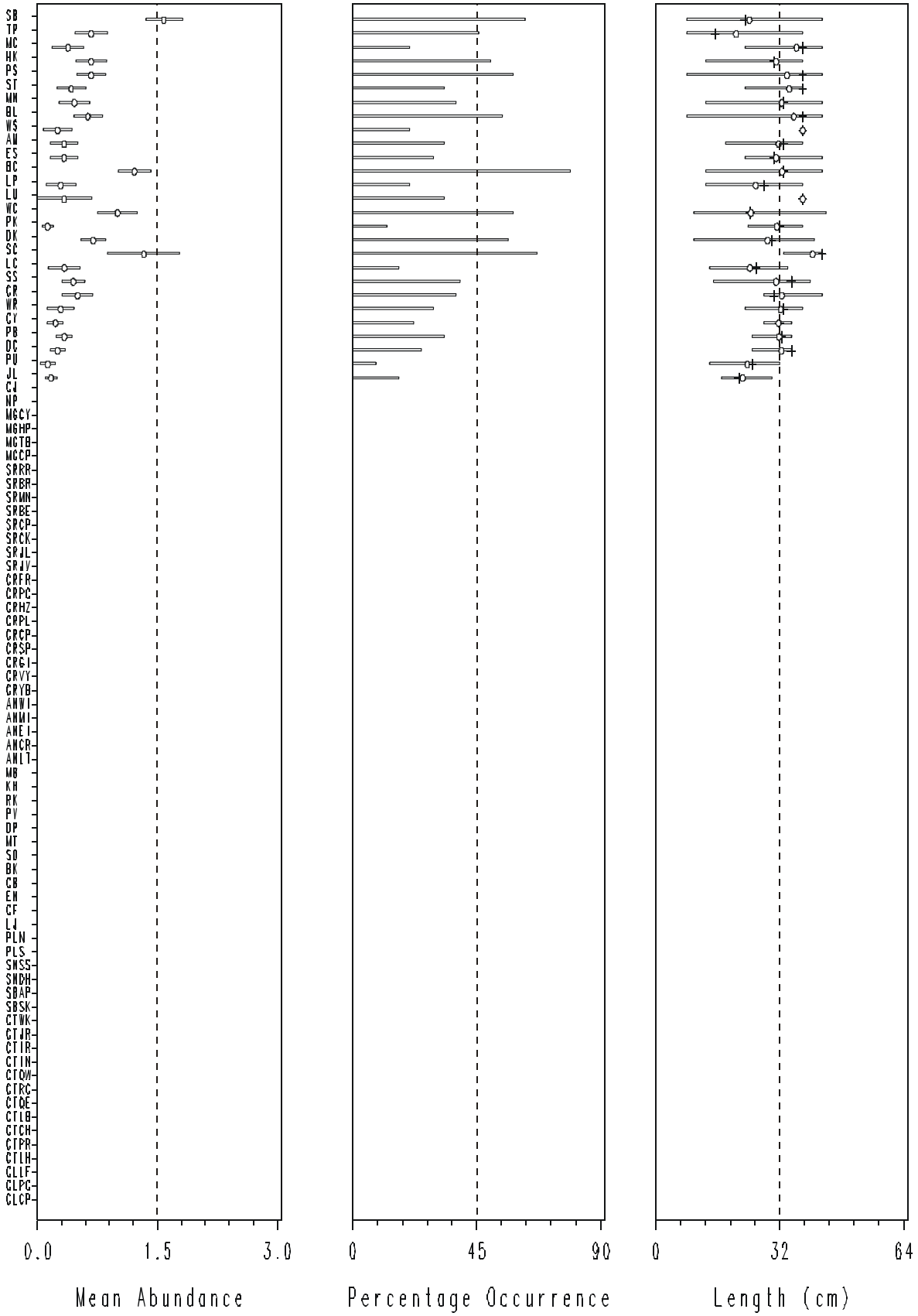
Halichoeres semicinctus - Rock wrasse (no Monterey-PISCO site data)



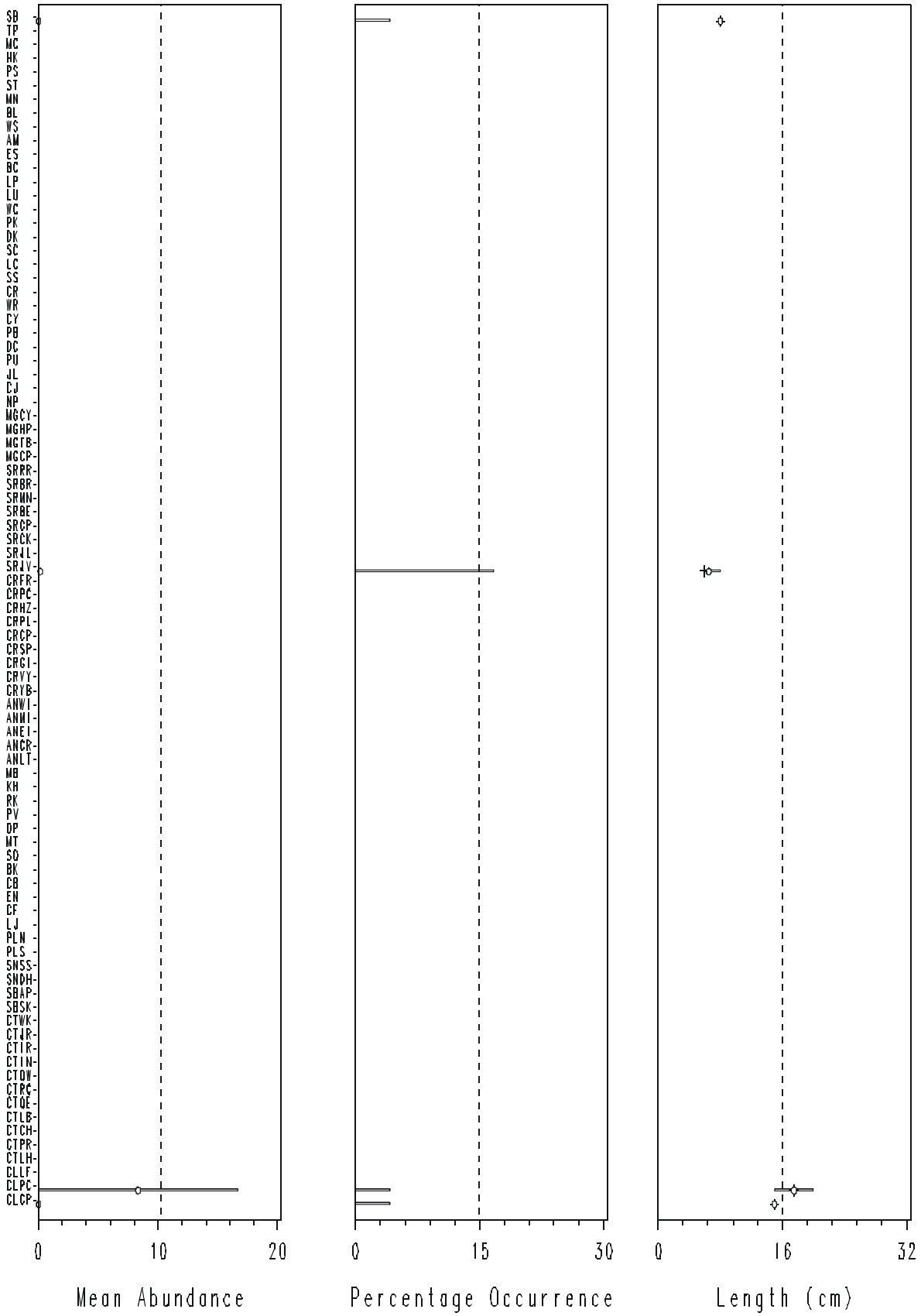
Hermosilla azurea - Zebra perch



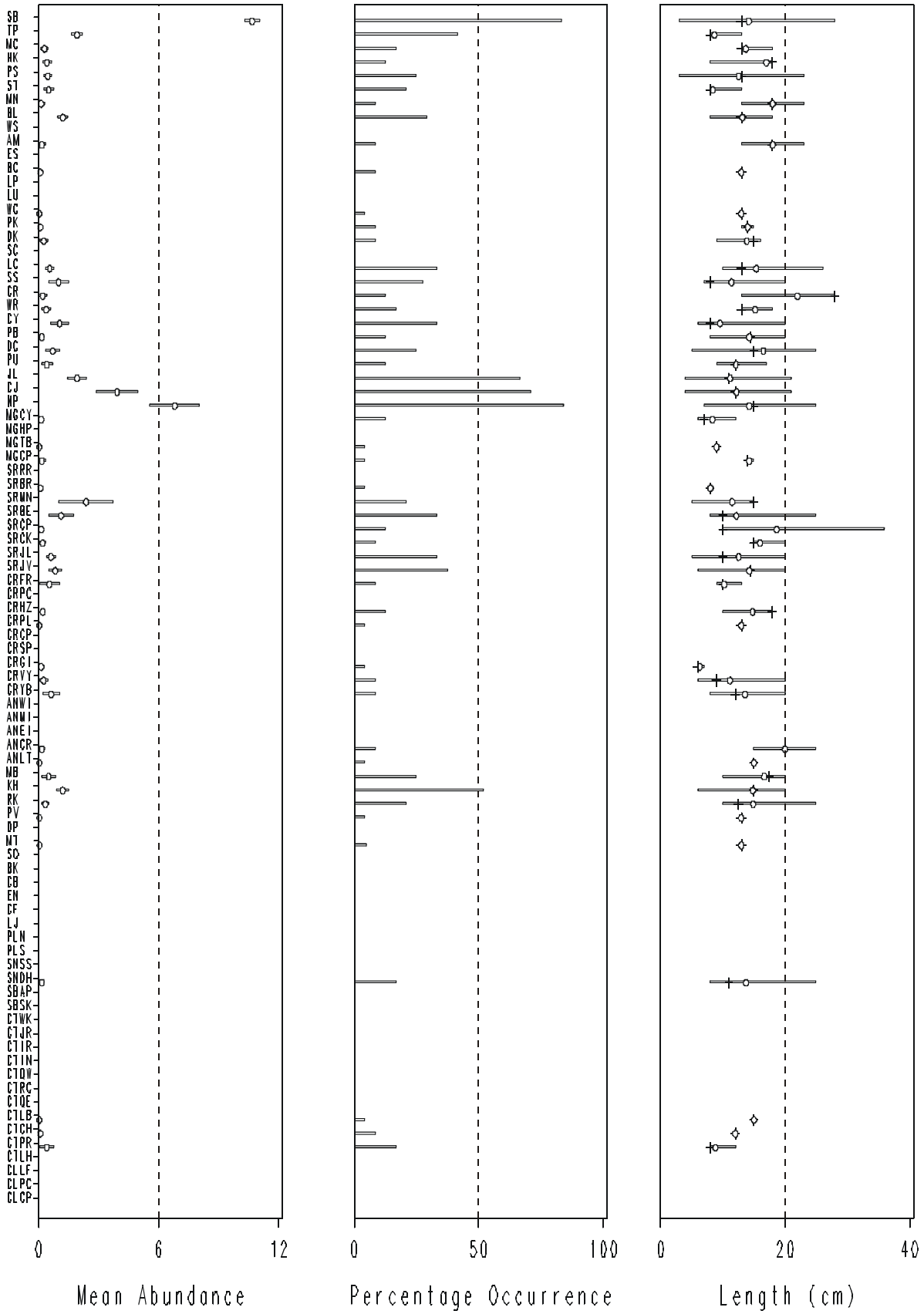
## Hexagrammos decagrammus - Kelp greenling



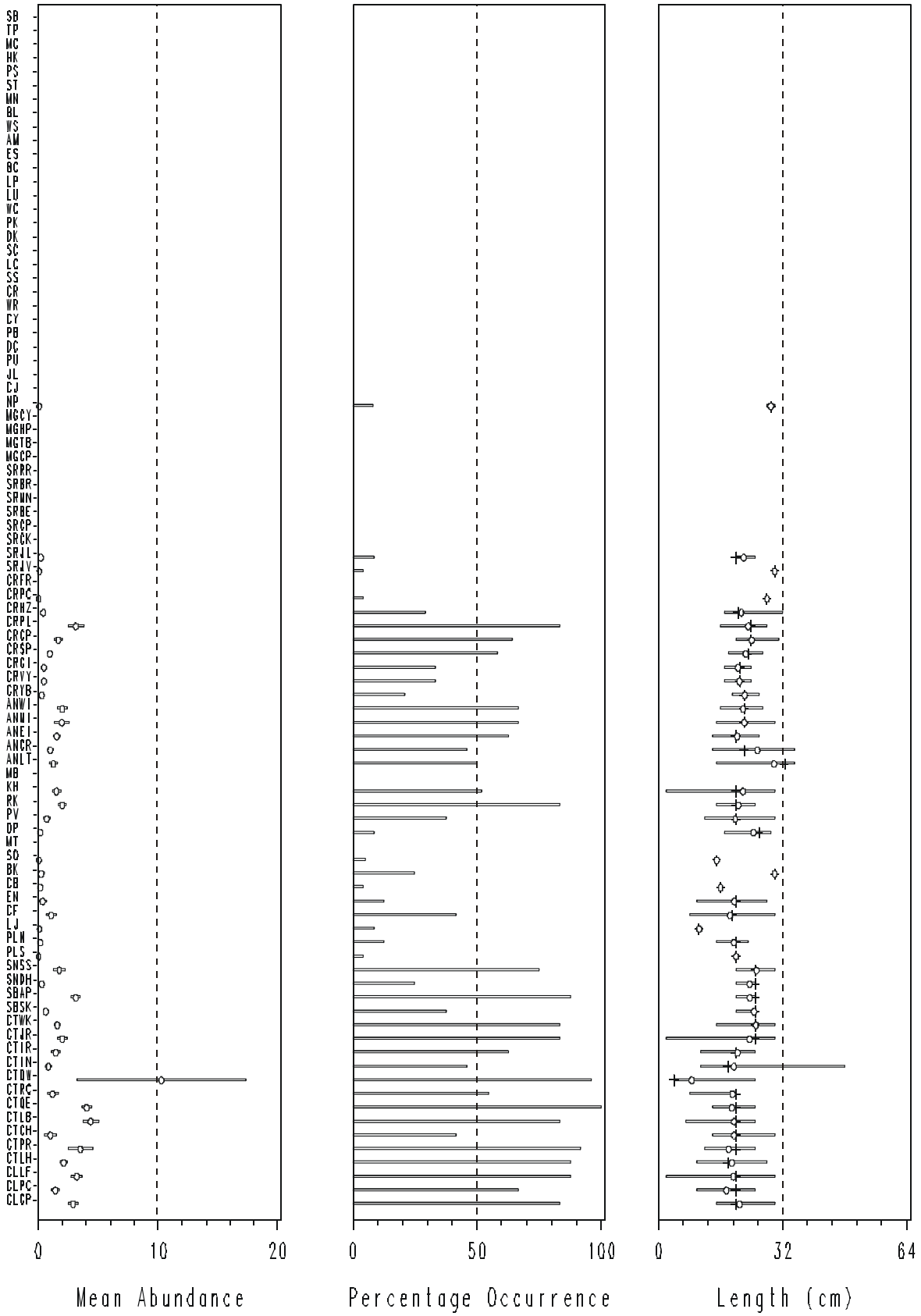
## Hyperprosopon argenteum - Walleye surfperch



