|                      |      |    | Skull length |      |      | $\ $ | Skull width |      |      | Prem     | Premaxilla length | 1    |         | Pren | Premaxilla depth |      |
|----------------------|------|----|--------------|------|------|------|-------------|------|------|----------|-------------------|------|---------|------|------------------|------|
| Locality             | Mean | z  | Range        | S.D. | Mean | z    | Range       | S.D. | Mean | z        | Range             | S.D. | Mean    | z    | Range            | S.D. |
| Sable Is., N.S.      | 29.0 | 14 | 28.1-29.8    | 0.51 | 14.7 | 16   | 14.1–15.1   | 0.28 | 6.3  | 13       | 5.8-6.7           | 0.34 | 3.6     | 16   | 3.3-4.0          | 0.20 |
| Halifax, N.S.        | 27.4 | 14 | 26.6-27.8    | 0.43 | 14.2 | 15   | 13.7 - 14.6 | 0.24 | 5.8  | 14       | 5.2 - 6.1         | 0.27 | 3.5     | 15   | 3.2 - 3.6        | 0.13 |
| River John, N.S.     | 27.1 | 23 | 25.7-27.9    | 0.55 | 14.1 | 24   | 13.6-14.5   | 0.23 | 5.7  | 22       | 4.8-6.6           | 0.42 | 3.4     | 24   | 3.0–3.6          | 0.14 |
| Pasadena, NFLD       | 27.4 | 6  | 26.5-28.3    | 0.58 | 14.2 | 6    | 13.7-14.6   | 0.31 | 5.8  | 10       | 5.3-6.3           | 0.32 | 3.5     | 10   | 3.2–3.7          | 0.16 |
| St. Andrews, N.B.    | 27.1 | 17 | 26.0-28.0    | 0.48 | 14.1 | 18   | 13.5-14.6   | 0.27 | 5.8  | 16       | 5.2-6.3           | 0.32 | 3.4     | 17   | 3.2 - 3.7        | 0.16 |
| Matane, QUE          | 26.9 | 21 | 25.6-28.2    | 0.69 | 14.1 | 22   | 13.6-14.7   | 0.24 | 5.7  | 22       | 4.6 - 6.3         | 0.40 | 3.5     | 22   | 3.2–3.9          | 0.17 |
| Magdalen Is., QUE    | 27.4 | 15 | 27.0-28.4    | 0.40 | 14.2 | 15   | 13.7-14.6   | 0.23 | 6.0  | 15       | 5.5-6.6           | 0.31 | 3.5     | 15   | 3.3 - 3.8        | 0.13 |
| Kuujjuaq, QUE        | 27.3 | 22 | 26.5-27.8    | 0.39 | 14.1 | 24   | 13.3-14.6   | 0.32 | 5.8  | 22       | 5.2 - 6.3         | 0.31 | 3.4     | 24   | 3.2–3.7          | 0.14 |
| Brandonville, WV     | 26.9 | ×  | 23.6-27.2    | 0.30 | 14.1 | 11   | 13.7-14.5   | 0.25 | 5.7  | 8        | 5.4-5.9           | 0.16 | 3.4     | 11   | 3.2–3.7          | 0.14 |
| Wildfield, ON        | 27.0 | Π  | 25.7–27.7    | 0.59 | 14.0 | 11   | 13.6-14.6   | 0.33 | 5.7  | 11       | 5.3-6.2           | 0.30 | 3.4     | П    | 3.3-3.5          | 0.08 |
| Wallaceburg, ON      | 26.7 | 15 | 25.8-27.5    | 0.41 | 13.8 | 15   | 13.5-14.2   | 0.21 | 5.6  | 15       | 5.0 - 6.3         | 0.36 | 3.3     | 15   | 3.0 - 3.5        | 0.13 |
| Sowerby, ON          | 26.6 | 6  | 26.0-27.3    | 0.45 | 14.0 | 6    | 13.7-14.6   | 0.26 | 5.5  | 6        | 5.0-5.8           | 0.27 | 3.3     | 6    | 3.2–3.5          | 0.10 |
| Moosonee, ON         | 27.0 | 26 | 26.1–27.8    | 0.40 | 14.1 | 30   | 13.6-14.5   | 0.23 | 5.7  | 27       | 5.2-6.4           | 0.26 | 3.3     | 31   | 3.1 - 3.6        | 0.13 |
