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| --- | --- | --- | --- | --- | --- |
|  | Survey Type | |  | Individual Chi-Square Test | |
| Species | SVC | Roving | Total | X2 | p-value |
| Goldentail moray | 1 (11.11%) | 8 (88.89%) | 9 (100%) | 6.3629 | 0.01165 |
| Green moray | 1 (4.55%) | 21 (95.45%) | 22 (100%) | 18.289 | 1.898e-05 |
| Purplemouth moray | 1 (7.69%) | 12 (92.31%) | 13 (100%) | 10.682 | 0.001082 |
| Spotted moray | 6 (9.84%) | 55 (90.16%) | 61 (100%) | 55.608 | 8.848e-14 |
| Sharptail eel | 1 (33.33%) | 2 (66.67%) | 3 (100%) | 0.50472 | 0.4774 |
| Amberjack | 1 (50%) | 1 (50%) | 2 (100%) | 0 | 1 |
| Black grouper | 13 (25%) | 39 (75%) | 52 (100%) | 19.025 | 1.29e-05 |
| Coney | 5 (29.41%) | 12 (70.59%) | 17 (100%) | 2.3004 | 0.1293 |
| Gag grouper | 4 (15.38%) | 22 (84.62%) | 26 (100%) | 12.653 | 0.000375 |
| Graysby | 54 (45.76%) | 64 (54.24%) | 118 (100%) | 1.8856 | 0.1697 |
| Nassau grouper | 1 (4.76%) | 20 (95.24%) | 21 (100%) | 19.911 | 8.114e-06 |
| Red grouper | 13 (28.26%) | 33 (71.74%) | 46 (100%) | 12.617 | 0.0003823 |
| Red hind | 1 (12.5%) | 7 (87.5%) | 8 (100%) | 5.3168 | 0.02112 |
| Rock hind | 1 (20%) | 4 (80%) | 5 (100%) | 0.81914 | 0.3654 |
| Greater soapfish | 1 (14.29%) | 6 (85.71%) | 7 (100%) | 4.2869 | 0.03841 |
| Scamp | 1 (50%) | 1 (50%) | 2 (100%) | 0 | 1 |
| Black margate | 2 (66.67%) | 1 (33.33%) | 3 (100%) | 0 | 1 |
| Cubera snapper | 1 (50%) | 1 (50%) | 2 (100%) | 0 | 1 |
| Mutton snapper | 16 (43.24%) | 21 (56.76%) | 37 (100%) | 0.83489 | 0.3609 |
| Barracuda | 7 (46.67%) | 8 (53.33%) | 15 (100%) | 0.076429 | 0.7822 |
| Lionfish | 5 (12.20%) | 36 (87.80%) | 41 (100%) | 27.154 | 1.879e-07 |
| Spotted scorpionfish | 1 (11.11%) | 8 (88.89%) | 9 (100%) | 4.1756 | 0.04101 |
| Trumpetfish | 28 (96.55%) | 1 (3.45%) | 29 (100%) | 26.964 | 2.072e-07 |
| Total | 165 (30.12%) | 383 (69.89%) | 548 (100%) |  |  |
| X2 = 125.87, df = 22, p < 2.2e-16 | | | | | |

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| --- | --- | --- | --- | --- | --- |
| **Model** | **Parameters in top ranked models** | **df** | **AICc** | **ΔAIC** | **Weight** |
| SVC vs. Roving Survey | | | | | |
|  | 1. **Colouration** | 6 | 1567.1 | 0.00 | 0.518 |
|  | 1. **Colouration** + Cryptic Behaviour | 7 | 1569.3 | 2.24 | 0.169 |
|  | 1. **Colouration** + Reef Type | 7 | 1570.4 | 3.38 | 0.096 |
| SVC vs. Transect Survey | | | | | |
|  | 1. **Colouration** + **Cryptic Behaviour** + **Reef Type** + **Maximum Length** + **Shape**\*Size Bin | 17 | 28542.7 | 0.00 | 0.288 |
|  | 1. **Colouration** + Cryptic Behaviour + **Reef Type** + **Maximum Length** + **Shape**\*Size Bin + Position | 18 | 28545.3 | 2.56 | 0.080 |
|  | 1. **Colouration** + **Cryptic Behaviour** + **Reef Type** + **Maximum Length** + **Shape**\*Size Bin + Nocturnal | 18 | 28545.4 | 2.66 | 0.076 |
|  | 1. **Colouration** + **Cryptic Behaviour** + **Reef Type** + **Maximum Length** + **Shape**\*Size Bin + Stony Coral | 18 | 28545.8 | 3.08 | 0.062 |
|  | 1. **Colouration** + **Cryptic Behaviour** + **Reef Type** + **Maximum Length** + **Shape**\*Size Bin + Stony Coral + Octocoral | 19 | 28546.1 | 3.41 | 0.052 |
|  | 1. **Colouration** + **Cryptic Behaviour** + **Reef Type** + **Maximum Length** + **Shape**\*Size Bin + Octocoral | 18 | 28546.1 | 3.44 | 0.052 |