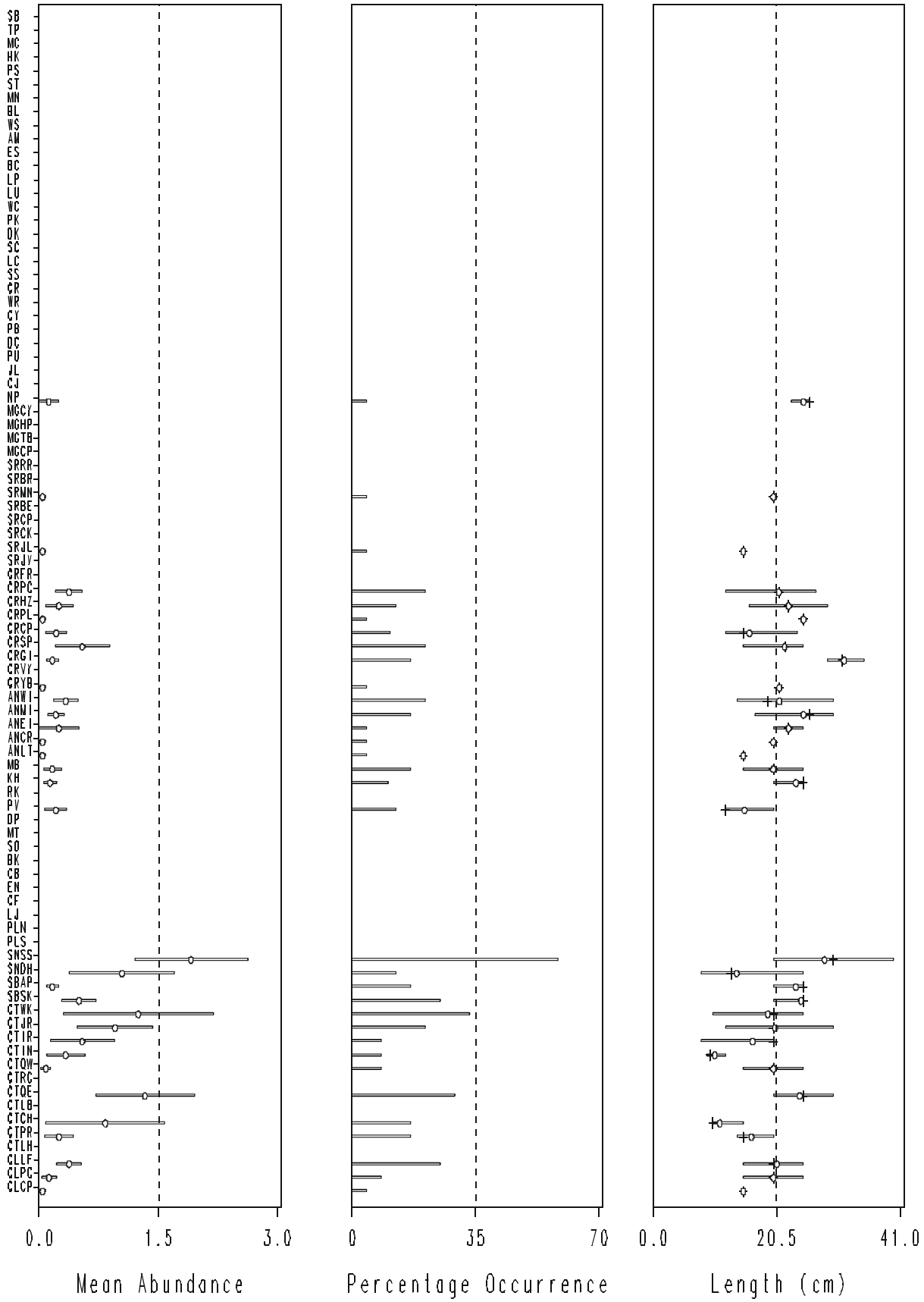
## Hypsurus caryi - Rainbow surfperch



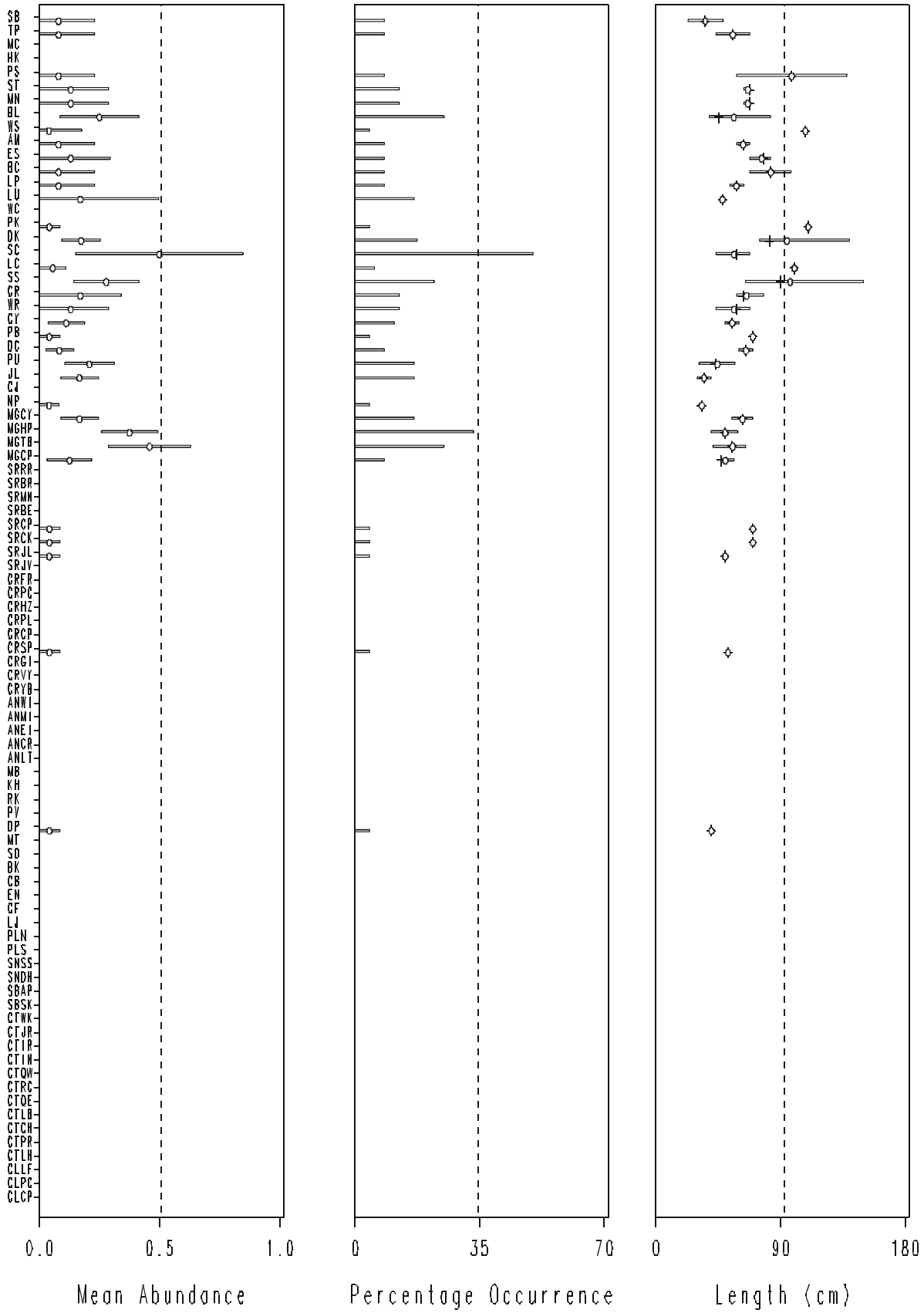
Hypsypops rubicundus - Garibaldi



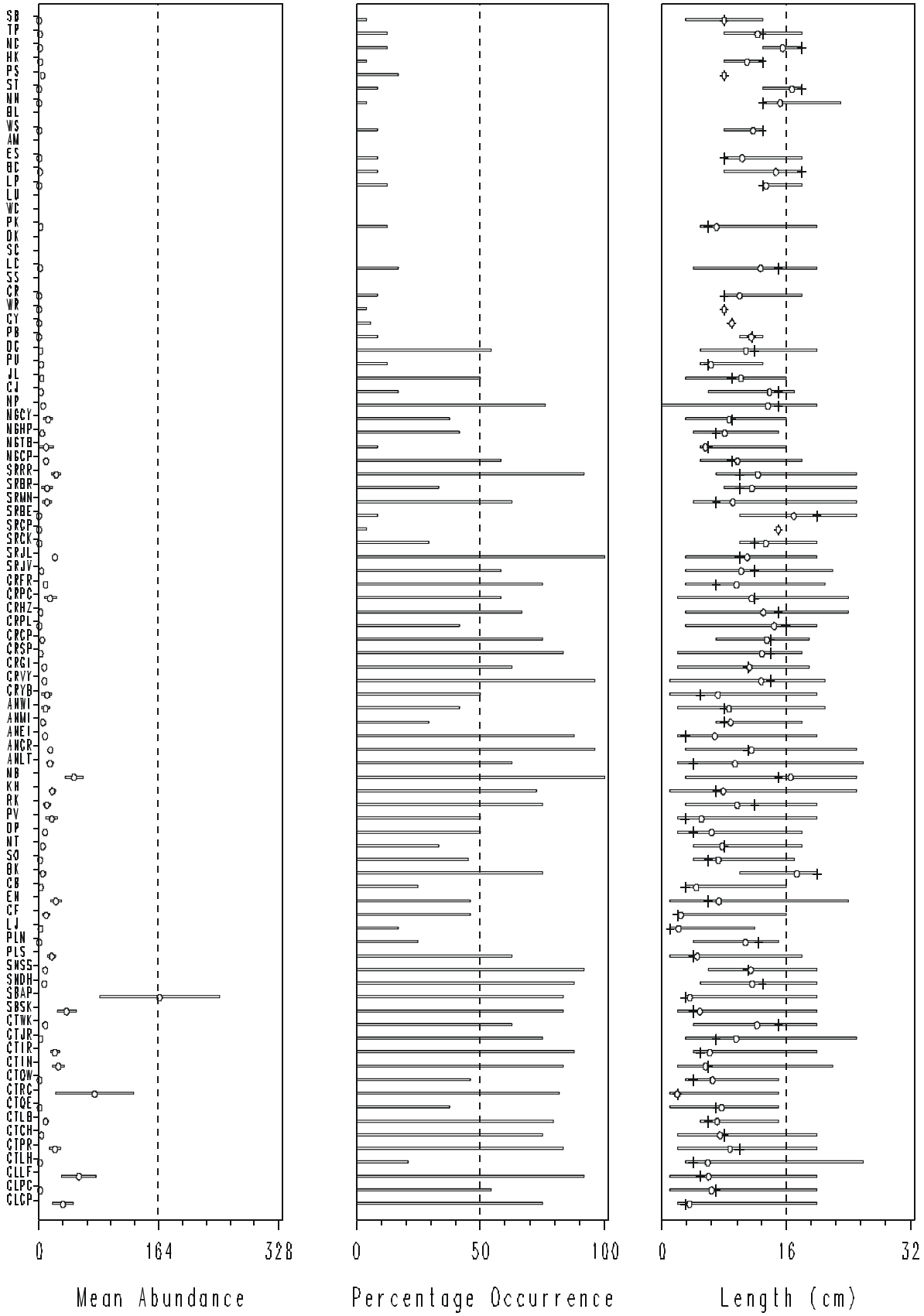
## Medialuna californiensis - Halfmoon



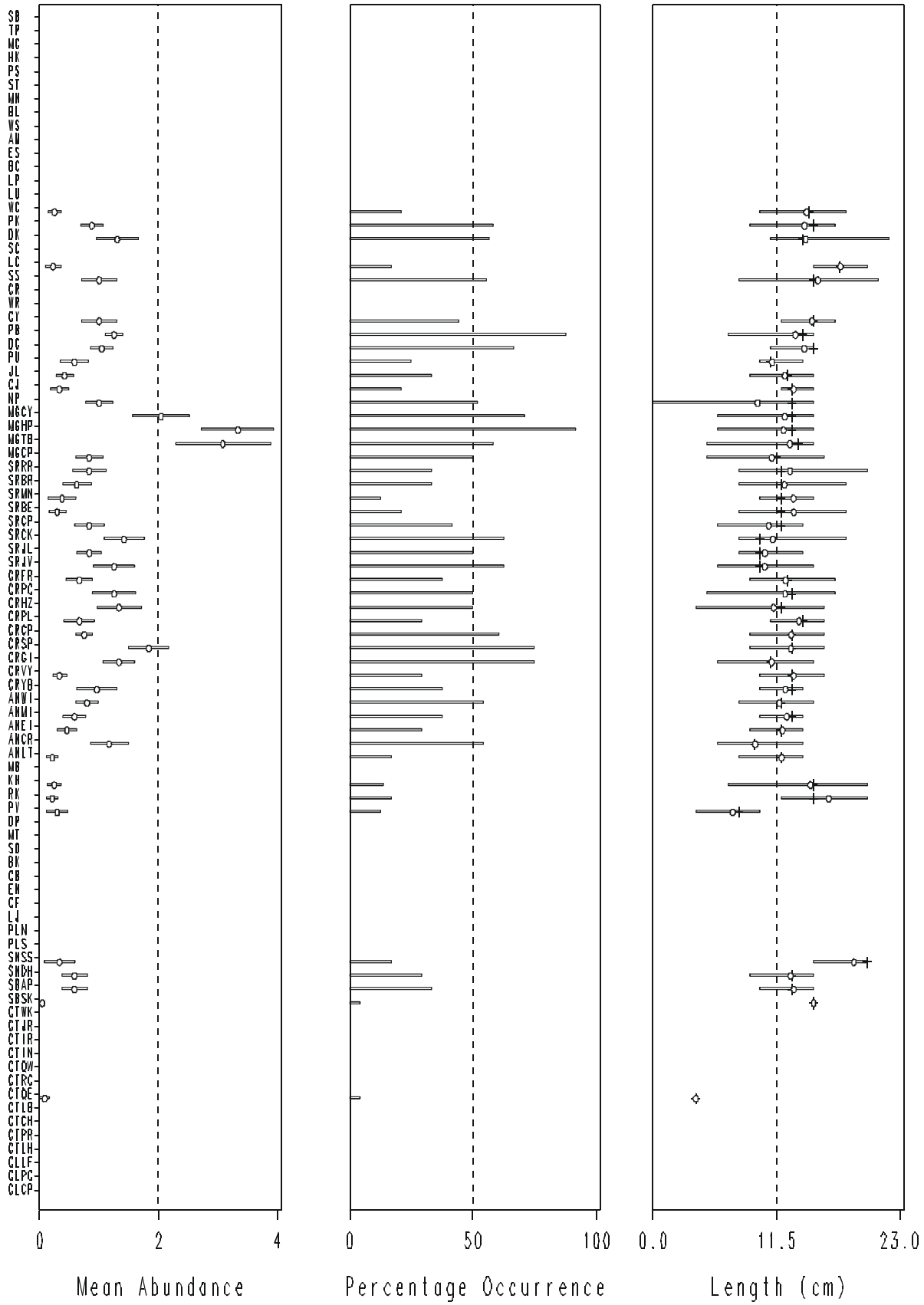
## Ophiodon elongatus - Lingcod



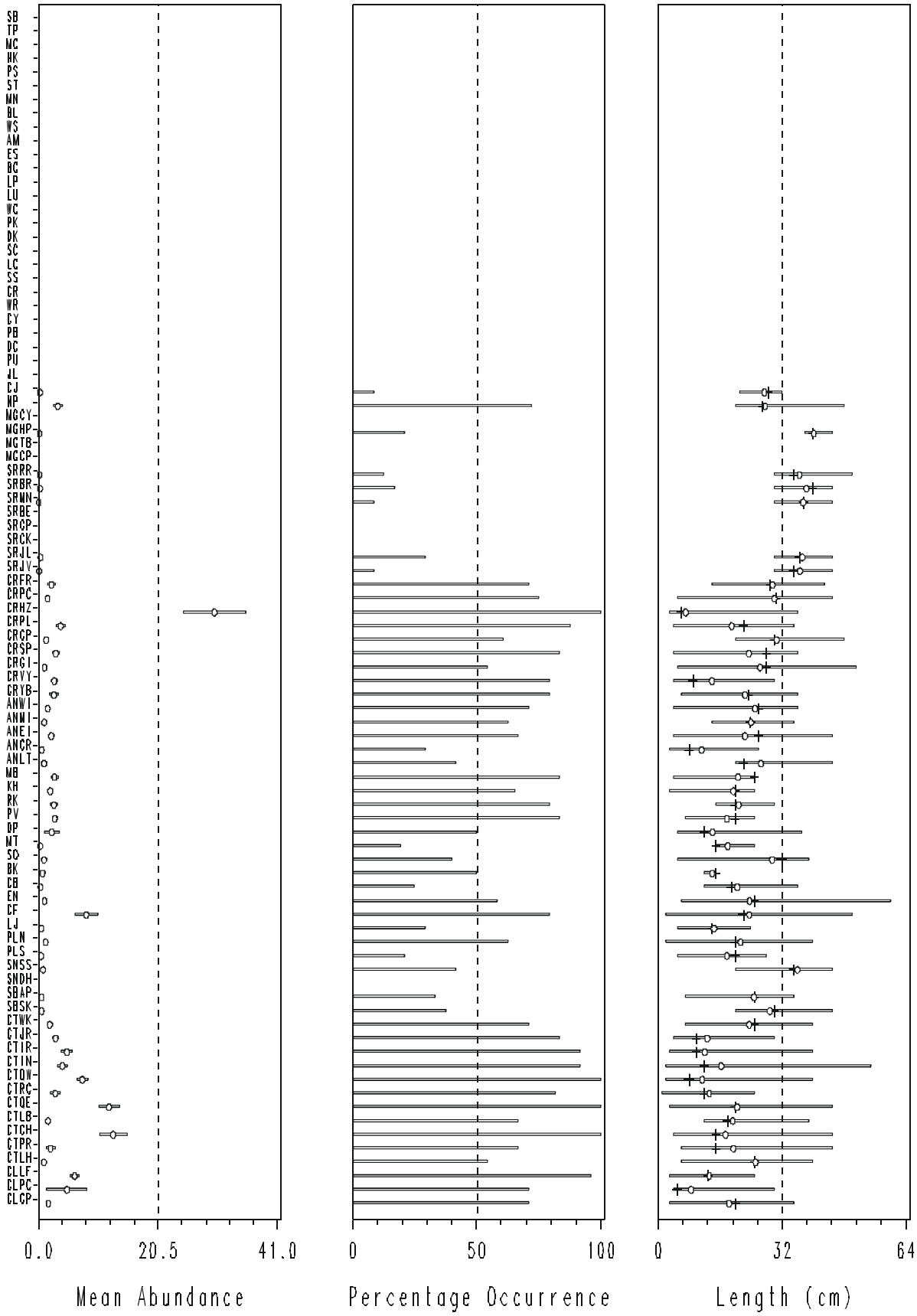
## Oxyjulis californica - Senorita



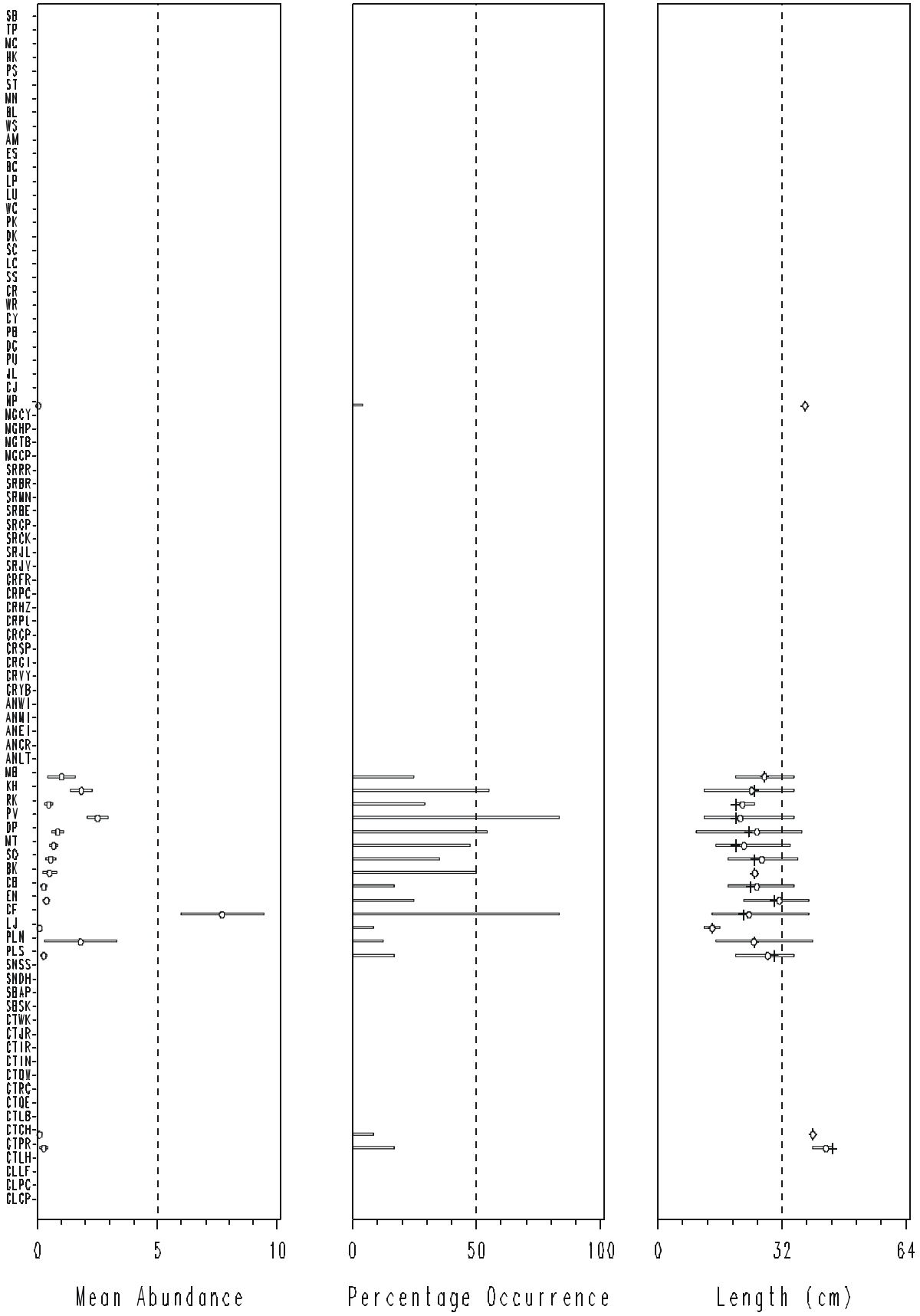
Oxylebius pictus - Painted greenling (no Monterey-PISCO site data)