| Attawapiskat, ON     | 27.0 | 25 | 25.8–27.8    | 0.52 | 14.0 | 26   | 13.6 - 14.6 | 0.26 | 5.8  | 24       | 5.2-6.2           | 0.29 | 3.4     | 25   | 3.1 - 3.7        | 0.17 |
| Winisk, ON           | 27.1 | 16 | 25.8-27.6    | 0.44 | 14.0 | 20   | 13.5-14.5   | 0.23 | 5.8  | 19       | 5.1 - 6.3         | 0.32 | 3.3     | 19   | 3.1 - 3.5        | 0.11 |
| Thunder Bay, ON      | 26.5 | 01 | 26.0-27.1    | 0.36 | 13.7 | 12   | 13.4-14.2   | 0.28 | 5.4  | 10       | 4.7-5.7           | 0.34 | 3.3     | 12   | 3.0-3.5          | 0.17 |
| Delta, MAN           | 26.4 | 17 | 25.4 - 27.6  | 0.65 | 13.7 | 21   | 13.1–14.5   | 0.34 | 5.4  | 18       | 4.9-5.9           | 0.28 | 3.3     | 21   | 3.1-3.6          | 0.15 |
| Churchill, MAN       | 27.1 | 17 | 25.6-28.0    | 0.53 | 14.0 | 18   | 13.6-14.6   | 0.25 | 5.7  | 17       | 5.2-6.3           | 0.29 | 3.3     | 18   | 3.1-3.6          | 0.13 |
| Coppermine, N.W.T.   | 26.9 | 15 | 25.6-27.6    | 0.58 | 13.8 | 16   | 13.1-14.2   | 0.36 | 5.7  | 14       | 5.2-5.9           | 0.25 | 3.2     | 15   | 3.0 - 3.5        | 0.15 |
| Norman Wells, N.W.T. | 26.9 | 21 | 25.5-28.0    | 0.55 | 13.9 | 21   | 13.2-14.3   | 0.31 | 5.5  | 21       | 4.6 - 6.1         | 0.41 | 3.3     | 21   | 3.1-3.5          | 0.12 |
| Inuvik, N.W.T.       | 27.2 | 13 | ТĽ.          | 0.48 | 13.8 | 14   | 13.2-14.4   | 0.28 | 5.7  | 13       | 5.0 - 6.2         | 0.34 | 3.2     | 14   | 3.0–3.5          | 0.16 |
| Grande Prairie, ALTA | 26.1 | 22 | 25.4–26.9    | 0.37 | 13.7 | 24   | 13.3-13.6   | 0.30 | 5.4  | 22       | 4.8-6.2           | 0.30 | 3.2     | 23   | 3.1 - 3.5        | 0.12 |
| Koyuk, AK            | 26.6 | 21 | 25.4–27.4    | 0.60 | 13.9 | 21   | 13.4–14.7   | 0.29 | 5.3  | 21       | 4.8-5.8           | 0.27 | 3.2     | 21   | 2.9–3.5          | 0.15 |
| Wasilla, AK          | 26.9 | 21 | 26.4–27.7    | 0.29 | 14.0 | 22   | 13.5-14.3   | 0.19 | 5.6  | 22       | 5.1-6.2           | 0.23 | 3.3     | 23   | 3.0 - 3.5        | 0.15 |
| Umnak Is., AK        | 29.2 | 23 | 28.3–30.5    | 0.61 | 15.0 | 23   | 14.5-15.4   | 0.28 | 6.6  | 23       | 6.0 - 7.1         | 0.24 | 3.8     | 24   | 3.6-4.0          | 0.13 |
| Cold Bay, AK         | 28.0 | 7  | 27.6–28.7    | 0.37 | 14.4 | 9    | 14.2–14.7   | 0.18 | 6.4  | 8        | 6.2–6.8           | 0.23 | 3.8     | ×    | 3.6 - 4.0        | 0.14 |
| Port Heiden, AK      | 27.6 | 12 | 27.0–28.3    | 0.39 | 14.4 | 13   | 14.0–14.8   | 0.23 | 6.0  | 12       | 5.8-6.5           | 0.21 | 3.5     | 13   | 3.3 - 3.7        | 0.13 |
| Middleton Is., AK    | 28.3 | 20 | 27.5-28.9    | 0.36 | 14.6 | 17   | 14.2-15.2   | 0.26 | 6.3  | 20       | 5.8-6.7           | 0.31 | 3.7     | 20   | 3.5-4.0          | 0.16 |
| Sheridan, WY         | 26.4 | 14 | 25.7–27.2    | 0.44 | 13.8 | 17   | 13.3-14.3   | 0.27 | 5.7  | <u>1</u> | 5.3-6.1           | 0.27 | а.<br>6 | 17   | 3.1 - 3.5        | 0.12 |
