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| --- | --- | --- | --- |
|  | 2019 | 2020 | Model Outputs |
| Response Variable | Moraine | Harrison Cove | Moraine | Harrison Cove | Explanatory Variables | Model | Estimate | CI (lwr, upr) | S.E. | *X*2 value | *p* value |
| Dive activity (dives h-1) | 45.9 ± 11.3 | 38.9 ± 8.8 | 33.7 ± 7.6 | 39.4 ± 8.8 | Site (MO)Year (2020)Site (MO):Year (2020) | GLMM – Negative Binomial | 0.0400.045-0.043 | -0.040-0.034-0.123 | 0.1190.1250.036 | 0.0410.0410.041 | 0.9521.251.13 | 0.3290.2630.288 |
| Number of wiggles per dive | 7.6 ± 2.2 | 7.2 ± 2.8 | 9.2 ± 1.8 | 8.9 ± 1.4 | Site (MO)Year (2020)Site (MO):Year (2020) | GLMM -Negative Binomial | -0.015-0.107-0.011 | -0.090 -0.183-0.086 | 0.061-0.0310.065 | 0.0390.0390.039 | 0.1427.660.080 | 0.706**0.006**0.777 |
| Dive duration (s) | 64.4 ± 17.0 | 71.1 ± 20.5 | 89.0 ± 19.3 | 66.7 ± 12.4 | Site (MO)Year (2020)Site (MO):Year (2020) | GLMM - Gaussian | -0.047-0.0660.088 | -0.136-0.155-0.000 | 0.0410.0220.177 | 0.0450.0450.045 | 1.092.153.81 | 0.2970.1430.051 |
| Max dive depth (m) | 19.0 ± 5.7 | 23.0 ± 7.8 | 30.9 ± 8.7 | 16.1 ± 5.2 | Site (MO)Year (2020)Site (MO):Year (2020) | GLMM - Gamma | -0.113-0.0320.197 | -0.230-0.1490.080 | 0.0040.0850.314 | 0.0600.0600.060 | 3.570.28410.91 | 0.0590.594**<0.001** |
| Descent rate (ms-1) | 0.86 ± 0.11 | 0.90 ± 0.16 | 1.05 ± 0.08 | 0.85 ± 0.07 | Site (MO)Year (2020)Site (MO):Year (2020) | GLMM - Gaussian | -0.037-0.0380.066 | -0.068-0.0690.034 | 0.0070.0060.109 | 0.0190.0190.019 | 3.774.0712.09 | 0.052**0.044****<0.001** |
| Ascent rate (ms-1) | 0.84 ± 0.03 | 0.86 ± 0.06 | 0.91 ± 0.08 | 0.83 ± 0.08 | Site (MO)Year (2020)Site (MO):Year (2020) | GLMM - Gaussian | -0.008-0.0150.022 | -0.036-0.043-0.006 | 0.0200.0130.050 | 0.0140.0140.014 | 0.2861.082.33 | 0.5930.2980.127 |
| Bottom time (s) | 30.5 ± 8.7 | 32.3 ± 9.5 | 40.5 ± 8.9 | 35.2 ± 4.3 | Site (MO)Year (2020)Site (MO):Year (2020) | GLMM - Gaussian | -0.020-0.0920.041 | -0.104-0.176-0.043 | 0.064-0.0080.126 | 0.0430.0430.043 | 0.2124.640.935 | 0.645**0.031**0.334 |
| Foraging efficiency | 0.37 ± 0.03 | 0.38 ± 0.02 | 0.40 ± 0.03 | 0.43 ± 0.03 | Site (MO)Year (2020)Site (MO):Year (2020) | GLMM - Gaussian | 0.032-0.041-0.020 | -0.003-0.075-0.055 | 0.067-0.0060.014 | 0.0180.0180.018 | 3.365.311.33 | 0.067**0.021**0.249 |