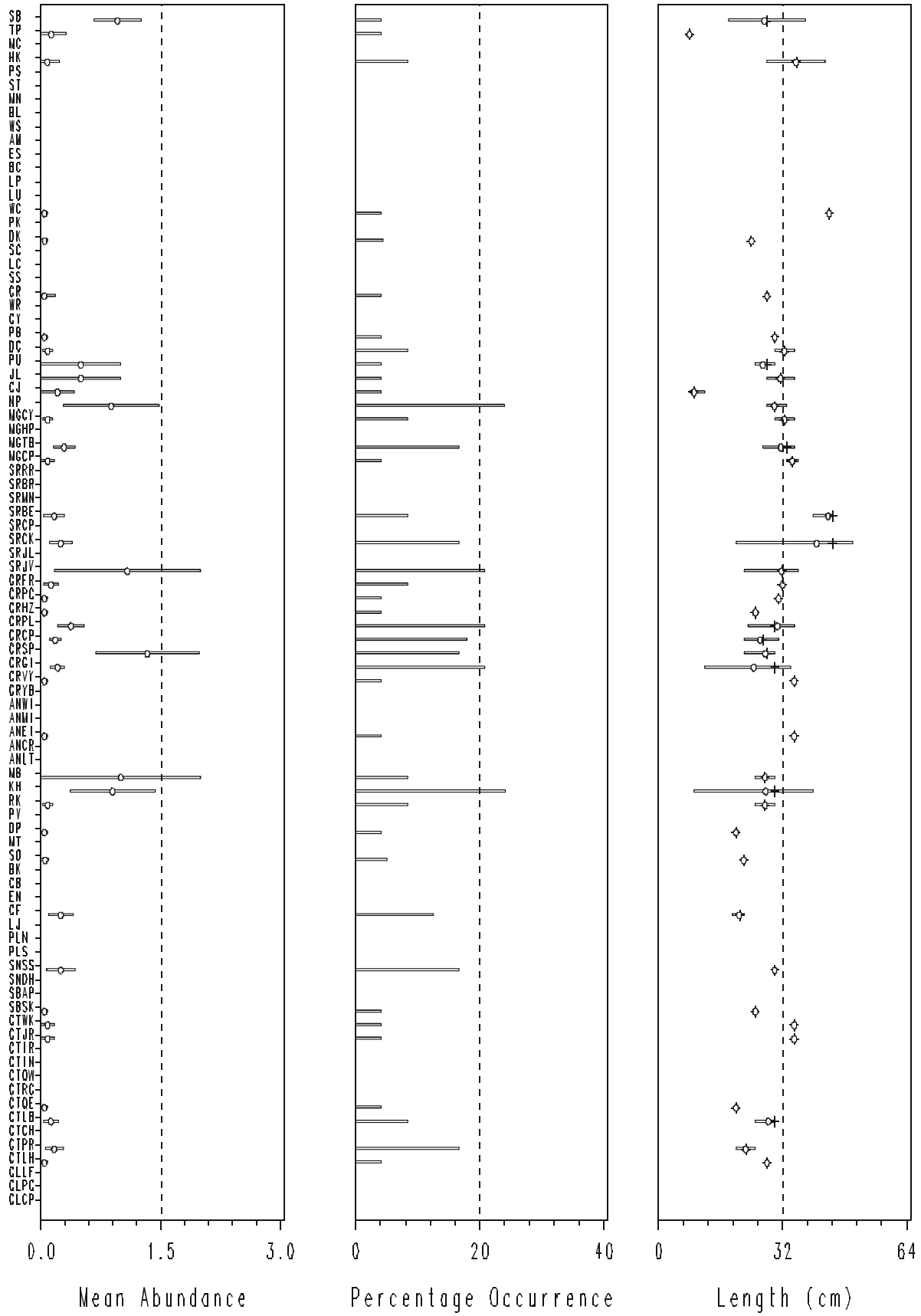
## Paralabrax clathratus - Kelp bass



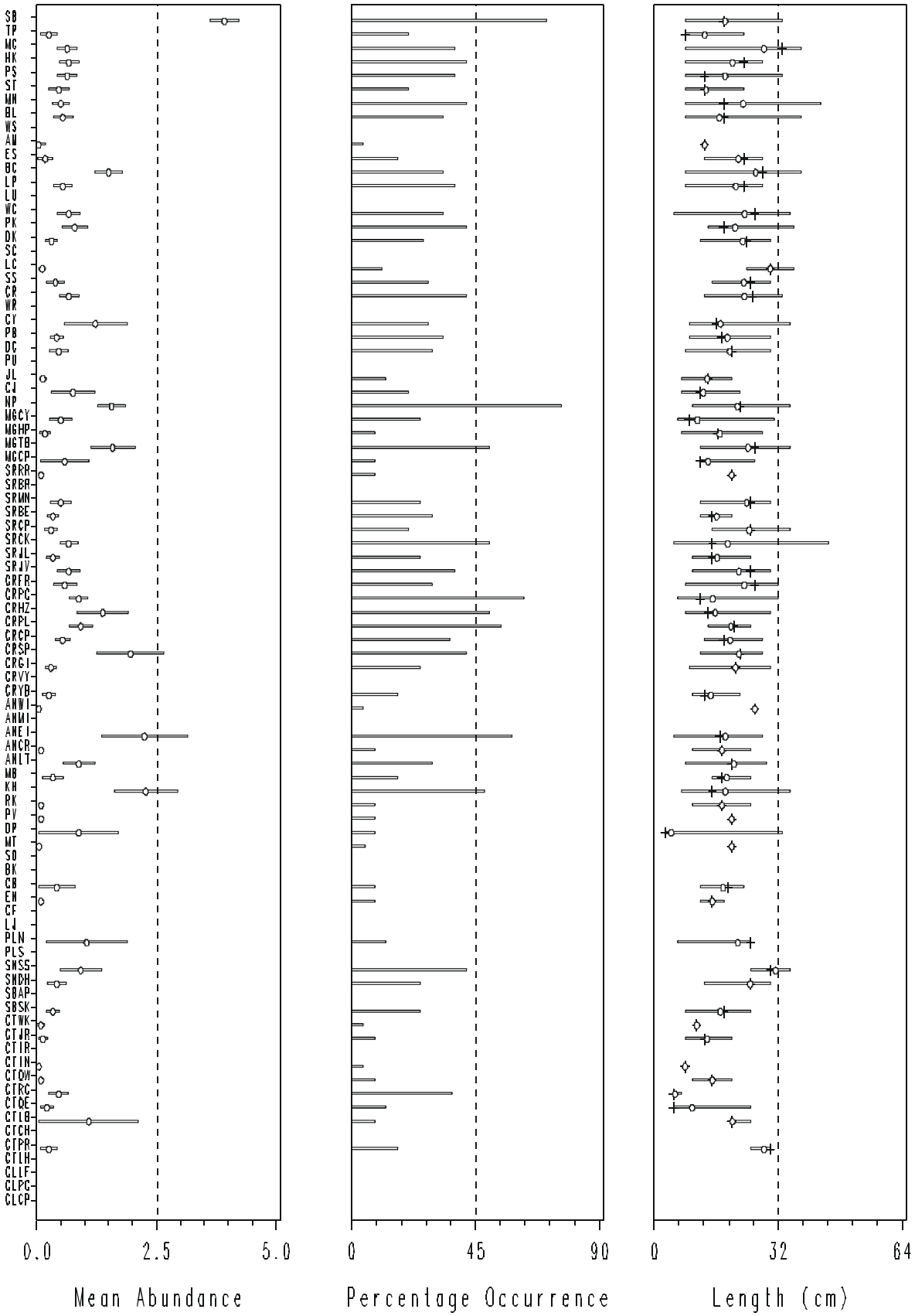
## Paralabrax nebulifer - Barred sandbass



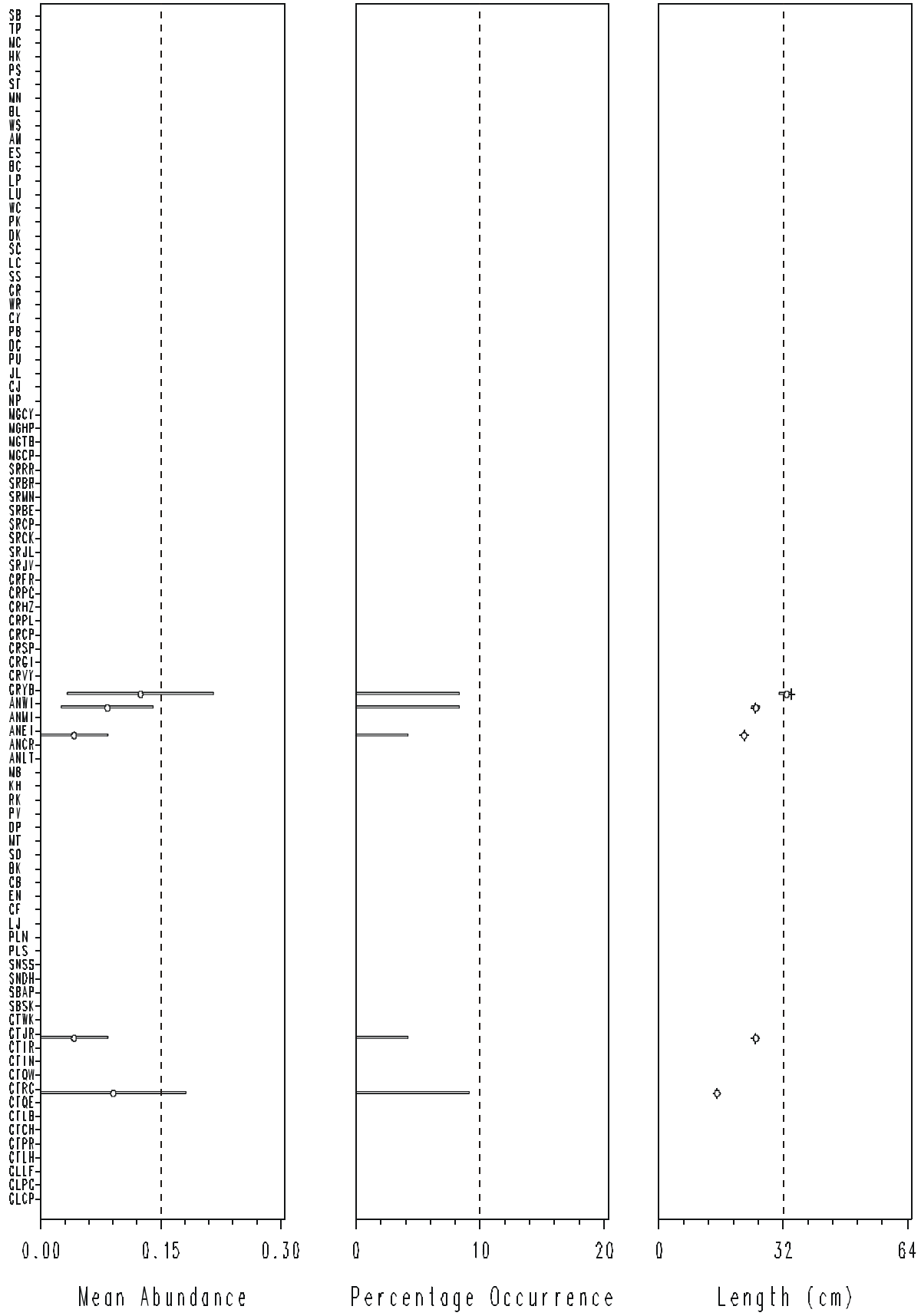
Rhacochilus toxotes - Rubberlip surfperch



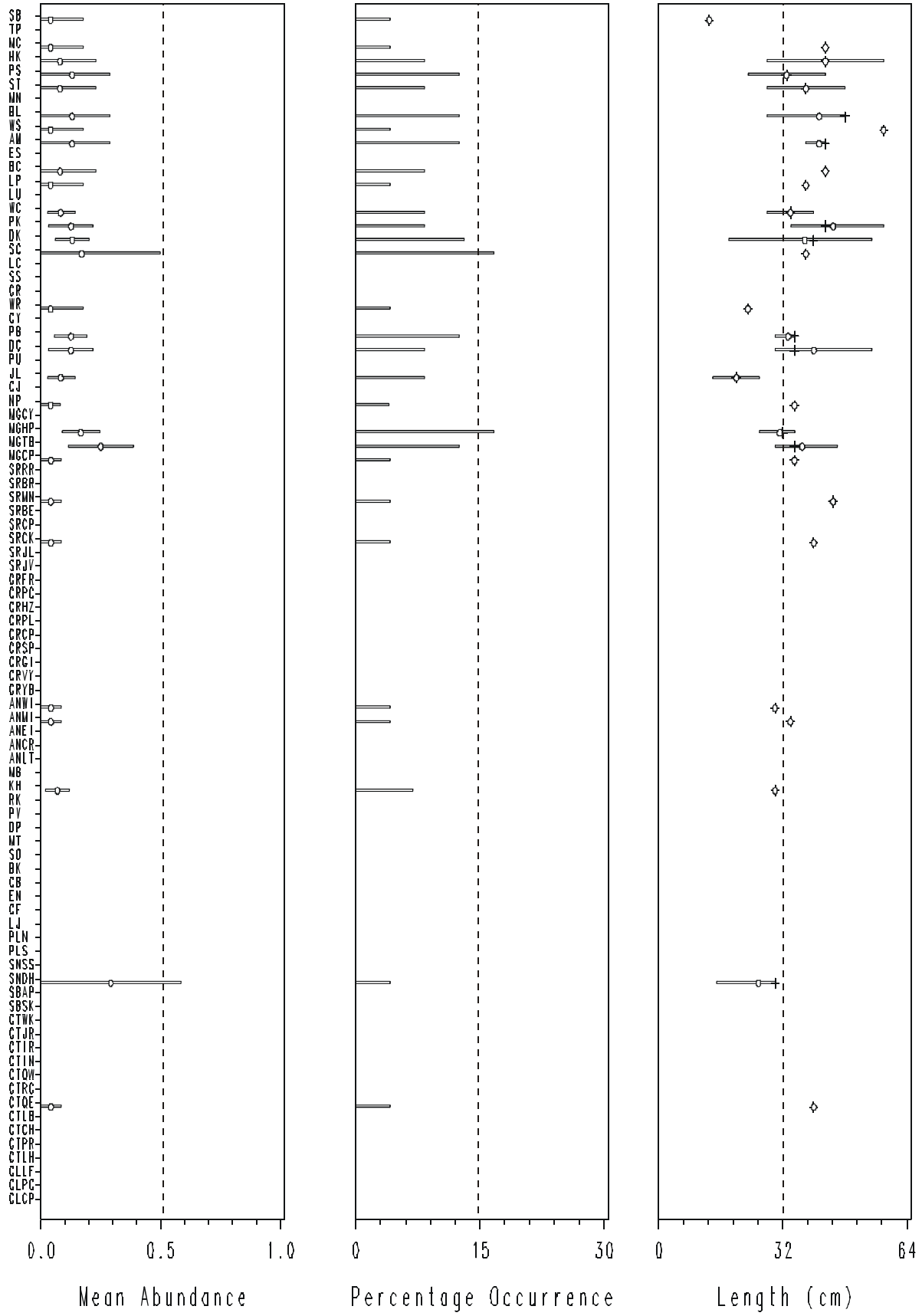
## Rhacochilus vacca - Pile surfperch



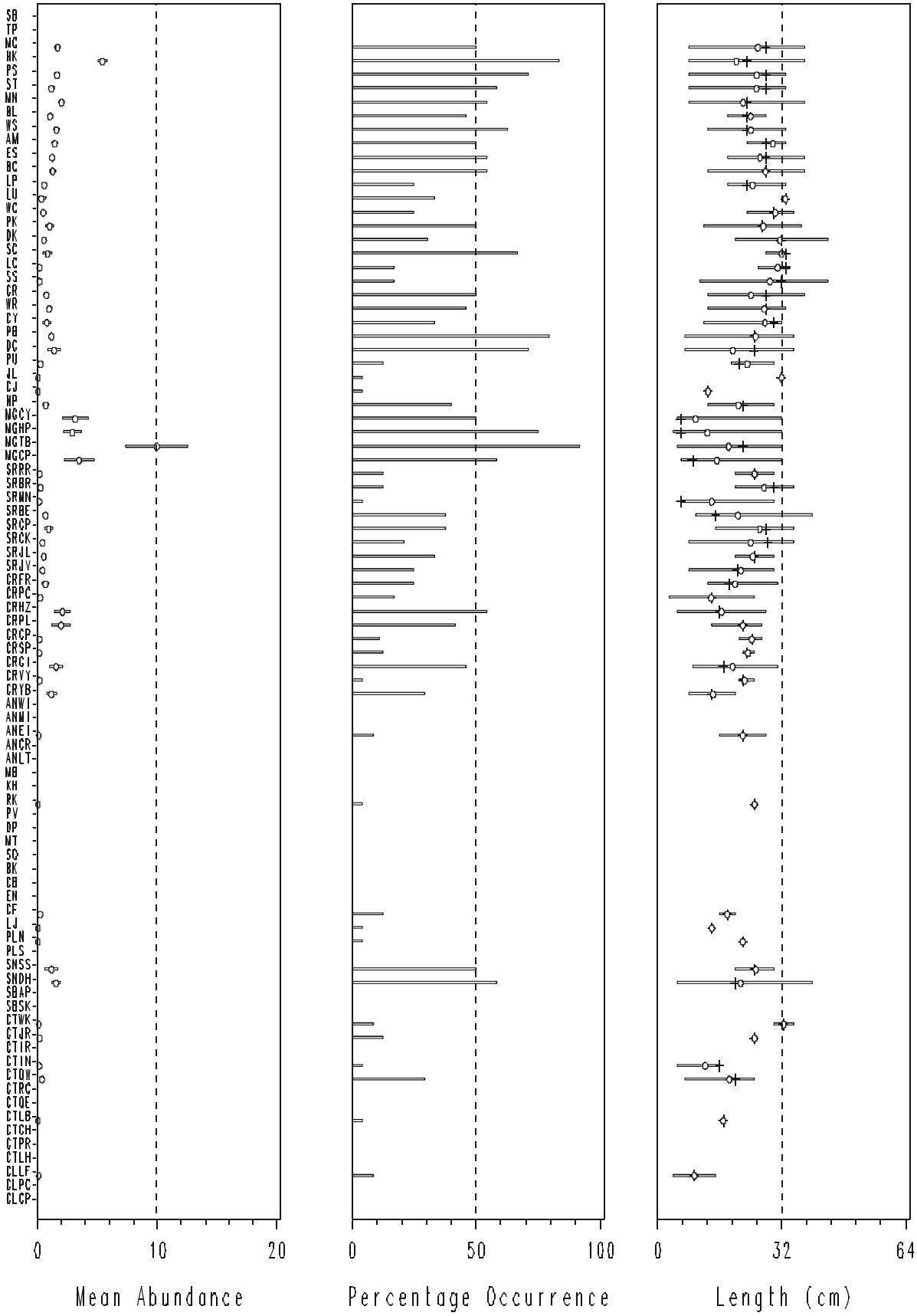
## Scorpaena guttata - California scorpionfish