| Woodruff, UT         | 26.5 | 16 | 25.9–27.2    | 0.41 | 13.8 | 16   | 13.5-14.0   | 0.14 | 5.7  | 16       | 5.1 - 6.0         | 0.25 | 3.3     | 16   |                  | 0.18 |
| Halleck, NV          | 26.4 | 6  | 25.7–27.0    | 0.52 | 13.6 | 6    | 13.4–14.0   | 0.19 | 5.6  | 6        | 5.2-6.1           | 0.31 | 3.1     | 6    |                  | 0.13 |
| Creston, WA          | 26.3 | 16 | 25.3-27.4    | 0.51 | 13.8 | 19   | 13.5-14.5   | 0.24 | 5.4  | 15       | 5.0-5.9           | 0.29 | 3.2     | 19   | 3.0 - 3.5        | 0.13 |
| Hoquiam, WA          | 26.6 | 22 | 25.7–27.5    | 0.43 | 13.9 | 24   | 13.4 - 14.6 | 0.31 | 5.5  | 24       | 5.0 - 5.9         | 0.25 | 3.2     | 25   | 3.0 - 3.5        | 0.12 |
| Owen's Lake, CA      | 26.0 | 22 |              | 0.50 | 13.5 | 23   |             | 0.31 | 5.4  | 22       | 5.0-5.9           | 0.27 | 3.1     | 23   | 2.8–3.6          | 0.18 |
| Eureka, CA           | 27.3 | 14 | 26.5-29.4    | 0.80 | 14.1 | 14   | 13.5-14.6   | 0.30 | 5.7  | 14       | 5.1 - 6.1         | 0.33 | 3.3     | 14   | 3.1-3.6          | 0.15 |

APPENDIX 2. MEASUREMENTS (IN MM) AND SAMPLE STATISTICS FOR FEMALE SAVANNAH SPARROWS (Ammodramus sandwichensis)

NO. 23

|                           |      | S  | Skull length |      |      |    | Skull width |      |      | Pren | Premaxilla length |      |      | Prer | Premaxilla depth |      |
|---------------------------|------|----|--------------|------|------|----|-------------|------|------|------|-------------------|------|------|------|------------------|------|
| -<br>Locality             | Mean | z  | Range        | S.D. | Mean | z  | Range       | S.D. | Mean | z    | Range             | S.D. | Mean | z    | Range            | S.D. |
| Morro Bay, CA             | 26.7 | 11 | 26.0-27.2    | 0.34 | 13.9 | =  | 13.6-14.2   | 0.17 | 5.6  | 11   | 5.0-5.9           | 0.26 | 3.2  | 11   | 2.8–3.4          | 0.18 |
| San Diego, CA             | 27.1 | 15 | 26.4-27.9    | 0.46 | 13.9 | 15 | 13.2-14.4   | 0.29 | 6.0  | 15   | 5.3 - 6.4         | 0.28 | 3.4  | 15   | 3.2-3.6          | 0.11 |
| Bahia San Ouintin, B.C.N. | 27.6 | 10 | 26.7-28.5    | 0.57 | 13.8 | 15 | 13.1-14.3   | 0.29 | 6.4  | 13   | 5.9 - 7.0         | 0.31 | 3.4  | 14   | 3.2 - 3.7        | 0.14 |
| Juerrero Negro, B.C.S.    |      | 21 | 26.5-29.3    | 0.60 | 14.3 | 23 | 13.6-14.9   | 0.27 | 6.6  | 21   | 5.8-7.3           | 0.36 | 3.5  | 23   | 3.2 - 3.9        | 0.15 |
| 3ahia Magdalena, B.C.S.   | 28.8 | 14 | 27.3 - 30.1  | 0.60 | 14.4 | 13 | 13.9-15.0   | 0.31 | 7.1  | 14   | 6.5-7.6           | 0.32 | 3.7  | 15   | 3.6 - 3.9        | 0.10 |
| Puerto Peñasco, Sonora    | 28.5 | 4  | 28.1 - 28.9  | 0.46 | 14.3 | 4  | 13.9–14.5   | 0.26 | 6.8  | 4    | 6.5 - 7.0         | 0.22 | 3.9  | 4    | 3.8 - 4.0        | 0.10 |
