Change in Atlantic cod migrations and adaptability of early land-based fishers to severe climate variation in the North Atlantic

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**Supplementary table 1.** The table provides information on the δ13C, %C and %N values of each Atlantic cod vertebrae used in the analysis. Please refer to the main text for further information.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SITE | EXCAVATION | CONTEXT | DATING | TEMPORAL GROUP | USID | δ13C | %C | %N | C/N ratio (atomic) |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 77639 | -12.80 | 15,7 | 5,8 | 3,1 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 77641 | -11.80 | 15,1 | 5,7 | 3,1 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 77644 | -14.50 | 7,3 | 2,7 | 3,2 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 77651 | -11.20 | 11,1 | 4 | 3,2 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 77659 | -15.30 | 15,4 | 5,5 | 3,3 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 77662 | -13.30 | 9,3 | 3,3 | 3,3 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 78479 | -14.00 | 14,6 | 5,3 | 3,2 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 78480 | -15.90 | 14,7 | 5,5 | 3,1 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 78481 | -17.60 | 10,5 | 4 | 3,1 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 80627 | -14.92 | 30,4 | 10,5 | 3,4 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 80628 | -13.94 | 30,3 | 11,1 | 3,2 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 80629 | -14.04 | 26 | 9,1 | 3,3 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 80630 | -12.98 | 31,5 | 11,4 | 3,2 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 80631 | -12.38 | 31,6 | 11,1 | 3,3 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 80632 | -12.94 | 28,2 | 10,1 | 3,3 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 80635 | -11.72 | 28,8 | 10,7 | 3,2 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 80636 | -12.41 | 32,2 | 11,7 | 3,2 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 80637 | -12.93 | 29,6 | 10,9 | 3,2 |
| BRV | 15 | 8 | 980 + 30 14C yr BP | 10th | 80638 | -12.73 | 30,4 | 11,1 | 3,2 |
| BRV | 15 | 17 | Context (≤ 1410) | 14th | 77642 | -13.00 | 15,6 | 5,8 | 3,1 |
| BRV | 15 | 17 | Context (≤ 1410) | 14th | 77653 | -11.40 | 18,4 | 6,7 | 3,2 |
| BRV | 15 | 17 | Context (≤ 1410) | 14th | 77666 | -12.60 | 26,4 | 10 | 3,1 |
| BRV | 15 | 16 | 540 + 30 14C yr BP | 14th | 77640 | -11.70 | 15,2 | 5,8 | 3,1 |
| BRV | 15 | 16 | 540 + 30 14C yr BP | 14th | 77645 | -12.10 | 10,9 | 4 | 3,2 |
| BRV | 15 | 16 | 540 + 30 14C yr BP | 14th | 77646 | -12.70 | 16,5 | 6,1 | 3,2 |
| BRV | 15 | 16 | 540 + 30 14C yr BP | 14th | 77649 | -11.60 | 14 | 5,1 | 3,2 |
| BRV | 15 | 16 | 540 + 30 14C yr BP | 14th | 77652 | -10.70 | 12,6 | 4,6 | 3,2 |
| BRV | 15 | 16 | 540 + 30 14C yr BP | 14th | 78483 | -12.60 | 16,2 | 6 | 3,2 |
| BRV | 15 | 16 | 540 + 30 14C yr BP | 14th | 80918 | -12.71 | 30,6 | 11,6 | 3,1 |
| BRV | 15 | 16 | 540 + 30 14C yr BP | 14th | 80919 | -11.16 | 30,8 | 11,9 | 3 |
| BRV | 15 | 16 | 540 + 30 14C yr BP | 14th | 80920 | -12.35 | 30,2 | 11,5 | 3,1 |
| BRV | 15 | 16 | 540 + 30 14C yr BP | 14th | 80921 | -11.78 | 34,2 | 12,9 | 3,1 |
| BRV | 15 | 16 | 540 + 30 14C yr BP | 14th | 80922 | -12.01 | 19,5 | 7,1 | 3,2 |
| BRV | 15 | 16 | 540 + 30 14C yr BP | 14th | 80923 | -12.45 | 29,3 | 11 | 3,1 |
| BRV | 15 | 16 | 540 + 30 14C yr BP | 14th | 80924 | -12.06 | 35,9 | 13,7 | 3,1 |
| BRV | 15 | 16 | 540 + 30 14C yr BP | 14th | 80925 | -13.03 | 34,4 | 13,1 | 3,1 |
| BRV | 15 | 16 | 540 + 30 14C yr BP | 14th | 80926 | -12.11 | 26,3 | 10,1 | 3,1 |