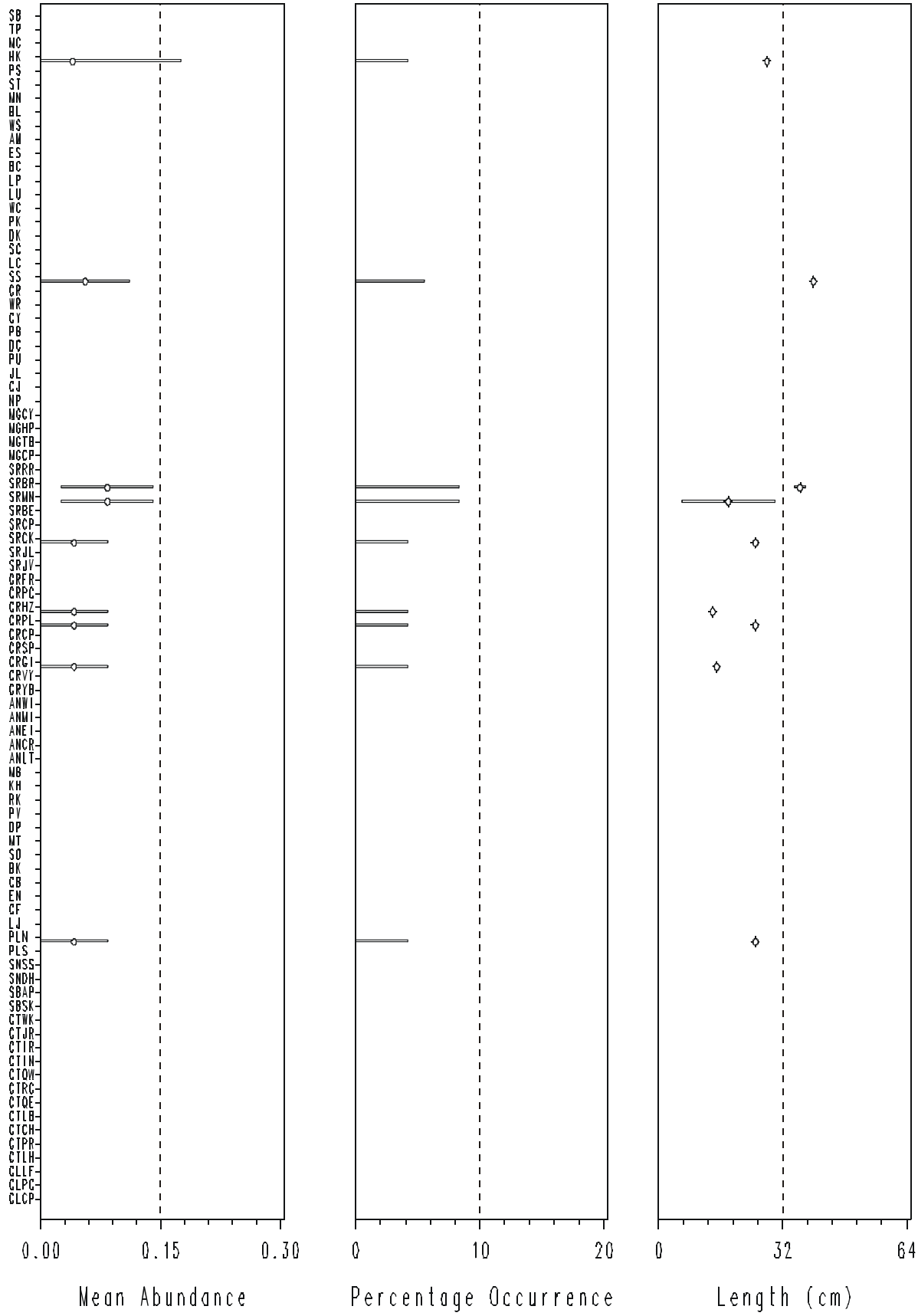
## Scorpaenichthys marmoratus -Cabezon



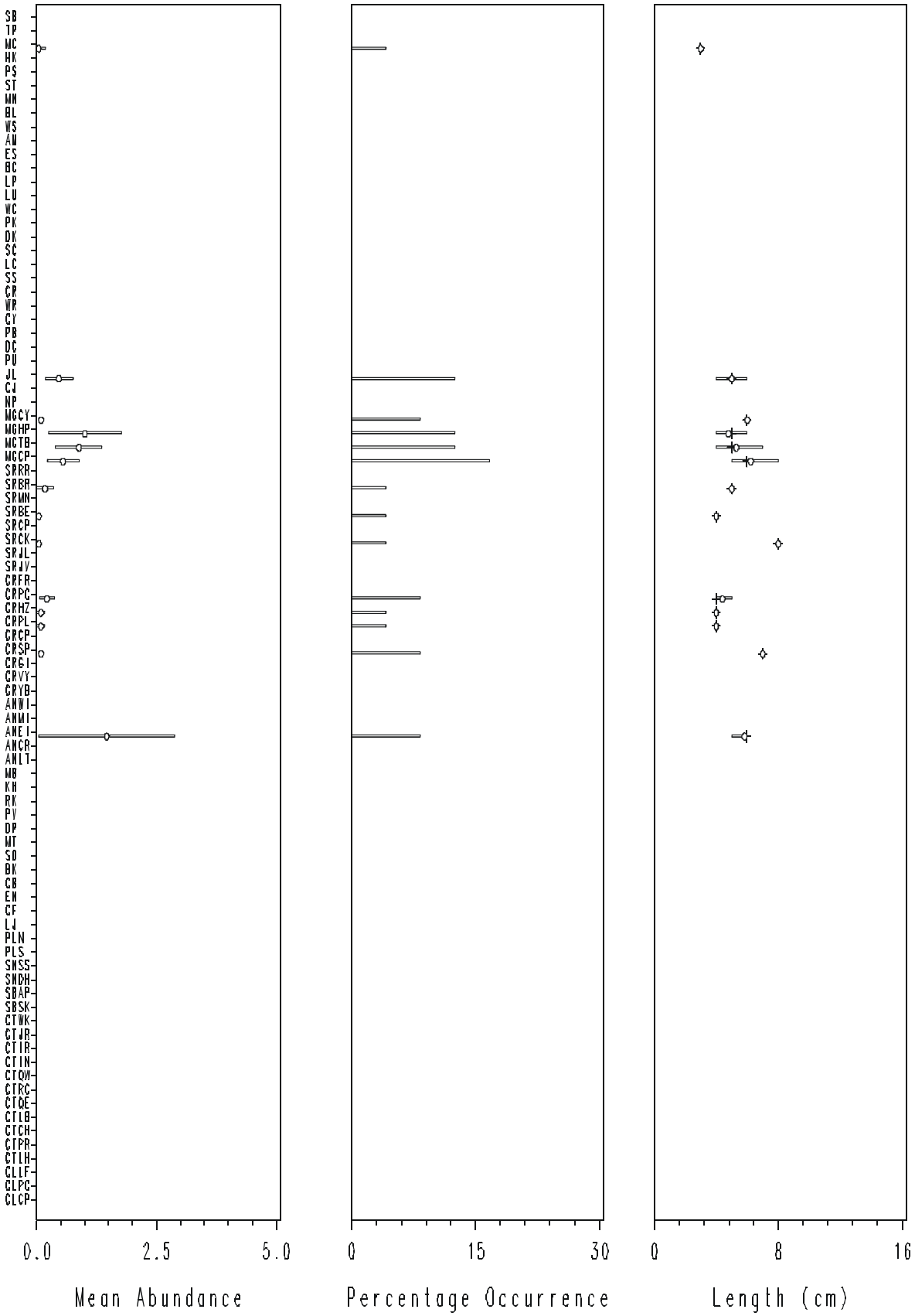
## Sebastes atrovirens - Kelp rockfish



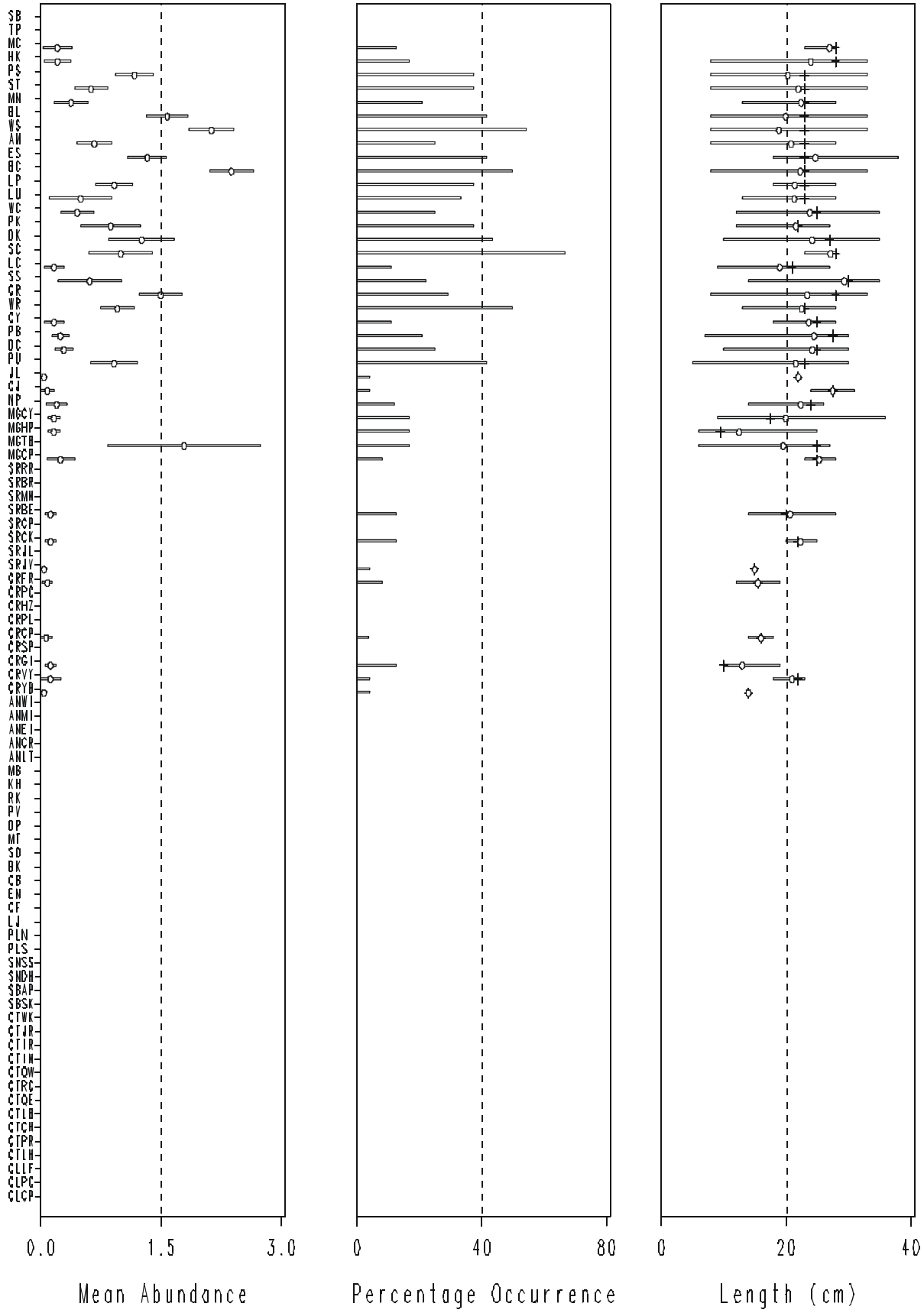
## Sebastes auriculatus - Brown rockfish



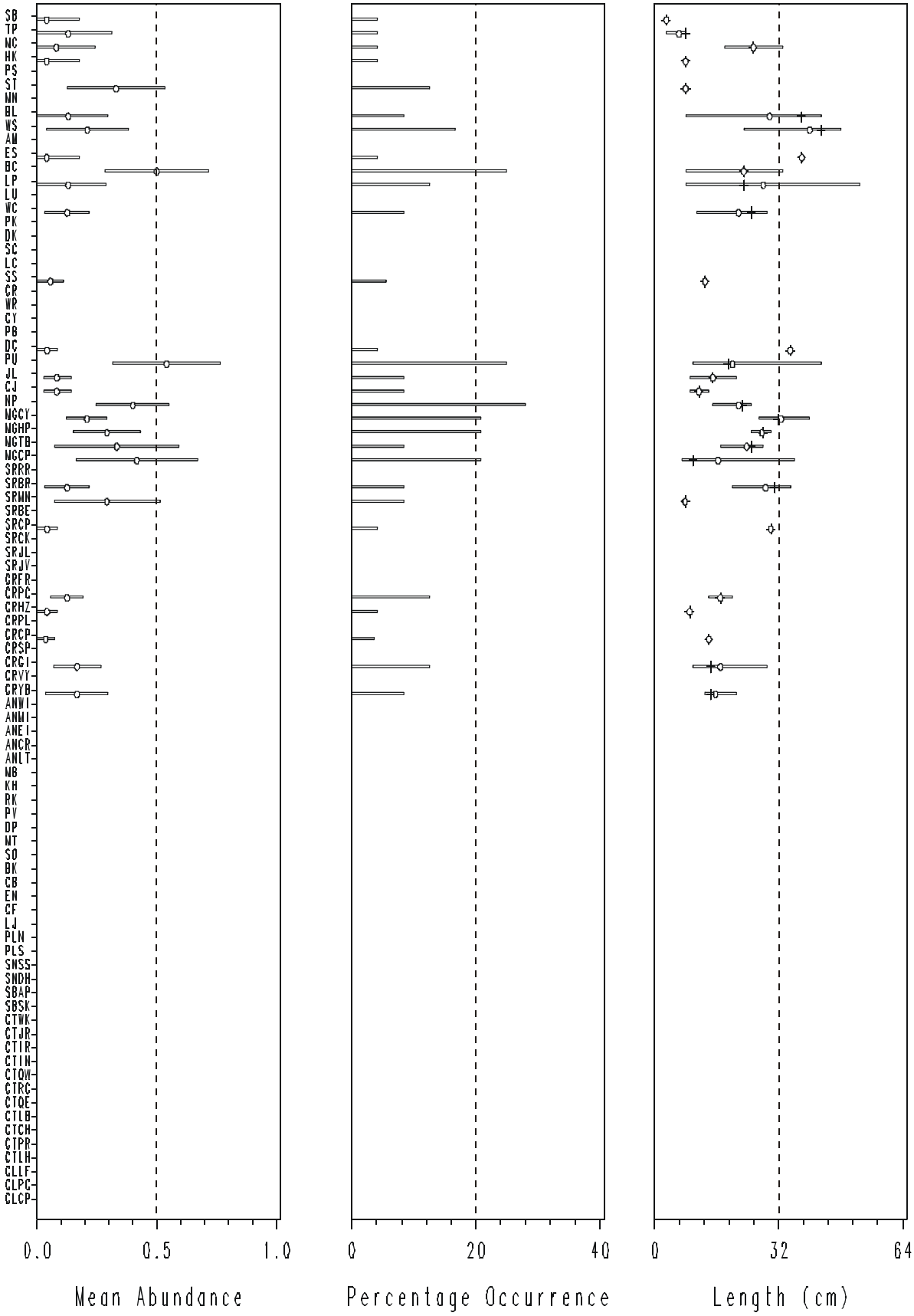
Sebastes atrovirens / S. carnatus / S. chrysomelas / S. caurinus (YOY)