| Bahia Kino. Sonora        | 29.0 | 13 | 28.2-29.7    | 0.48 | 14.5 | 14 | 13.8-15.3   | 0.32 | 7.3  | 14   | 6.9-7.9           | 0.33 | 3.9  | 14   | 3.7-4.2          | 0.16 |
| El Molino. Sinaloa        | 29.1 | ×  | 28.6-29.9    | 0.45 | 14.4 | 8  | 14.2-14.8   | 0.22 | 7.5  | 8    | 7.0-7.7           | 0.21 | 4.0  | ×    | 3.9-4.2          | 0.10 |
| Charco Redondo, Jalisco   | 26.2 | 7  | 25.0-27.0    | 0.70 | 13.7 | 7  | 13.5-14.0   | 0.19 | 5.4  | ٢    | 5.0 - 5.7         | 0.29 | 3.3  | ٢    | 3.2–3.5          | 0.11 |
| Lerma. México             | 27.4 | S  | 26.9–28.0    | 0.43 | 14.0 | 9  | 13.7–14.3   | 0.22 | 6.3  | 9    | 6.0 - 6.5         | 0.22 | 3.5  | Ś    | 3.0 - 3.6        | 0.11 |

| CONTINUED |  |
|-----------|--|
| ci        |  |
| APPENDIX  |  |

|                      |      | Ś  | narial width |      |      | Frem | Premaxilla width |      |      | Inter- | Inter-orbital width |      |      | Mane | Mandibular length |      |
|----------------------|------|----|--------------|------|------|------|------------------|------|------|--------|---------------------|------|------|------|-------------------|------|
| Locality             | Mean | z  | Range        | S.D. | Mean | z    | Range            | S.D. | Mean | z      | Range               | S.D. | Mean | z    | Range             | S.D. |
| Sable Is., N.S.      | 6.9  | 16 | 6.3-7.4      | 0.30 | 5.9  | 16   | 5.3-6.8          | 0.45 | 2.7  | 16     | 2.3-2.9             | 0.19 | 20.0 | 13   | 19.5-20.4         | 0.35 |
| Halifax, N.S.        | 6.5  | 15 | 6.0-6.8      | 0.24 | 5.2  | 15   | 4.8-5.5          | 0.17 | 2.6  | 15     | 2.3-2.9             | 0.15 | 18.4 | 14   | 17.7-19.0         | 0.48 |
| River John, N.S.     | 6.5  | 24 | 6.1-7.3      | 0.28 | 5.1  | 24   | 4.1-5.6          | 0.28 | 2.6  | 24     | 2.0 - 3.0           | 0.23 | 18.2 | 21   | 17.2-19.3         | 0.53 |
| Pasadena, NFLD       | 6.6  | 10 | 6.1 - 7.1    | 0.28 | 5.3  | 10   | 5.0-5.5          | 0.21 | 2.5  | 10     | 2.2–2.8             | 0.21 | 18.6 | 8    | 17.0-19.5         | 0.81 |
| St. Andrews, N.B.    | 6.5  | 17 | 6.0 - 7.0    | 0.25 | 5.2  | 17   | 4.9–5.6          | 0.19 | 2.5  | 18     | 2.2 - 3.0           | 0.18 | 18.3 | 14   | 17.3 - 18.7       | 0.35 |
| Matane, QUE          | 6.4  | 22 | 5.9-7.0      | 0.27 | 5.1  | 22   | 4.7-5.6          | 0.22 | 2.5  | 20     | 2.1 - 2.9           | 0.21 | 18.1 | 18   | 16.9-19.1         | 0.52 |
| Magdalen Is., QUE    | 6.5  | 15 | 6.1 - 7.1    | 0.28 | 5.1  | 15   | 4.9-5.3          | 0.14 | 2.7  | 14     | 2.4 - 3.1           | 0.20 | 18.7 | 14   | 18.1-19.5         | 0.43 |
| Kuujjuaq, QUE        | 6.4  | 23 | 5.9-6.8      | 0.28 | 5.1  | 24   | 4.8-5.5          | 0.18 | 2.5  | 24     | 2.1 - 2.9           | 0.20 | 18.5 | 21   | 17.2-19.3         | 0.46 |