| BRV | 15 | 16 | 540 + 30 14C yr BP | 14th | 81129 | -11.76 | 33,1 | 12,5 | 3,1 |
| BRV | 12 | 5 | 396 + 30 14C yr BP | 16th | 61596 | -13.60 | 44 | 15,7 | 3,4 |
| BRV | 12 | 5 | 396 + 30 14C yr BP | 16th | 61599 | -12.60 | 41,3 | 13,7 | 3,5 |
| BRV | 12 | 5 | 396 + 30 14C yr BP | 16th | 61604 | -13.00 | 45 | 15,2 | 3,5 |
| BRV | 12 | 5 | 396 + 30 14C yr BP | 16th | 61610 | -12.50 | 47 | 16,3 | 3,4 |
| BRV | 12 | 5 | 396 + 30 14C yr BP | 16th | 61611 | -12.40 | 44,7 | 15,5 | 3,4 |
| BRV | 12 | 5 | 396 + 30 14C yr BP | 16th | 61620 | -14.50 | 45,1 | 15,4 | 3,4 |
| BRV | 15 | 14 | Context (1410-1649) | 16th | 77604 | -11.80 | 18,2 | 6,5 | 3,3 |
| BRV | 15 | 14 | Context (1410-1649) | 16th | 77643 | -11.70 | 21,3 | 7,9 | 3,2 |
| BRV | 15 | 14 | Context (1410-1649) | 16th | 77650 | -12.20 | 19,7 | 7,2 | 3,2 |
| BRV | 15 | 14 | Context (1410-1649) | 16th | 77654 | -12.80 | 18,6 | 6,7 | 3,3 |
| BRV | 15 | 14 | Context (1410-1649) | 16th | 77663 | -12.20 | 23,5 | 8,7 | 3,2 |
| BRV | 15 | 7 | 313 + 32 14C yr BP | 17th | 76439 | -17.20 | 16,6 | 6,4 | 3,05 |
| BRV | 15 | 7 | 313 + 32 14C yr BP | 17th | 77656 | -12.50 | 10,2 | 3,6 | 3,4 |
| BRV | 15 | 7 | 313 + 32 14C yr BP | 17th | 78477 | -11.70 | 19,9 | 7,4 | 3,2 |
| BRV | 15 | 7 | 313 + 32 14C yr BP | 17th | 78478 | -19.30 | 7,1 | 2,4 | 3,4 |
| BRV | 15 | 6 | Context (1637-1680) | 17th | 79865 | -12.41 | 25,9 | 9,8 | 3,1 |
| BRV | 15 | 6 | Context (1637-1680) | 17th | 79868 | -12.79 | 20,6 | 7,6 | 3,2 |
| BRV | 15 | 6 | Context (1637-1680) | 17th | 79869 | -13.22 | 19,7 | 7,1 | 3,3 |
| BRV | 15 | 6 | Context (1637-1680) | 17th | 79870 | -14.92 | 30,9 | 11,4 | 3,2 |
| BRV | 15 | 6 | Context (1637-1680) | 17th | 79871 | -12.97 | 21,4 | 7,9 | 3,2 |
| BRV | 15 | 6 | Context (1637-1680) | 17th | 79872 | -13.17 | 18,3 | 6,6 | 3,2 |
| BRV | 15 | 6 | Context (1637-1680) | 17th | 79873 | -14.65 | 29,6 | 11,1 | 3,1 |
| BRV | 15 | 6 | Context (1637-1680) | 17th | 79874 | -12.72 | 21,4 | 8 | 3,1 |
| BRV | 15 | 6 | Context (1637-1680) | 17th | 79875 | -12.33 | 20,2 | 7,4 | 3,2 |
| BRV | 15 | 6 | Context (1637-1680) | 17th | 79876 | -13.29 | 11,1 | 3,9 | 3,3 |
| BRV | 15 | 6 | Context (1637-1680) | 17th | 79877 | -12.90 | 19,5 | 7,4 | 3,1 |
| BRV | 15 | 5 | Context (1637-1680) | 17th | 76430 | -20.60 | 20,4 | 7,8 | 3,07 |
| KOV | 12 | 3 | 165 + 30 14C yr BP | 18th | 62513 | -13 | 39,7 | 14,5 | 3,4 |
| BRV | 12 | 3 | 165 + 30 14C yr BP | 18th | 63827 | -10,9 | 49,4 | 17 | 3,4 |
| BRV | 12 | 3 | 165 + 30 14C yr BP | 18th | 63832 | -12,2 | 43,9 | 15,4 | 3,3 |
| BRV | 12 | 3 | 165 + 30 14C yr BP | 18th | 63845 | -10,7 | 49,4 | 17,4 | 3,3 |
| BRV | 12 | 3 | 165 + 30 14C yr BP | 18th | 63903 | -13,6 | 46,1 | 15,5 | 3,5 |
| BRV | 15 | 3 | 130 + 32 14C yr BP | 18th | 76436 | -10.00 | 12,9 | 5 | 3,06 |
| BRV | 15 | 3 | 130 + 32 14C yr BP | 18th | 78476 | -12.90 | 13,6 | 4,9 | 3,2 |
| BRV | 15 | 3 | 130 + 32 14C yr BP | 18th | 79859 | -12.52 | 22,7 | 8,1 | 3,3 |
| BRV | 15 | 3 | 130 + 32 14C yr BP | 18th | 79860 | -12.43 | 23,3 | 8,5 | 3,2 |
| BRV | 15 | 12 | Finds to 19th century | 19th | 77603 | -12.70 | 14,6 | 5 | 3,4 |
| BRV | 15 | 12 | Finds to 19th century | 19th | 77665 | -13.10 | 17,6 | 6,2 | 3,3 |
| BRV | 15 | 12 | Finds to 19th century | 19th | 78482 | -12.70 | 19 | 7 | 3,2 |
| BRV | 15 | 12 | Finds to 19th century | 19th | 80639 | -12,2 | 14,1 | 5,2 | 3,2 |
| BRV | 15 | 12 | Finds to 19th century | 19th | 80642 | -14,2 | 12,4 | 4 | 3,6 |
| BRV | 15 | 1 | Context (>1890) | 19th | 76431 | -15.10 | 20,6 | 7,8 | 3,07 |
| BRV | 15 | 1 | Context (>1890) | 19th | 76435 | -17.10 | 14,8 | 5,6 | 3,07 |