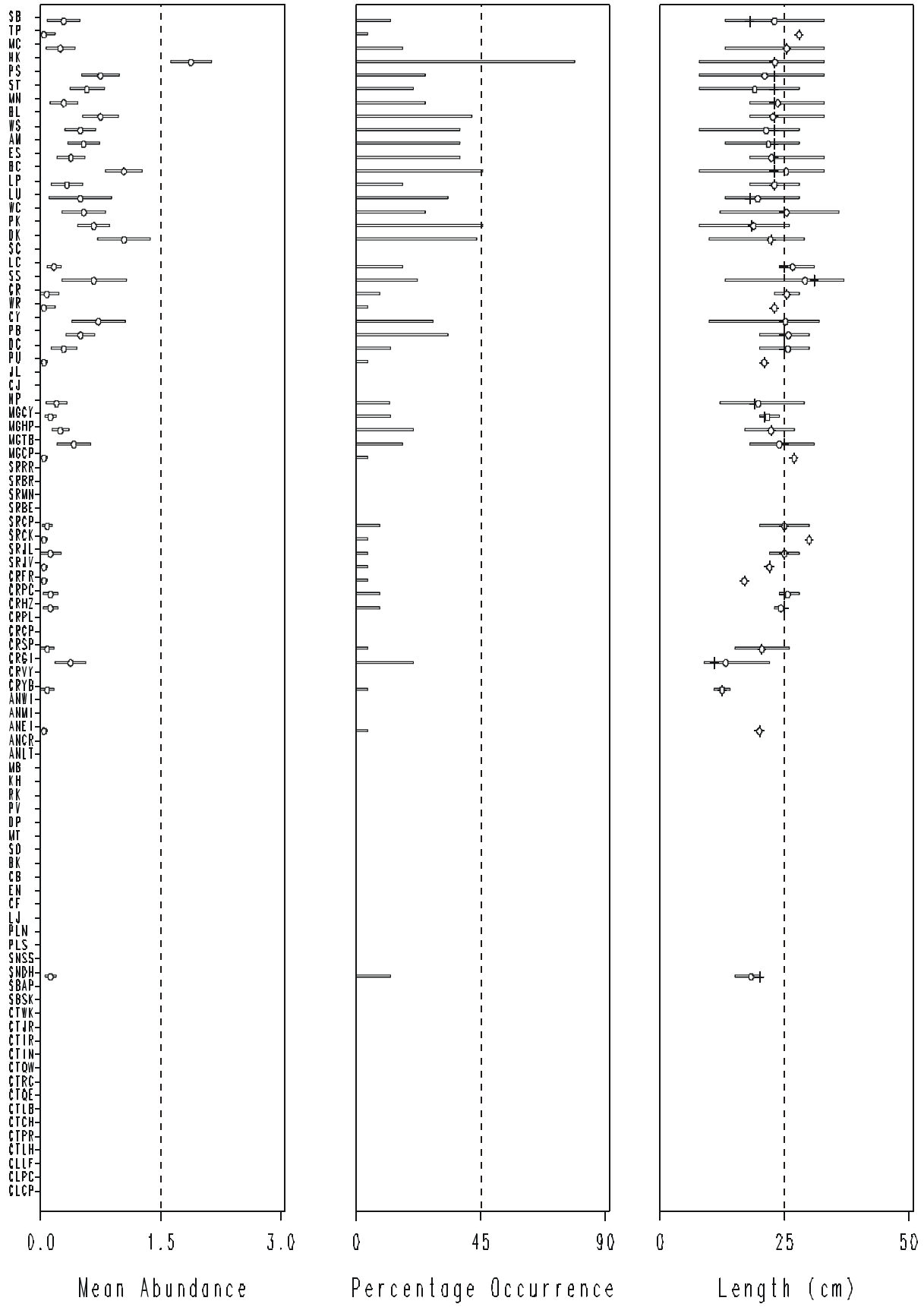
## Sebastes carnatus - Gopher rockfish



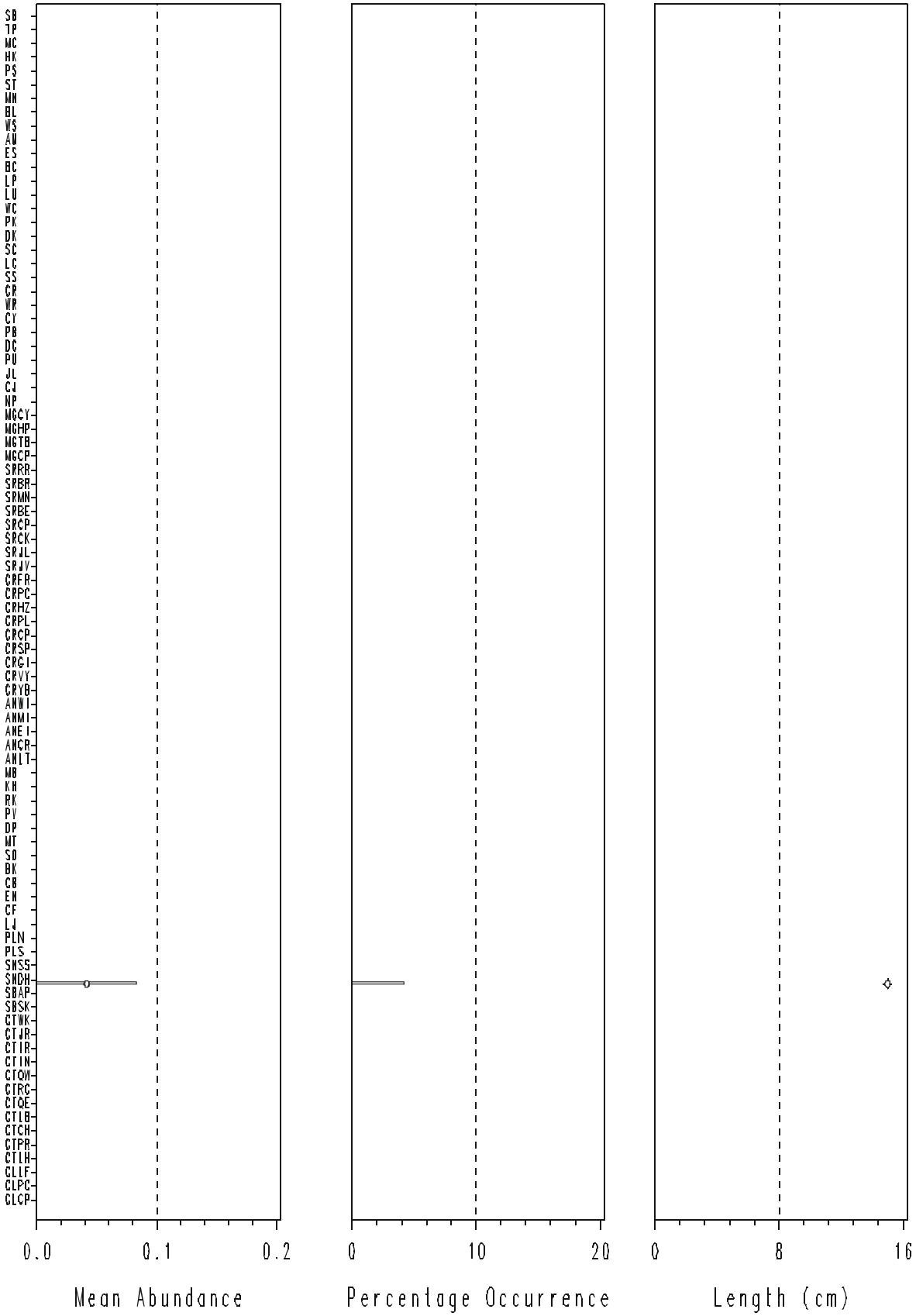
## Sebastes caurinus - Copper rockfish



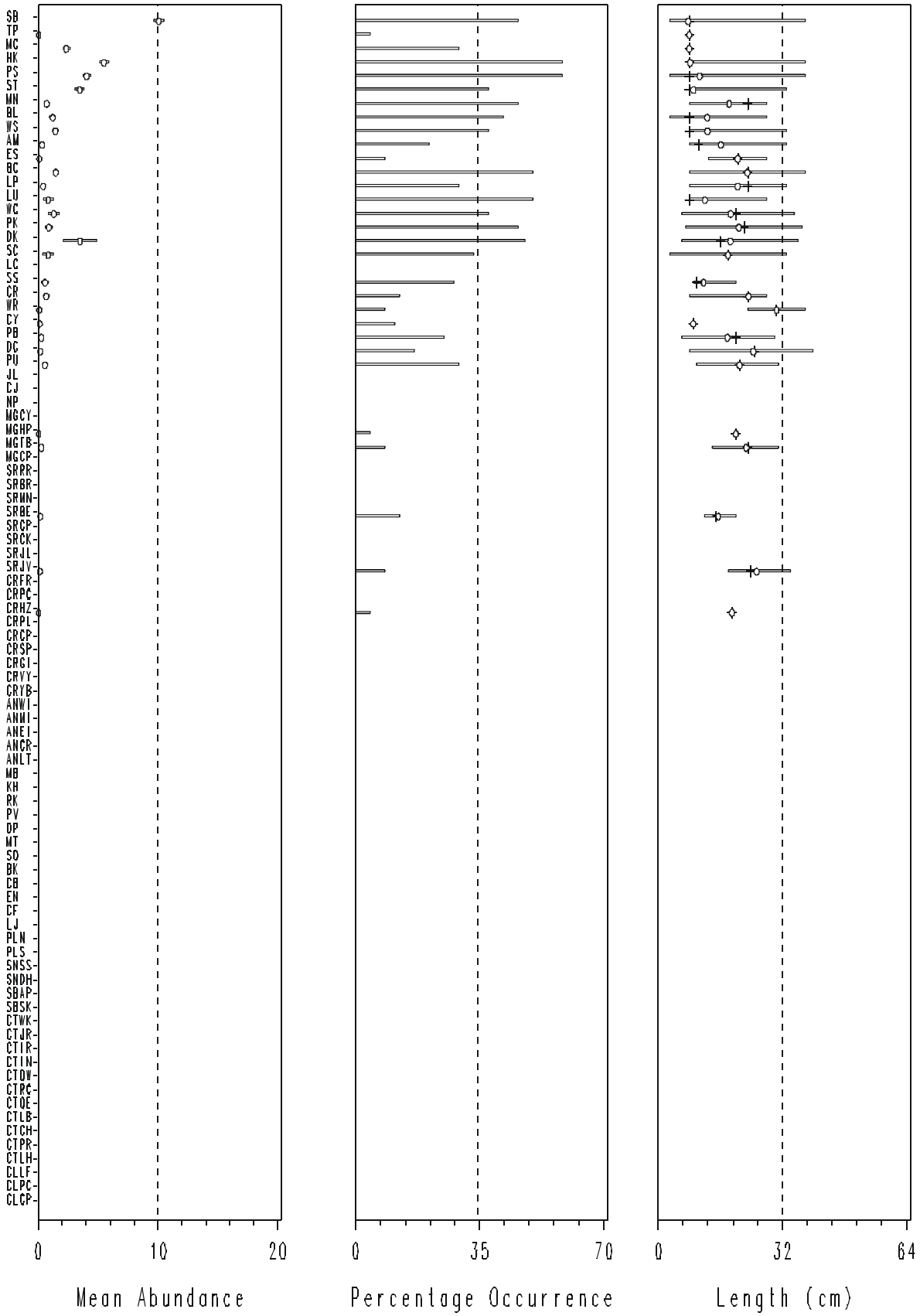
## Sebastes chrysomelas - Black and yellow rockfish



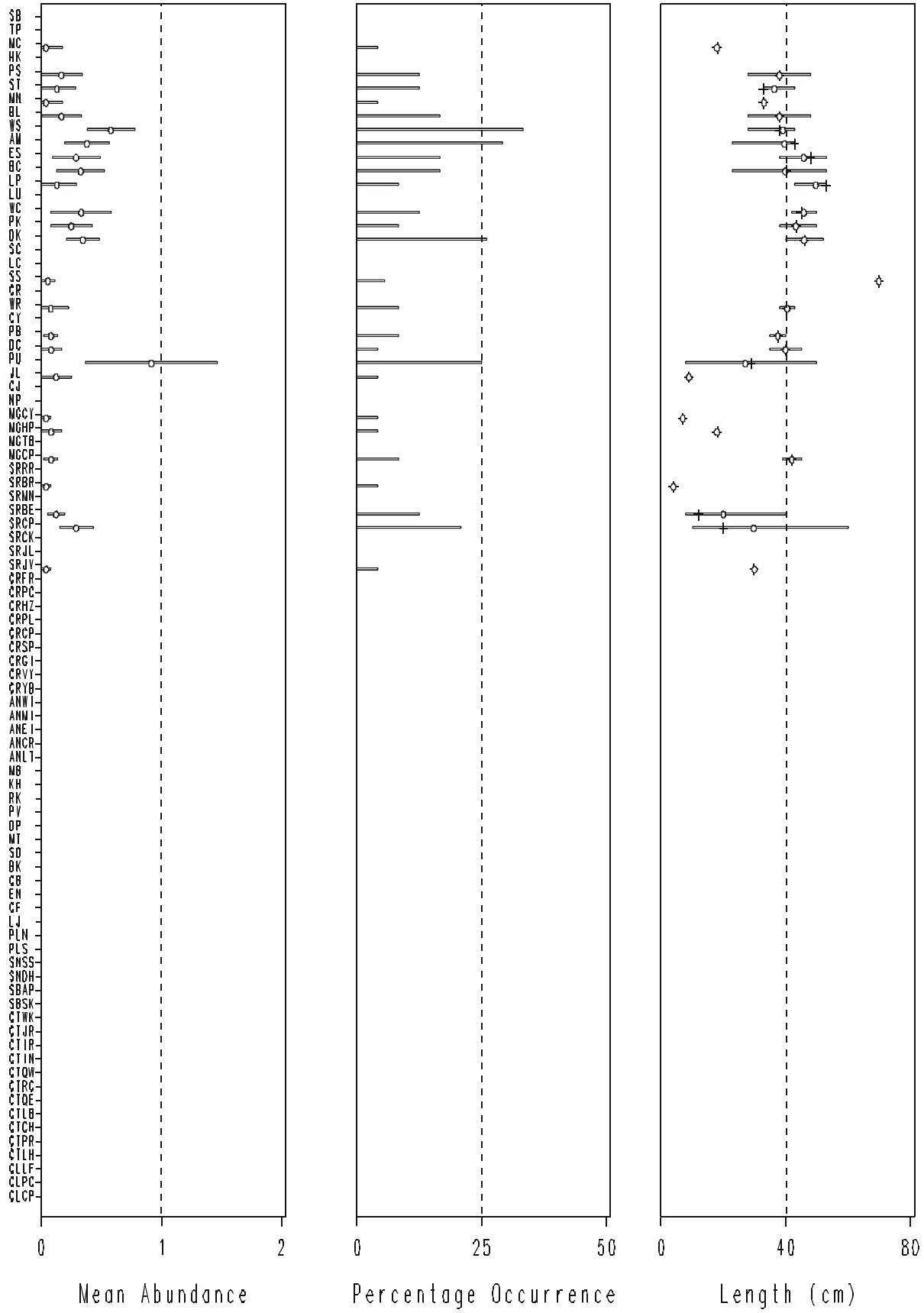
## Sebastes dalli - Calico rockfish



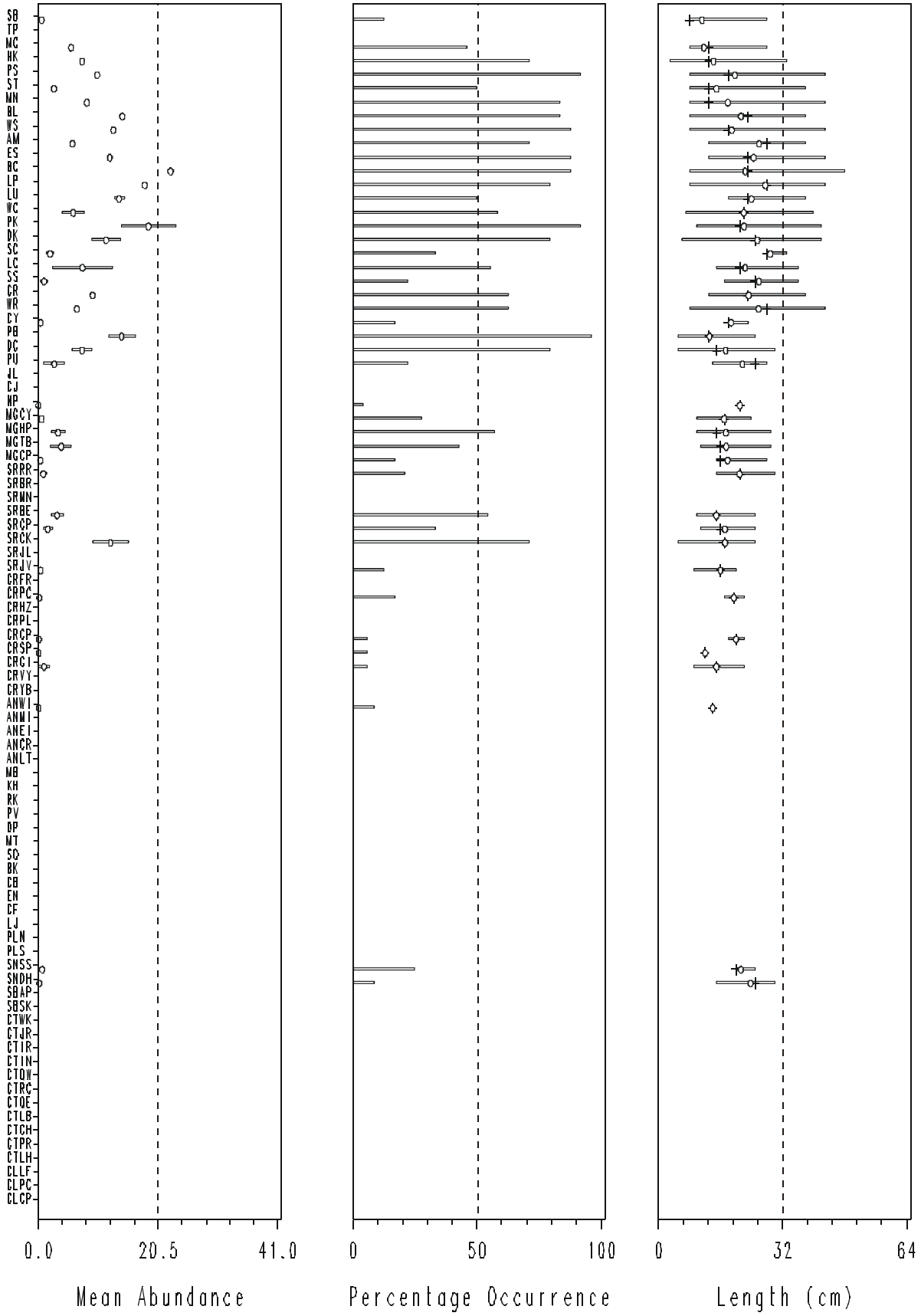
## Sebastes melanops - Black rockfish



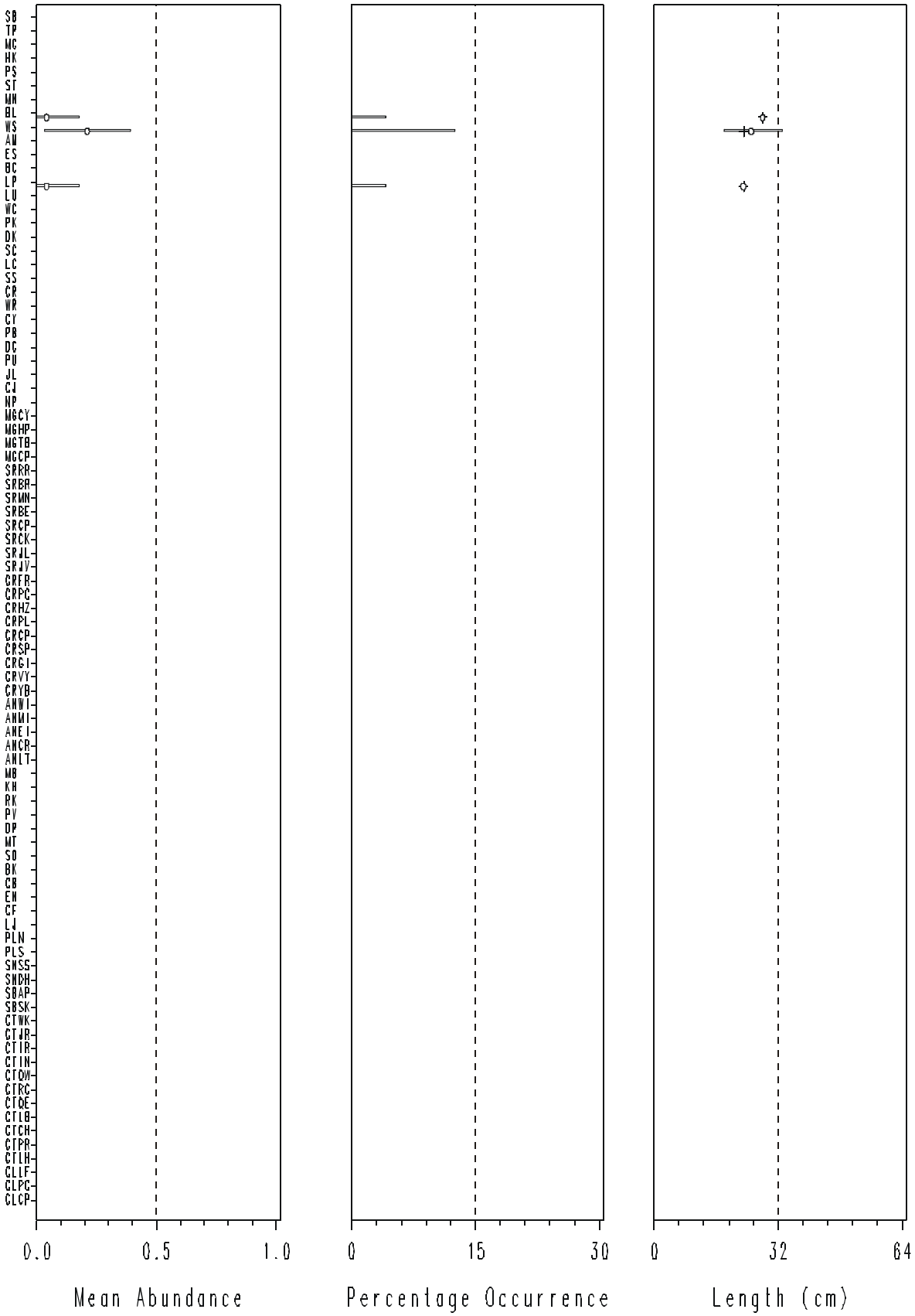
## Sebastes miniatus - Vermilion rockfish