| Brandonville, WV     | 6.7  | 11 | 6.6–6.9      | 0.12 | 5.2  | 11   | 5.0-5.5          | 0.14 | 2.5  | 11     | 2.1 - 2.7           | 0.17 | 18.1 | 6    | 17.3-18.5         | 0.34 |
| Wildfield, ON        | 6.5  | 11 | 5.9-7.0      | 0.30 | 5.2  | 11   | 5.0-5.6          | 0.21 | 2.6  | 11     | 2.2 - 3.0           | 0.20 | 18.2 | 11   | 17.5-18.6         | 0.38 |
| Wallaceburg, ON      | 6.4  | 14 | 5.9-6.9      | 0.28 | 5.1  | 14   | 4.7-5.3          | 0.16 | 2.5  | 15     | 2.2-2.9             | 0.20 | 17.8 | 15   | 17.2-18.5         | 0.37 |
| Sowerby, ON          | 6.5  | 6  | 6.1 - 7.0    | 0.24 | 5.1  | 6    | 4.9–5.3          | 0.13 | 2.6  | 6      | 2.3–2.8             | 0.18 | 17.9 | ×    | 17.5-18.5         | 0.34 |
| Moosonee, ON         | 6.4  | 31 | 5.9 - 7.0    | 0.26 | 5.1  | 31   | 4.6-5.5          | 0.19 | 2.5  | 31     | 2.1 - 3.0           | 0.19 | 18.0 | 26   | 17.1 - 18.8       | 0.36 |
| Attawapiskat, ON     | 6.4  | 26 | 5.9-6.9      | 0.26 | 5.0  | 26   | 4.6-5.3          | 0.19 | 2.6  | 26     | 2.2 - 3.0           | 0.23 | 18.1 | 24   | 17.1-19.2         | 0.46 |
| Winisk, ON           | 6.3  | 19 | 5.8-6.7      | 0.25 | 5.1  | 19   | 4.9-5.4          | 0.13 | 2.1  | 21     | 2.2-2.9             | 0.21 | 18.2 | 18   | 16.8 - 19.0       | 0.48 |
| Thunder Bay, ON      | 6.2  | 12 | 5.9-6.7      | 0.28 | 5.0  | 11   | 4.7-5.3          | 0.17 | 2.5  | 12     | 2.0-2.9             | 0.24 | 17.8 | 10   | 17.4 - 18.5       | 0.35 |
| Delta, MAN           | 6.3  | 20 | 5.8-6.7      | 0.27 | 5.0  | 21   | 4.7–5.4          | 0.19 | 2.4  | 21     | 1.9 - 2.9           | 0.21 | 17.6 | 21   | 16.6-19.2         | 0.61 |
| Churchill, MAN       | 6.3  | 18 | 5.7-6.8      | 0.32 | 5.0  | 18   | 4.7-5.4          | 0.18 | 2.3  | 17     | 2.0-2.7             | 0.17 | 18.0 | 16   | 17.1 - 18.9       | 0.39 |
| Coppermine, N.W.T.   | 6.0  | 14 | 5.8-6.5      | 0.25 | 4.8  | 15   | 4.4–5.2          | 0.21 | 2.3  | 15     | 1.9 - 2.8           | 0.26 | 17.9 | 12   | 17.4 - 18.7       | 0.44 |
| Norman Wells, N.W.T. | 6.3  | 22 | 5.7-6.6      | 0.22 | 5.0  | 22   | 4.7–5.4          | 0.18 | 2.4  | 21     | 2.0–2.7             | 0.17 | 18.0 | 20   | 17.2-18.9         | 0.50 |
| Inuvik, N.W.T.       | 6.1  | 14 | 5.8-6.8      | 0.30 | 4.9  | 14   | 4.7-5.2          | 0.14 | 2.4  | 14     | 2.1–2.6             | 0.17 | 18.2 | 14   | 17.3 - 18.7       | 0.41 |
| Grande Prairie, ALTA | 6.2  | 24 | 5.8-6.7      | 0.23 | 5.0  | 23   | 4.5-5.5          | 0.19 | 2.3  | 23     | 1.9 - 2.6           | 0.20 | 17.6 | 21   | 16.6 - 18.4       | 0.48 |
| Koyuk, AK            | 6.2  | 20 | 5.6-6.9      | 0.32 | 4.8  | 21   | 4.6-5.2          | 0.16 | 2.2  | 21     | 1.9-2.5             | 0.17 | 17.9 | 20   | 16.9 - 18.6       | 0.54 |
| Wasilla, AK          | 6.3  | 22 | 5.9 - 7.0    | 0.27 | 4.8  | 21   | 4.6-5.1          | 0.15 | 2.5  | 23     | 2.1 - 2.8           | 0.22 | 18.0 | 22   | 17.4–18.5         | 0.28 |
