Body length estimation of Neogene macrophagous lamniform sharks (*Carcharodon* and *Otodus*) derived from associated fossil dentitions

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**APPENDIX 5.** Correction factors applied for missing teeth in fossil *Carcharodon* and *Otodus* dentitions. Correction factors for *Carcharodon* spp. are based on the mean percentage of the total summed crown width from a sample of 10 modern *C. carcharias* dentitions (see Figure 6A-B). Correction factors for adult *Otodus megalodon* are based on crown width proportions in UF-VP-311000. Correction factors for juvenile *Otodus megalodon* are based on crown width proportions in CH-31-46P. Correction factors for *Otodus chubutensis* are from GHC 3.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Position | Correction Factor (CF) | | Position | Correction Factor (CF) | |
| ***Carcharodon carcharias*** | | | | | |
| A1 | 0.109 | | a1 | 0.112 | |
| A2 | 0.111 | | a2 | 0.131 | |
| I3 | 0.100 | | a3 | 0.117 | |
| L1 | 0.115 | | l1 | 0.122 | |
| L2 | 0.114 | | l2 | 0.116 | |
| L3 | 0.108 | | l3 | 0.106 | |
| L4 | 0.095 | | l4 | 0.091 | |
| L5 | 0.075 | | l5 | 0.074 | |
| L6 | 0.061 | | l6 | 0.055 | |
| L7 | 0.045 | | l7 | 0.039 | |
| L8 | 0.034 | | l8 | 0.030 | |
| L9 | 0.026 | | l9 | 0.017 | |
| L10 | 0.018 | | l10 | 0.009 | |
| L11 | 0.018 | |  |  | |
|  |  | |  |  | |
| ***Otodus megalodon*** | | | | | |
|  | Adult | Juvenile |  | Adult | Juvenile |
| A1 | 0.092 | 0.106 | a1 | 0.096 | 0.096 |
| A2 | 0.092 | 0.095 | a2 | 0.108 | 0.112 |
| A3 | 0.089 | 0.104 | a3 | 0.105 | 0.106 |
| L1 | 0.105 | 0.102 | l1 | 0.111 | 0.103 |
| L2 | 0.102 | 0.111 | l2 | 0.104 | 0.108 |
| L3 | 0.098 | 0.105 | l3 | 0.102 | 0.110 |
| L4 | 0.097 | 0.094 | l4 | 0.104 | 0.106 |
| L5 | 0.099 | 0.081 | l5 | 0.094 | 0.094 |
| L6 | 0.082 | 0.065 | l6 | 0.073 | 0.075 |
| L7 | 0.057 | 0.060 | l7 | 0.057 | 0.053 |
| L8 | 0.051 | 0.044 | l8 | 0.045 | 0.037 |
| L9 | 0.035 | 0.032 |  |  | |
|  |  | |  |  | |
| ***Otodus chubutensis*** | | | | | |
| A1 | 0.100 | | a1 | 0.096 | |
| A2 | 0.107 | | a2 | 0.115 | |
| A3 | 0.107 | | a3 | 0.110 | |
| L1 | 0.104 | | l1 | 0.112 | |
| L2 | 0.105 | | l2 | 0.111 | |
| L3 | 0.105 | | l3 | 0.108 | |
| L4 | 0.100 | | l4 | 0.102 | |
| L5 | 0.085 | | l5 | 0.096 | |
| L6 | 0.069 | | l6 | 0.069 | |
| L7 | 0.049 | | l7 | 0.054 | |
| L8 | 0.036 | | l8 | 0.026 | |
| L9 | 0.032 | |  |  | |