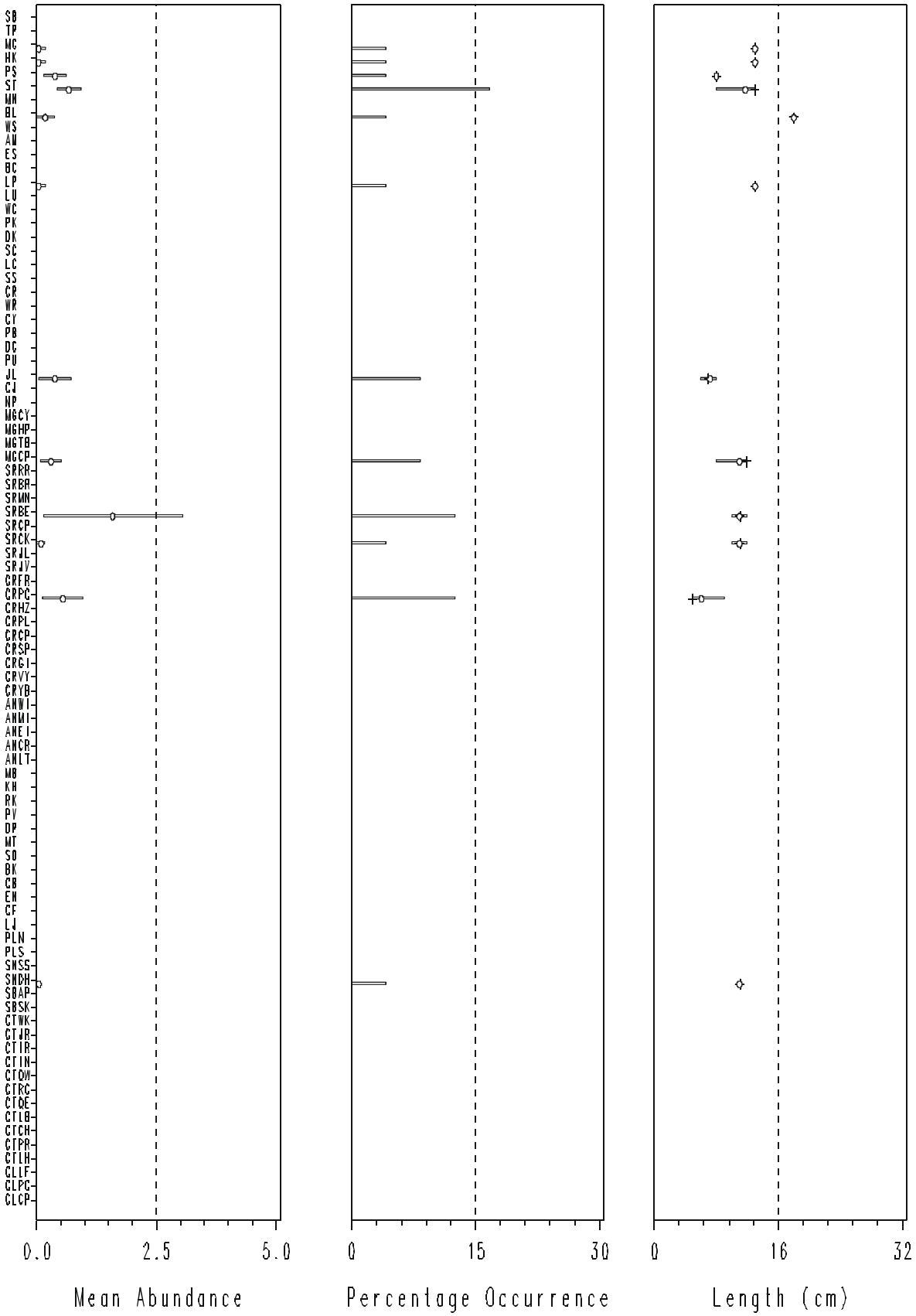
## Sebastes mystinus - Blue rockfish (midwater data)



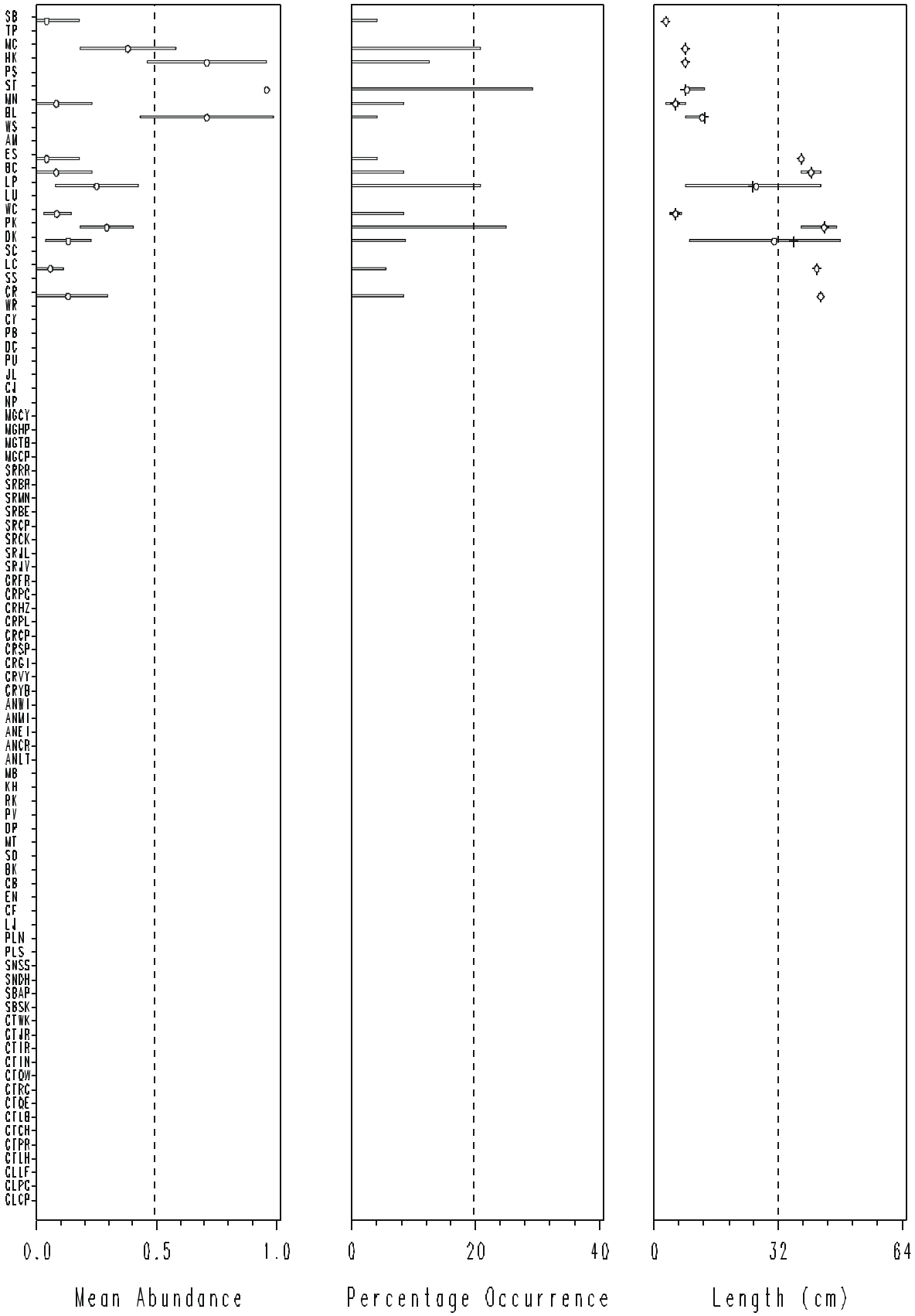
## Sebastes nebulosus - China rockfish



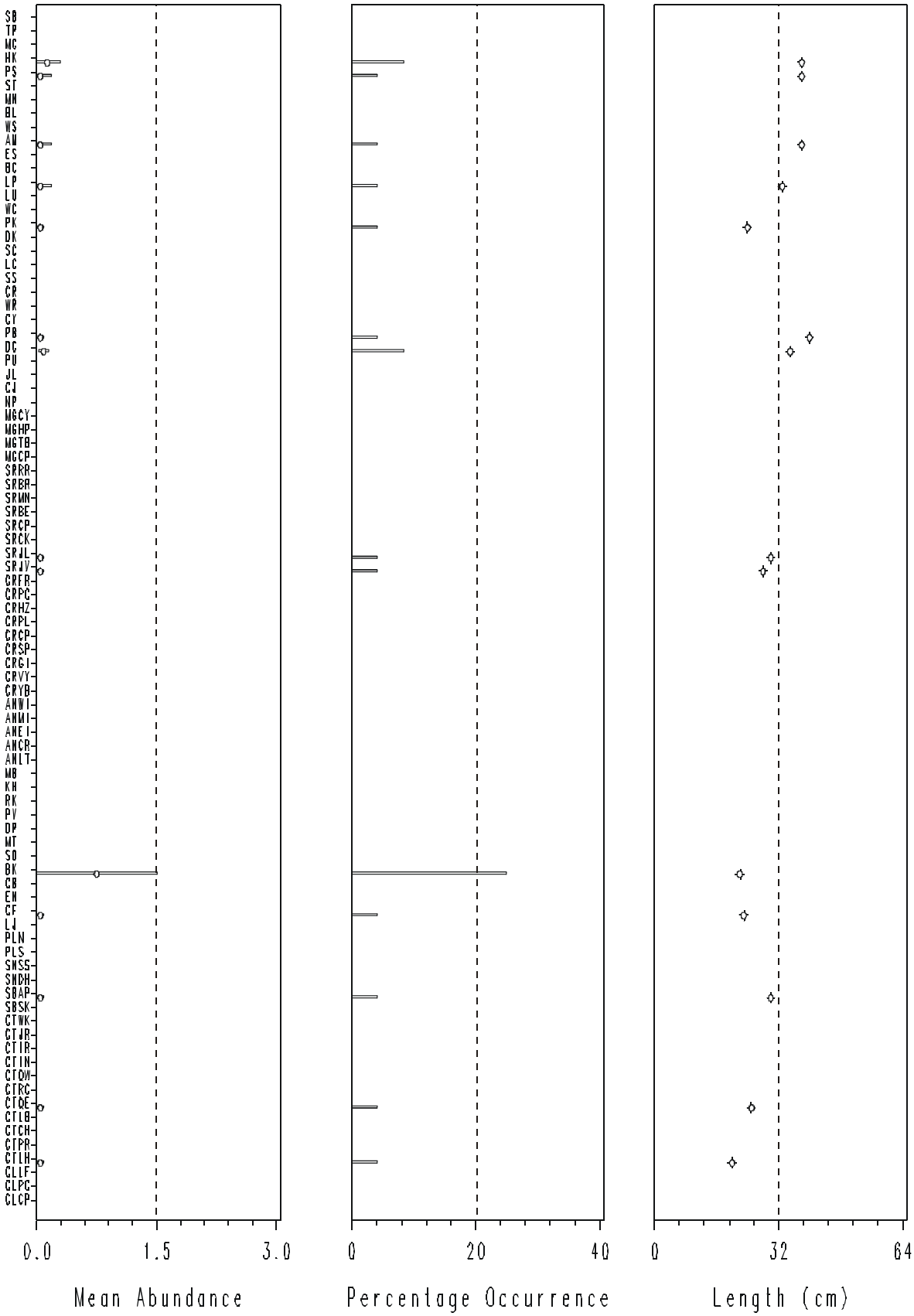
## Sebastes paucispinis - Bocaccio



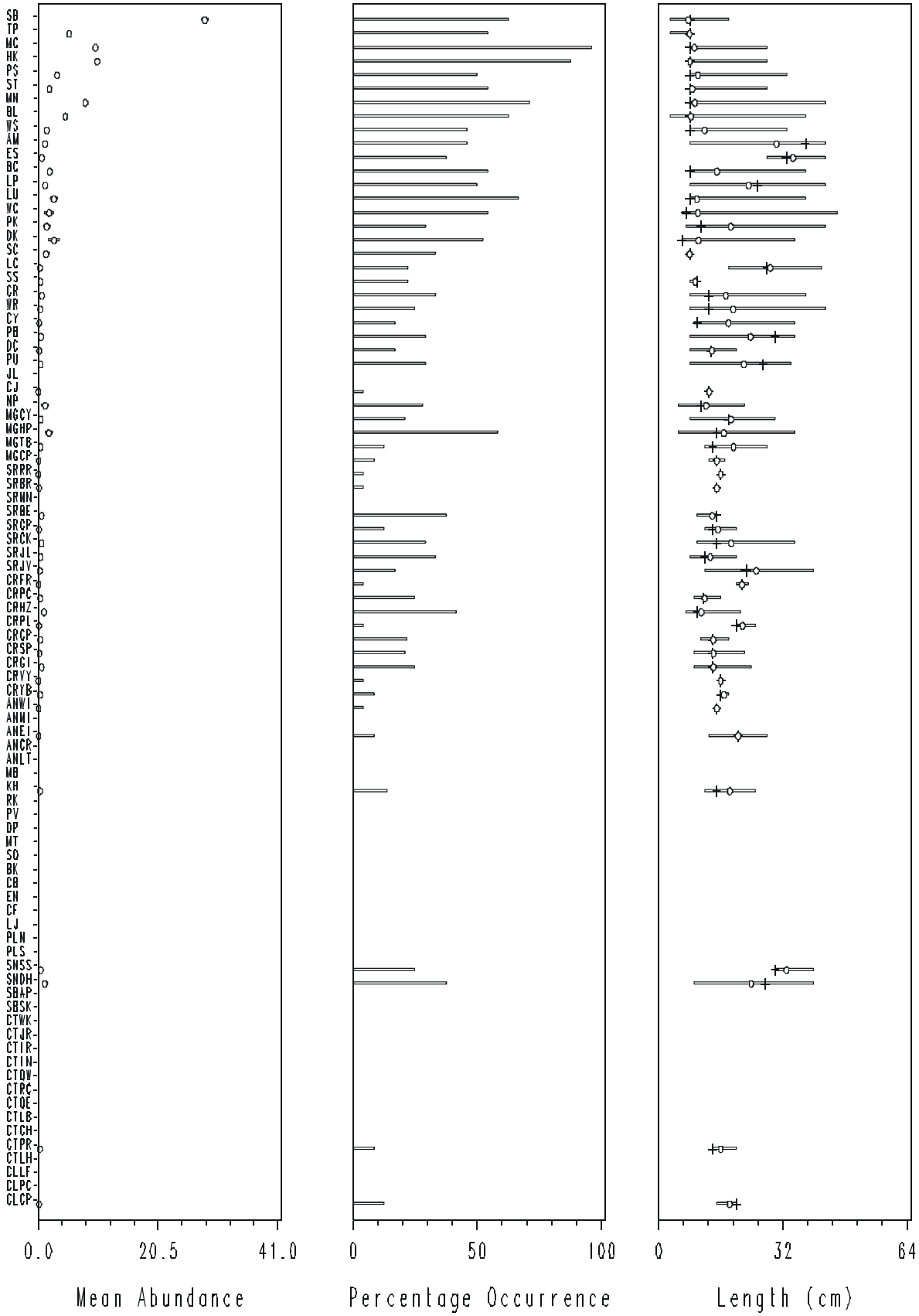
Sebastes pinniger - Canary rockfish



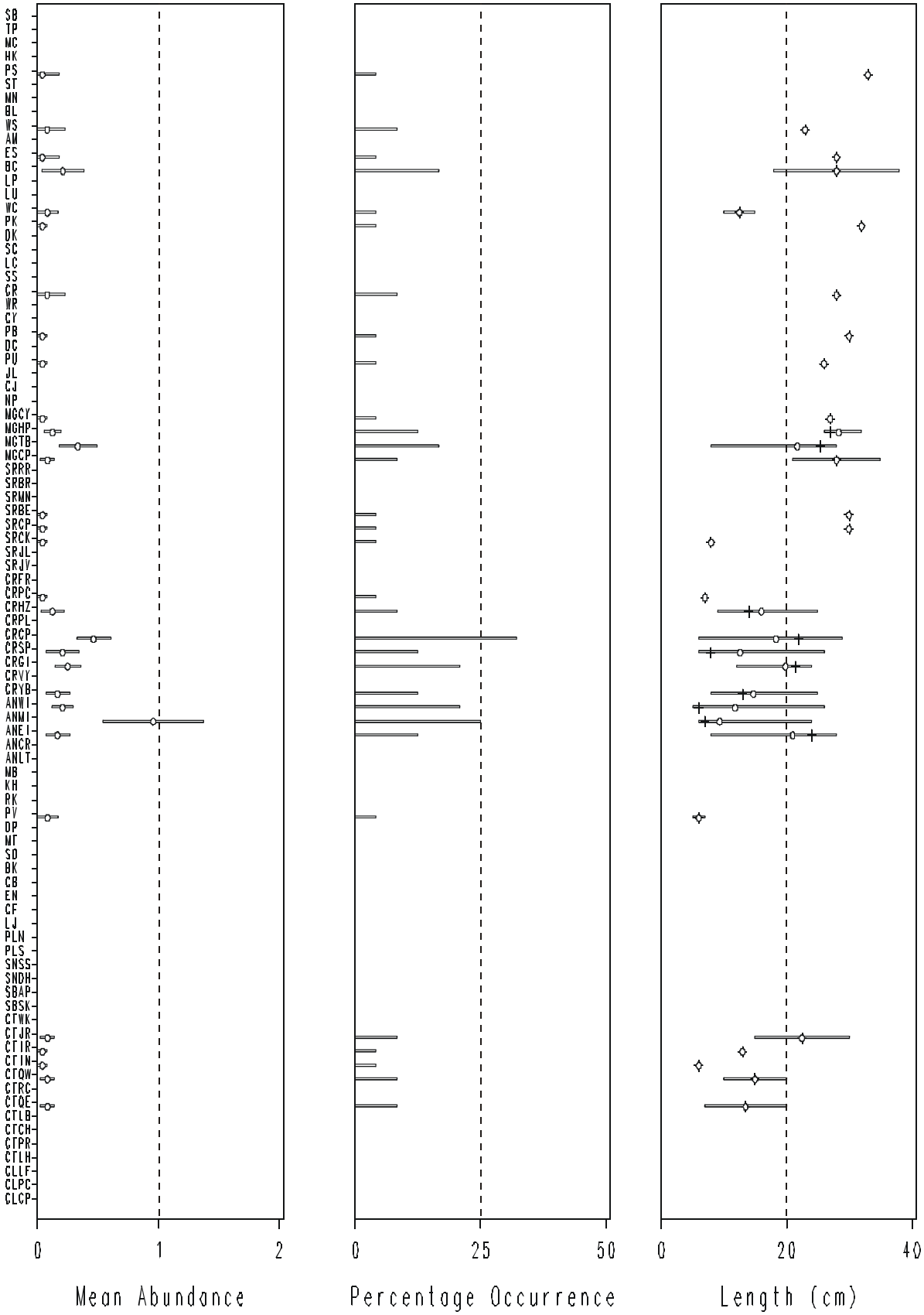
## Sebastes rastrelliger - Grass rockfish



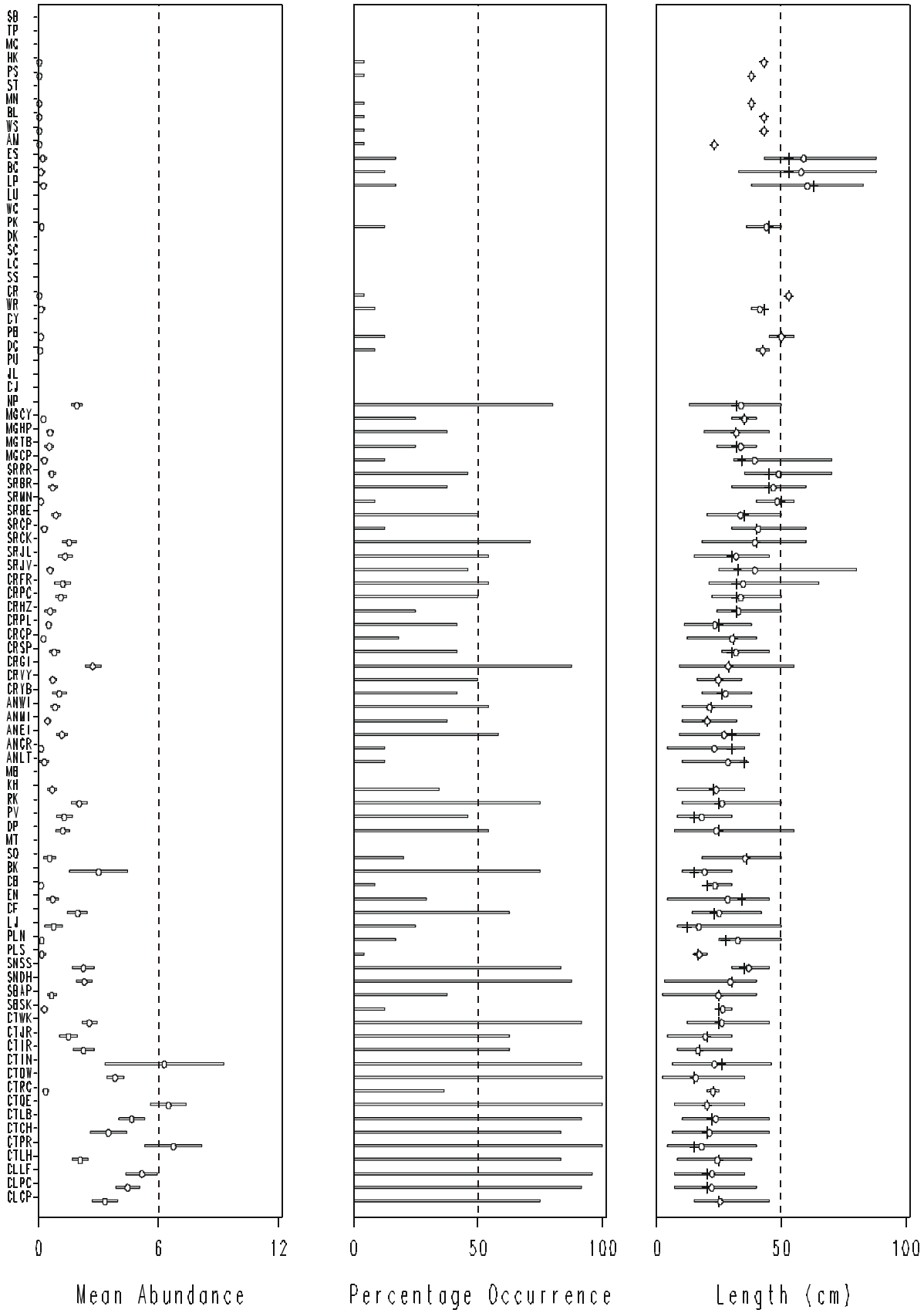
## Sebastes serranoides / S. flavidus - Olive / Yellowtail rockfish