| Umnak Is., AK        | 7.0  | 24 | 6.4–7.4      | 0.29 | 5.8  | 24   | 5.3-6.3          | 0.26 | 2.7  | 23     | 2.4–3.3             | 0.22 | 20.1 | 22   | 19.2-20.9         | 0.51 |
| Cold Bay, AK         | 6.8  | ×  | 6.5-7.1      | 0.18 | 5.5  | ×    | 5.4-5.6          | 0.08 | 2.7  | ×      | 2.4 - 3.1           | 0.21 | 19.1 | 9    | 18.8–19.4         | 0.24 |
| Port Heiden, AK      | 6.4  | 13 | 6.1–6.9      | 0.24 | 5.2  | 11   | 5.0-5.3          | 0.11 | 2.6  | 13     | 2.2 - 3.0           | 0.24 | 18.8 | 12   | 18.3-19.4         | 0.34 |
| Middleton Is., AK    | 6.6  | 20 | 6.3-6.9      | 0.17 | 5.3  | 20   | 4.9–5.7          | 0.19 | 2.6  | 20     | 2.3–2.8             | 0.15 | 19.1 | 18   | 18.4 - 19.9       | 0.40 |
| Sheridan, WY         | 6.3  | 17 | 5.8-6.7      | 0.25 | 4.9  | 16   |                  | 0.22 | 2.5  | 17     | 2.3–2.7             | 0.16 | 17.6 | 16   | 17.2 - 18.1       | 0.30 |
| Woodruff, UT         | 6.4  | 16 | 6.0-6.7      | 0.20 | 4.9  | 16   |                  | 0.18 | 2.6  | 16     | 2.3-2.8             | 0.16 | 17.7 | 15   | 17.0 - 18.1       | 0.28 |
| Halleck, NV          | 6.3  | 6  | 6.0-6.6      | 0.20 | 4.8  | 6    | 4.6 - 5.0        | 0.12 | 2.4  | 6      | 2.2-2.6             | 0.15 | 17.4 | 6    | 16.6–17.9         | 0.51 |
| Creston, WA          | 6.3  | 19 | 5.6-6.7      | 0.29 | 4.9  | 18   | 4.6-5.8          | 0.27 | 2.4  | 19     | 2.1 - 2.7           | 0.21 | 17.7 | 19   | 17.0-19.3         | 0.58 |
| Hoquiam, WA          | 6.3  | 22 | 5.8-6.7      | 0.24 | 5.0  | 24   | 4.8-5.3          | 0.15 | 2.4  | 25     | 2.0–2.8             | 0.20 | 17.7 | 23   | 17.0 - 18.4       | 0.42 |
| Owen's Lake, CA      | 6.1  | 23 | 5.3-6.8      | 0.38 | 4.8  | 23   | 4.5-5.2          | 0.19 | 2.4  | 23     | 2.0–2.7             | 0.20 | 17.4 | 23   | 16.9-18.2         | 0.40 |
| Eureka, CA           | 6.6  | 11 | 6.4–6.9      | 0.14 | 5.1  | 14   | 4.8-5.5          | 0.20 | 2.3  | 13     | 1.8 - 2.7           | 0.20 | 18.4 | 14   | 16.7-19.9         | 0.91 |

|                           |        | z  | Narial width |      |      | Prem | Premaxilla width |      |      | Inter- | Inter-orbital width |      |      | Man | Mandibular length |      |
|---------------------------|--------|----|--------------|------|------|------|------------------|------|------|--------|---------------------|------|------|-----|-------------------|------|
| Locality                  | Mean N | z  | Range        | S.D. | Mean | z    | Range            | S.D. | Mean | z      | Range               | S.D. | Mean | z   | Range             | S.D. |
| Morro Bay, CA             | 6.1    | 10 | 5.8-6.4      | 0.20 | 5.1  | =    | 4.8-5.5          | 0.22 | 2.5  | 11     | 1.9-2.8             | 0.24 | 18.0 | 10  | 17.6-18.5         | 0.28 |