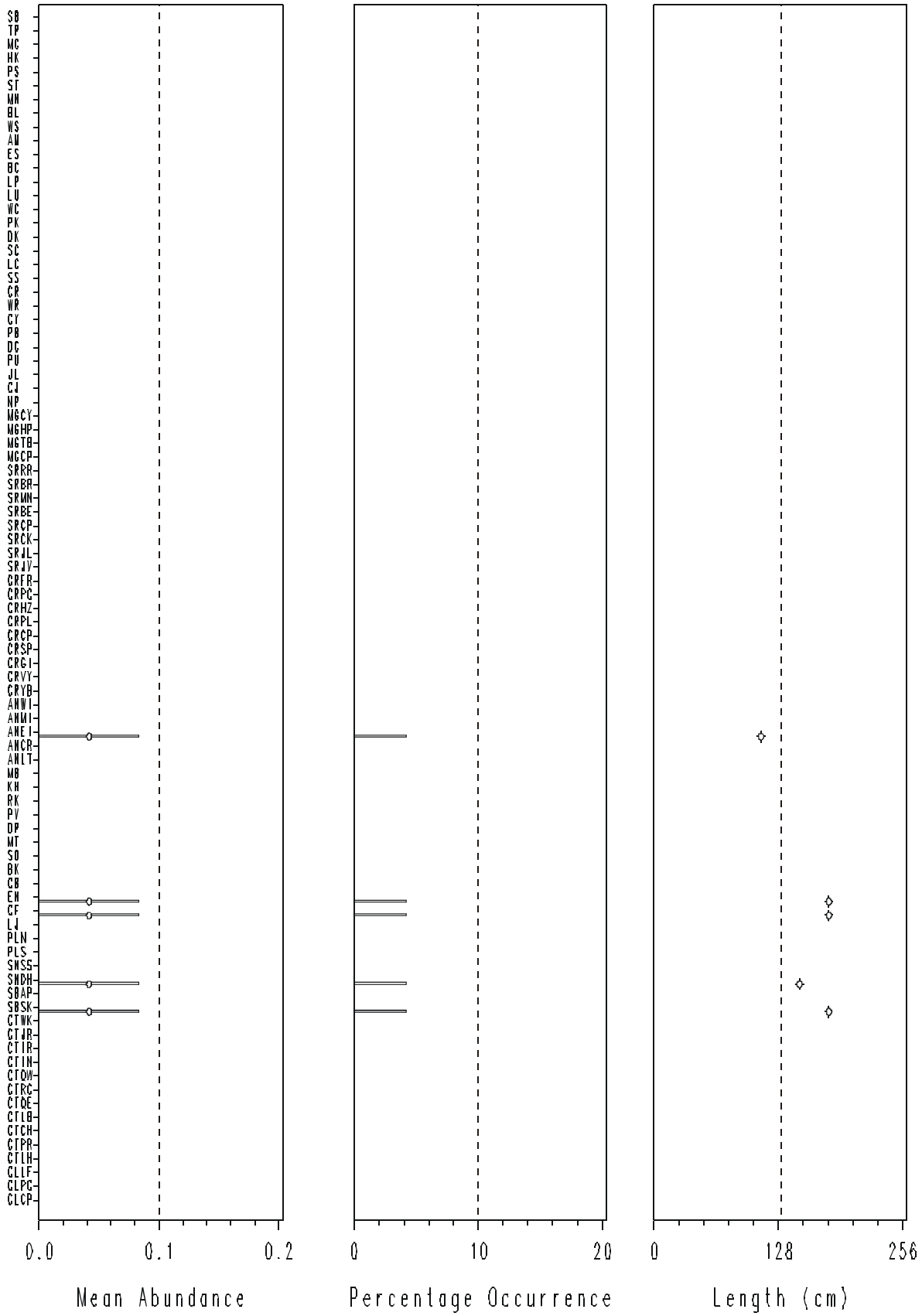
## Sebastes serriceps - Treefish



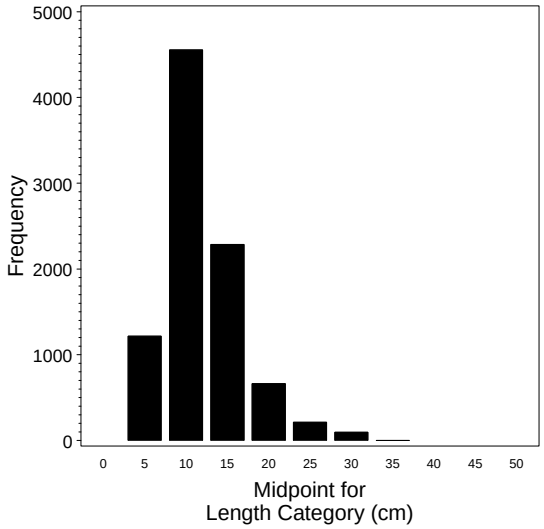
## Semicossyphus pulcher - Sheephead



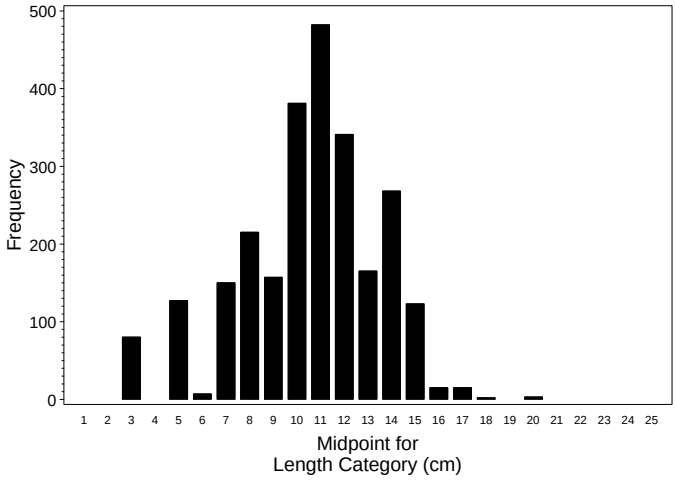
Stereolepis gigas - Giant sea bass



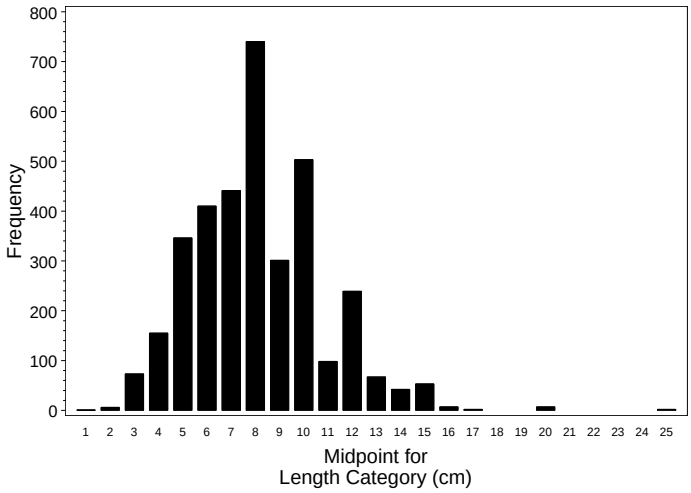
*Atherinops californiensis* – Topsmelt



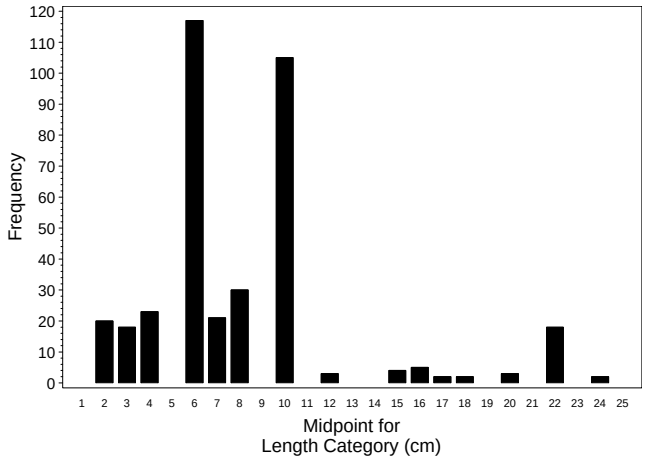

*Aulorhynchus flavidus* – Tubesnout



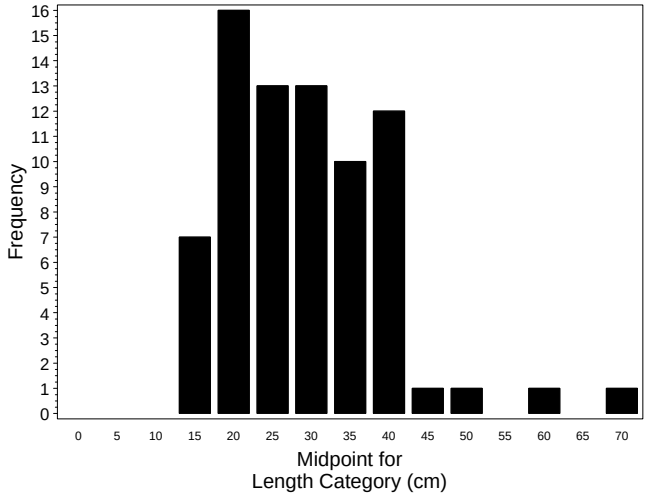

*Brachyistius frenatus* – Kelp surfperch



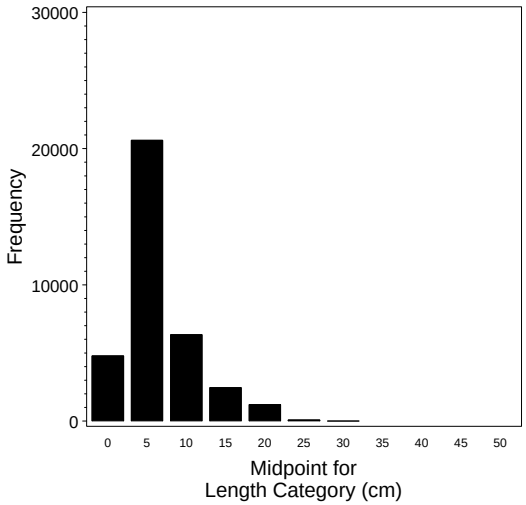
*Cymatogaster aggregata* – Shiner surfperch



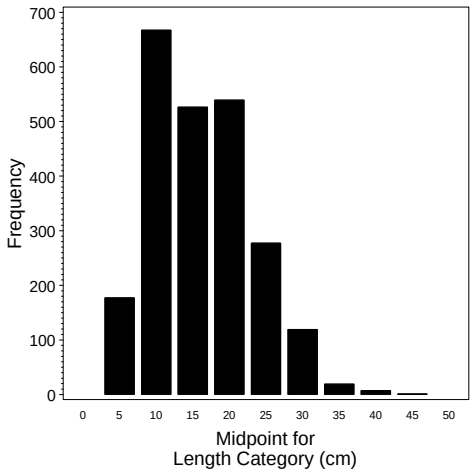

*Caulolatilus princeps* – Ocean Whitefish



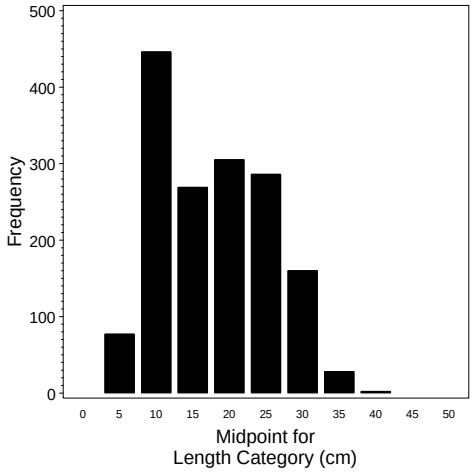

*Chromis punctipinnis* – Blacksmith



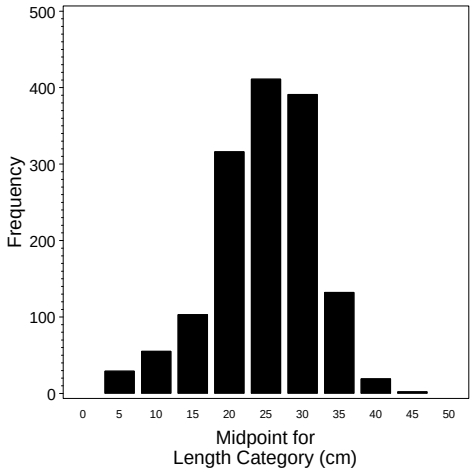
*Embiotoca jacksoni* – Black surfperch



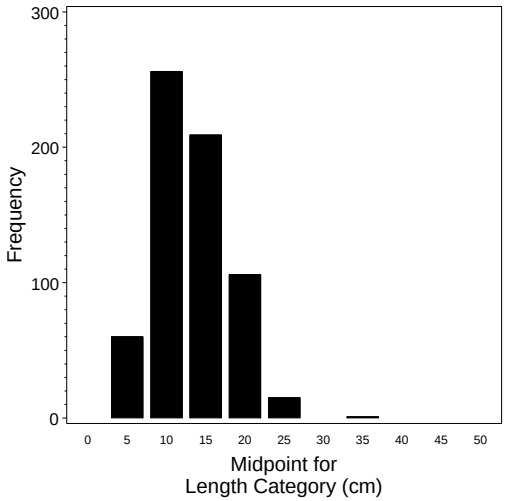

*Embiotoca lateralis* – Striped surfperch



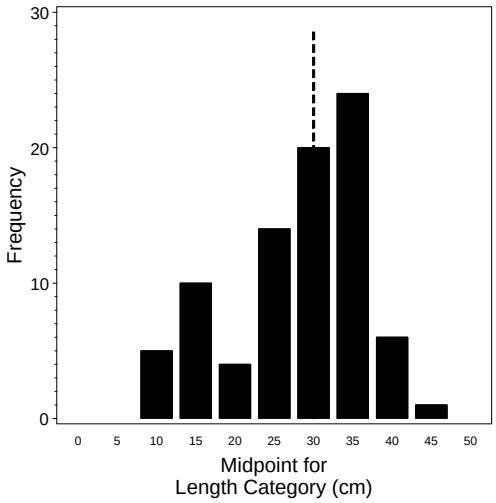

*Girella nigricans* – Opaleye



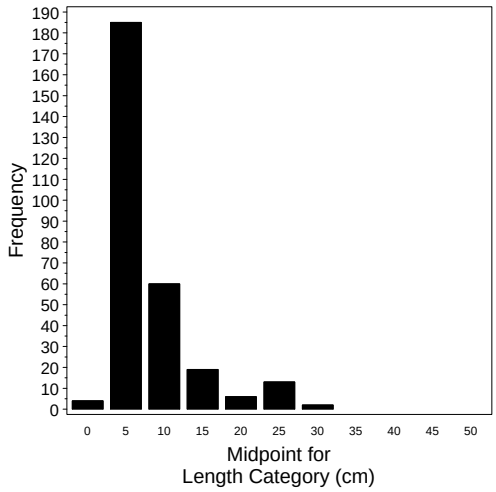
*Hypsurus caryi* – Rainbow surfperch



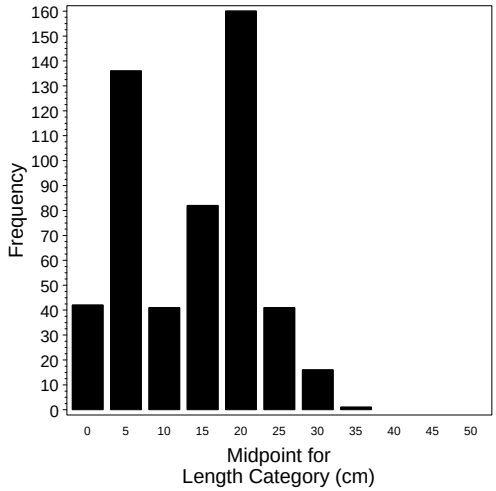

*Hexagrammos decagrammus* – Kelp greenling



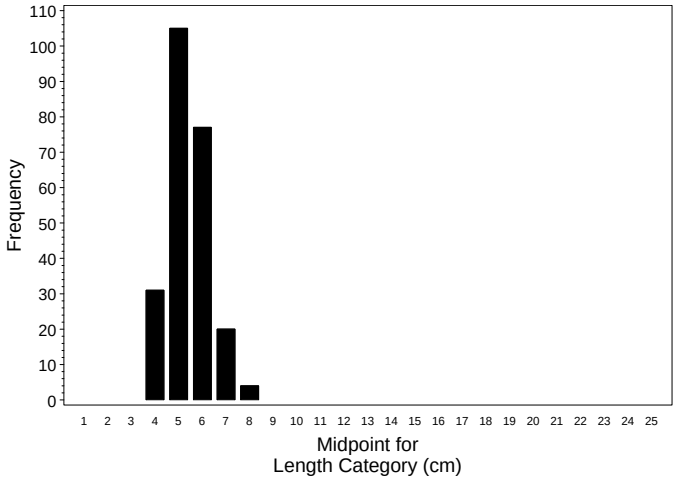

*Heterostichus rostratus* – Giant kelpfish



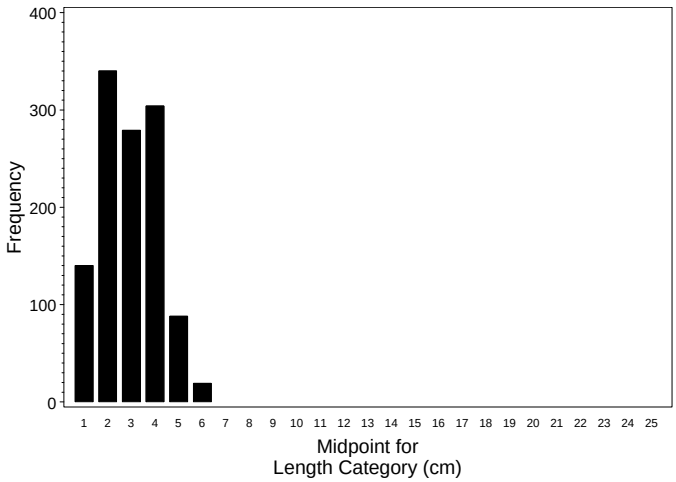
*Halichoeres semicinctus* – Rock wrasse



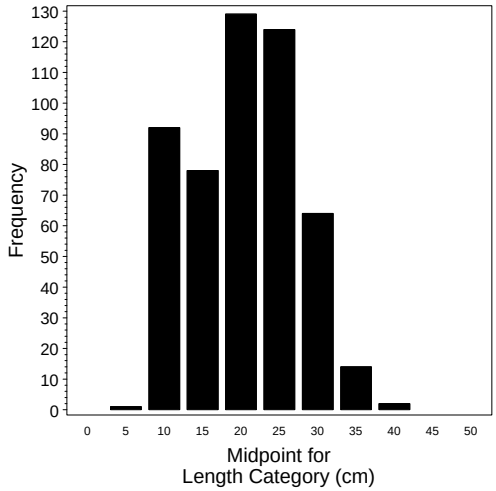

*Sebastes atrovirens / S. carnatus / S. chrysomelas* (YOY) – KGB rockfishes



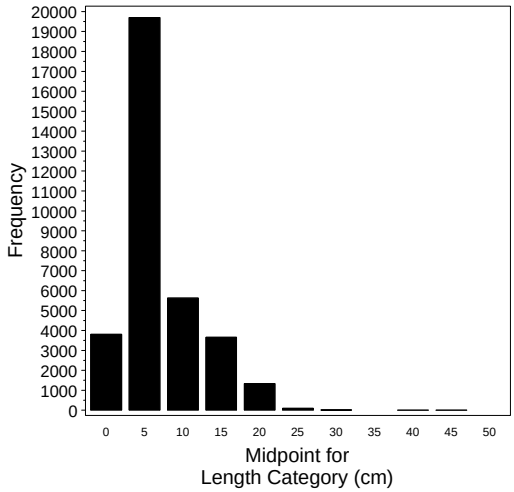

*Lythrypnus dalli* – Bluebanded goby



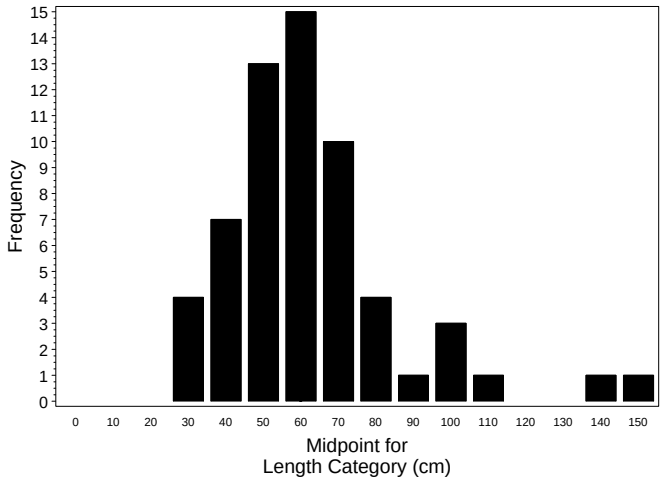
*Medialuna californiensis* – Halfmoon



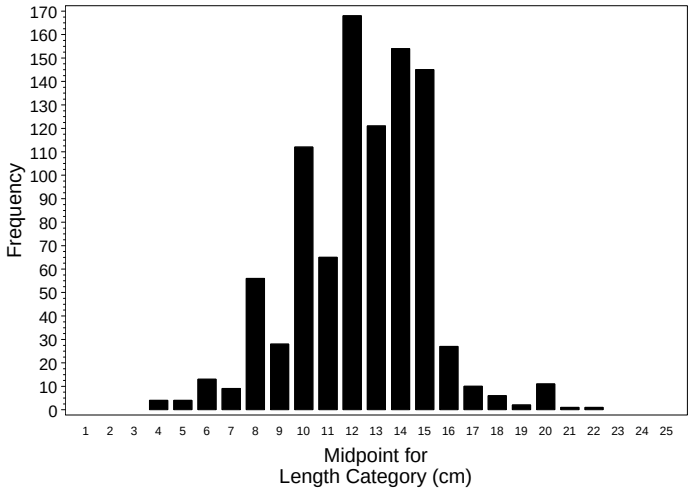

*Oxyjulis californica* – Senorita



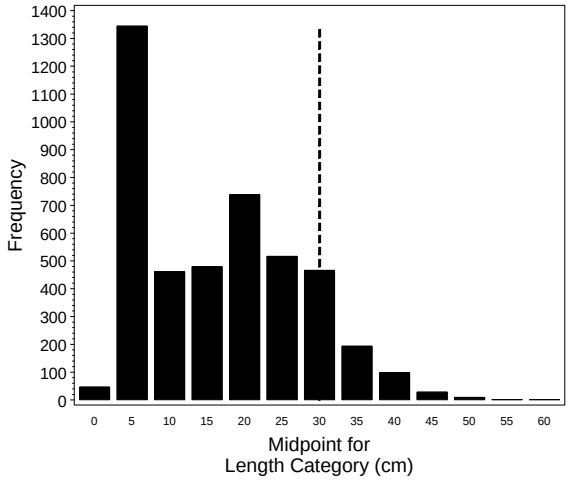

*Ophiodon elongatus* – Lingcod



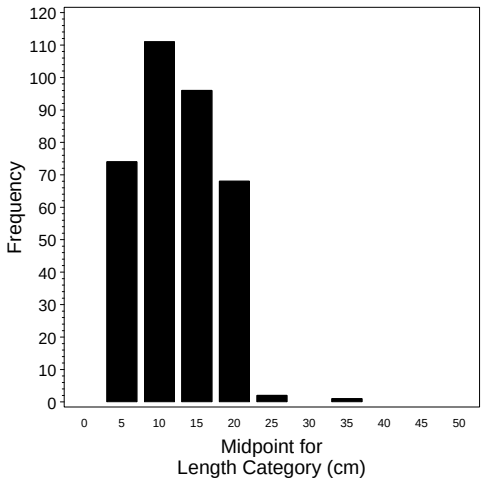
*Oxylebius pictus* – Painted greenling



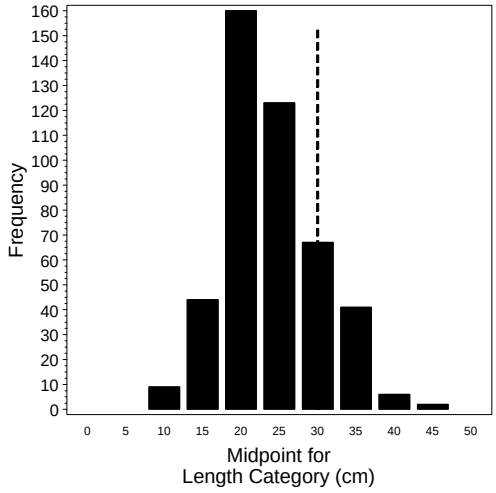

*Paralabrax clathratus* – Kelp bass



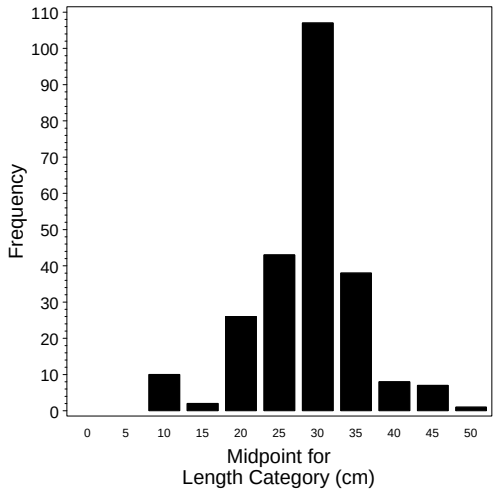

*Phanerodon furcatus* – White surfperch



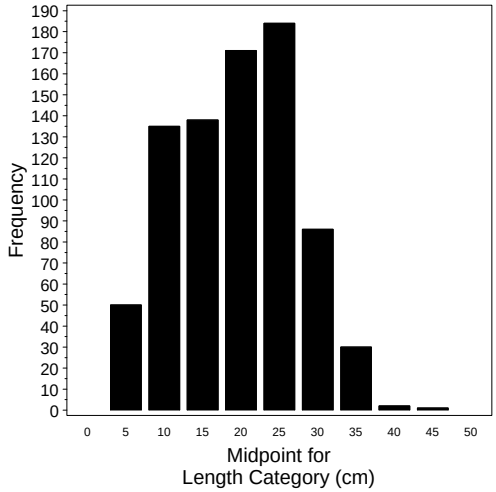
*Paralabrax nebulifer* – Barred sandbass



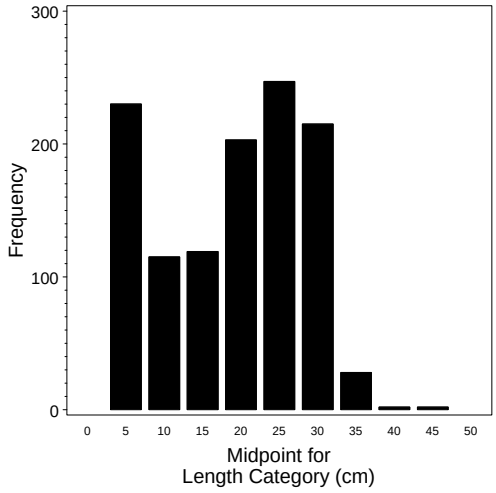

*Rhacochilus toxotes* – Rubberlip surfperch



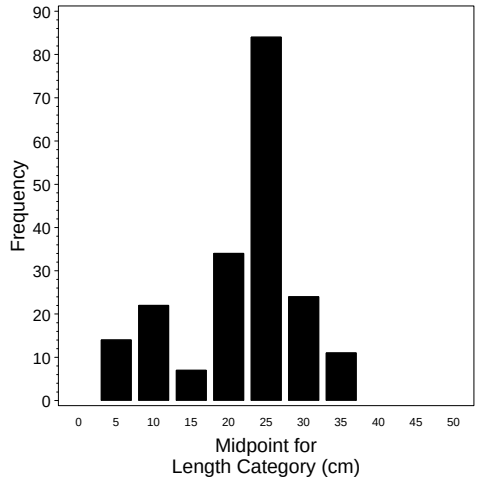

*Rhacochilus vacca* – Pile perch



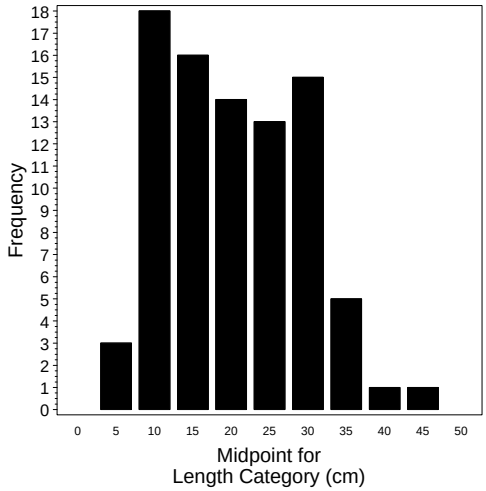
*Sebastes atrovirens* – Kelp rockfish



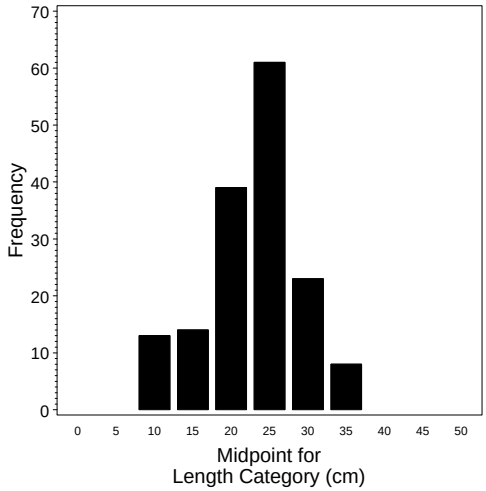

*Sebastes carnatus* – Gopher rockfish



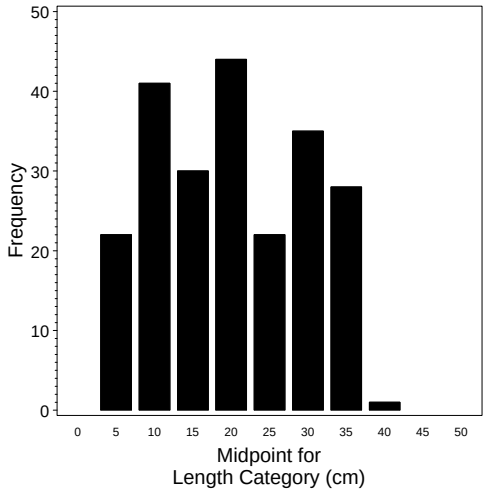

*Sebastes caurinus* – Copper rockfish



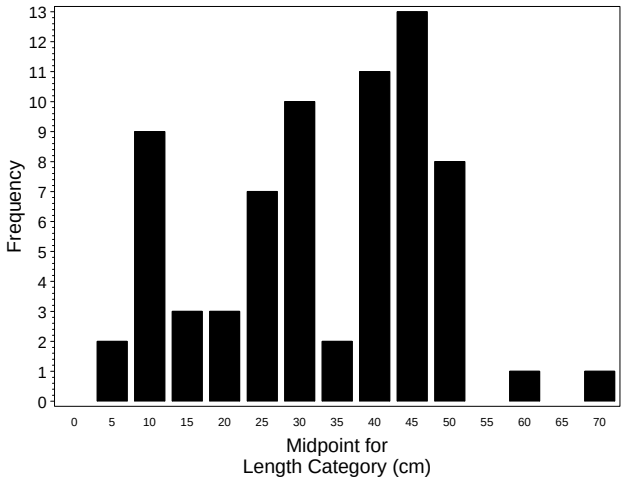
*Sebastes chrysomelas* – Black and yellow rockfish



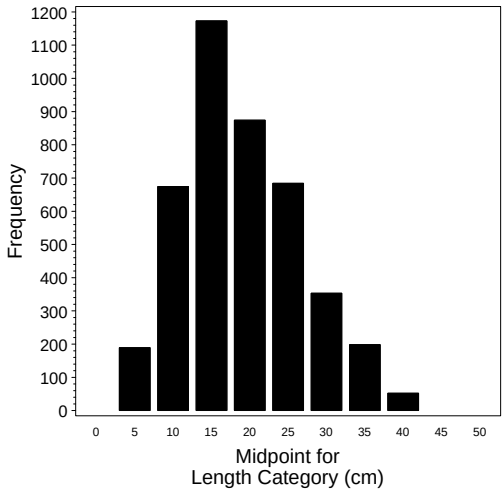

*Sebastes melanops* – Black rockfish



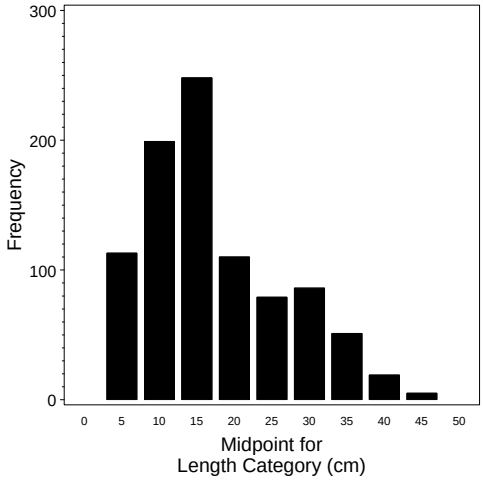

*Sebastes miniatus* – Vermilion rockfish



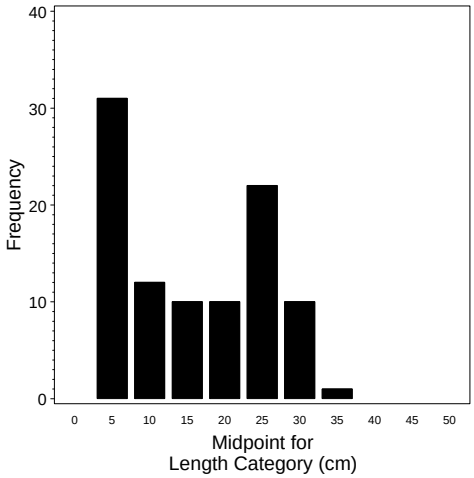
*Sebastes mystinus* – Blue rockfish



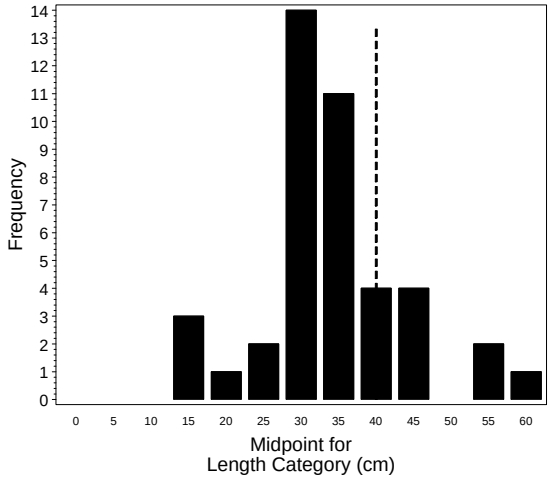

*Sebastes serranoides* – Olive rockfish



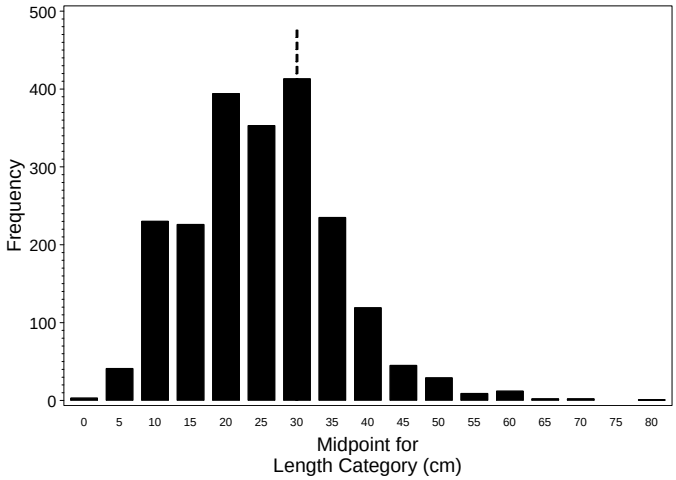

*Sebastes serriceps* – Treefish

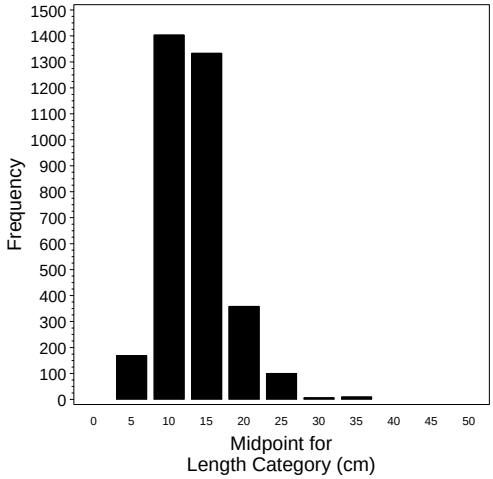


*Scorpaenichthys marmoratus* – Cabezon




*Semicossyphus pulcher* – California sheephead




*Trachurus symmetricus* – Jack mackerel