| San Diego, CA             | 6.2    | 15 | 5.6-6.5      | 0.26 | 5.2  | 15   | 4.7-5.7          | 0.24 | 2.4  | 4      | 2.0 - 2.7           | 0.19 | 18.4 | 12  | 17.6–19.1         | 0.44 |
| Bahia San Quintin, B.C.N. | 6.1    | 15 | 5.5-6.7      | 0.35 | 5.1  | 13   | 4.9 - 5.3        | 0.10 | 2.4  | 15     | 2.1 - 2.6           | 0.15 | 18.9 | 14  | 17.8 - 20.0       | 0.58 |
| Guerrero Negro, B.C.S.    | 6.4    | 23 | 5.9 - 6.8    | 0.20 | 5.4  | 22   | 4.9 - 5.7        | 0.20 | 2.6  | 22     | 2.2-2.9             | 0.19 | 19.2 | 18  | 18.1 - 19.0       | 0.50 |
| Bahia Magdalena, B.C.S.   | 6.7    | 15 | 6.3 - 7.0    | 0.22 | 5.6  | 15   | 5.2 - 6.0        | 0.23 | 2.7  | 14     | 2.4 - 3.0           | 0.17 | 20.0 | 10  | 18.9 - 20.7       | 0.62 |
| Puerto Peñasco, Sonora    | 6.7    | 4  | 6.4 - 6.9    | 0.21 | 5.9  | 4    | 5.7 - 6.0        | 0.13 | 2.4  | 4      | 2.2 - 2.6           | 0.18 | 19.6 | 4   | 19.3-19.7         | 0.19 |
| Bahia Kino, Sonora        | 6.7    | 14 | 6.3 - 7.4    | 0.27 | 5.8  | 14   | 5.5 - 6.1        | 0.17 | 2.0  | 13     | 2.3-3.2             | 0.36 | 20.1 | 11  | 19.3 - 20.8       | 0.40 |
| El Molino, Sinaloa        | 6.9    | 8  | 6.4-7.2      | 0.33 | 5.9  | ×    | 5.6-6.1          | 0.19 | 2.9  | 8      | 2.6 - 3.1           | 0.15 | 20.3 | Ś   | 19.7 - 20.6       | 0.36 |
| Charco Redondo, Jalisco   | 6.2    | 2  | 5.8-6.7      | 0.29 | 4.9  | 7    | 4.7-5.0          | 0.12 | 2.4  | 7      | 2.1 - 2.7           | 0.21 | 17.5 | 9   | 16.9 - 19.7       | 0.39 |
| Lerma, México             | 6.5    | 9  | 6.2–6.8      | 0.24 | 5.4  | S    | 5.2-5.5          | 0.13 | 2.6  | 9      | 2.3-3.0             | 0.24 | 18.4 | S   | 18.0 - 18.7       | 0.30 |
|                           |        |    |              |      |      |      |                  |      |      |        |                     |      |      |     |                   |      |

|                      |      |    | Gonys     |      |      | Mar | Mandible depth |      |      | Cor | Coracoid length |      |      | Sc | Scapula length |      |
|----------------------|------|----|-----------|------|------|-----|----------------|------|------|-----|-----------------|------|------|----|----------------|------|
| Locality             | Mean | z  | Range     | S.D. | Mean | z   | Range          | S.D. | Mean | z   | Range           | S.D. | Mean | z  | Range          | S.D. |
| Sable Is., N.S.      | 5.3  | 12 | 5.0-5.7   | 0.22 | 2.1  | 11  | 1.9-2.2        | 0.08 | 18.1 | 16  | 17.2-19.2       | 0.53 | 20.8 | 16 | 18.8-21.9      | 0.83 |
| Halifax, N.S.        | 4.9  | 13 | 4.4-5.4   | 0.37 | 1.9  | 14  | 1.8 - 2.0      | 0.07 | 16.9 | 14  | 16.3–17.5       | 0.33 | 19.3 | 14 | 17.9 - 20.0    | 0.57 |
| River John, N.S.     | 4.8  | 21 | 4.2-5.9   | 0.35 | 1.9  | 21  | 1.7 - 2.2      | 0.12 | 16.7 | 24  | 16.2 - 17.0     | 0.37 | 19.1 | 23 | 17.8 - 20.1    | 0.59 |
| Pasadena, NFLD       | 4.9  | ×  | 4.3-5.3   | 0.34 | 1.9  | 8   | 1.8 - 2.0      | 0.06 | 16.8 | ×   | 16.1 - 17.9     | 0.63 | 18.9 | 6  | 17.8-19.7      | 0.68 |
| St. Andrews, N.B.    | 4.8  | 15 | 4.3-5.2   | 0.29 | 1.9  | 16  | 1.8 - 2.1      | 0.08 | 16.7 | 18  | 16.1 - 17.5     | 0.38 | 19.1 | 16 | 17.9 - 20.6    | 0.70 |
| Matane, QUE          | 4.8  | 20 | 4.2-5.4   | 0.29 | 1.8  | 19  | 1.7 - 2.0      | 0.08 | 16.5 | 22  | 15.7–17.4       | 0.44 | 19.0 | 20 | 18.0 - 20.0    | 0.52 |
| Magdalen Is., QUE    | 5.0  | 14 | 4.4-5.7   | 0.31 | 1.9  | 14  | 1.7 - 2.0      | 0.10 | 16.9 | 15  | 16.4 - 17.7     | 0.32 | 19.4 | 15 | 18.3-20.4      | 0.48 |
| Kuujjuaq, QUE        | 5.1  | 20 | 4.4–5.6   | 0.32 | 1.9  | 24  | 1.7 - 2.0      | 0.07 | 16.7 | 24  | 15.8-17.5       | 0.44 | 19.0 | 23 | 17.6 - 20.1    | 0.58 |
| Brandonville, WV     | 4.7  | 6  | 4.4-5.1   | 0.26 | 1.8  | 6   | 1.7 - 2.0      | 0.09 | 16.5 | 11  | 16.0 - 16.8     | 0.24 | 19.0 | 10 | 18.4 - 20.4    | 0.63 |
| Wildfield, ON        | 4.8  | 11 |           | 0.27 | 1.9  | 11  | 1.7 - 2.0      | 0.09 | 16.8 | 11  | 16.1–17.3       | 0.42 | 19.4 | 11 | 18.6-20.6      | 0.63 |
| Wallaceburg, ON      | 4.7  | 14 | 4.2 - 5.1 | 0.21 | 1.8  | 15  | 1.7 - 1.9      | 0.06 | 16.5 | 15  | 16.0 - 17.0     | 0.31 | 19.0 | 15 | 18.2-19.7      | 0.45 |
| Sowerby, ON          | 4.7  | 6  | 4.4-5.3   | 0.32 | 1.8  | 6   | 1.7 - 2.0      | 0.09 | 16.6 | 6   | 16.1 - 17.3     | 0.38 | 19.3 | 6  | 18.5-20.7      | 0.68 |
| Moosonee, ON         | 4.7  | 25 | 4.3-5.5   | 0.32 | 1.8  | 27  | 1.7 - 2.0      | 0.08 | 16.9 | 30  | 16.3-17.7       | 0.34 | 19.5 | 29 | 18.2 - 20.4    | 0.55 |
| Attawapiskat, ON     |      | 23 | 4.2-5.4   | 0.30 | 1.8  | 24  | 1.7 - 1.9      | 0.07 | 16.7 | 25  | 16.0-17.5       | 0.43 | 19.2 | 24 | 18.1 - 20.5    | 0.63 |
| Winisk, ON           | 4.8  | 18 | 4.1 - 5.2 | 0.31 | 1.9  | 19  | 1.7 - 2.1      | 0.10 | 16.9 | 21  | 16.1 - 17.8     | 0.38 | 19.3 | 21 | 17.9 - 20.0    | 0.53 |
| Thunder Bay, ON      | 4.5  | 11 | 4.2-4.9   | 0.24 | 1.8  | 11  | 1.7 - 1.9      | 0.07 | 16.6 | 12  | 15.9–17.1       | 0.39 | 19.0 | 12 | 18.2-19.7      | 0.43 |
| Delta, MAN           | 4.5  | 21 | 4.2–5.1   | 0.24 | 1.8  | 21  | 1.6 - 1.9      | 0.07 | 16.5 | 21  | 15.5-17.8       | 0.52 | 19.0 | 19 | 18.0 - 19.8    | 0.52 |
| Churchill, MAN       | 4.6  | 16 | 4.3-5.1   | 0.20 | 1.8  | 15  | 1.6 - 1.8      | 0.06 | 16.9 | 18  | 16.3 - 17.7     | 0.36 | 19.4 | 17 | 18.4-20.5      | 0.54 |
| Coppermine, N.W.T.   | 4.7  | 13 | 4.5-5.2   | 0.18 | 1.7  | 14  | 1.6 - 1.8      | 0.06 | 16.4 | 16  | 15.3–17.1       | 0.48 | 18.6 | 15 | 17.7–19.7      | 0.58 |
| Norman Wells, N.W.T. | 4.6  | 19 | 4.1 - 5.1 | 0.27 | 1.7  | 20  | 1.6 - 1.9      | 0.06 | 16.6 | 21  | 16.0-17.3       | 0.36 | 19.1 | 21 | 18.4 - 19.9    | 0.51 |
| Inuvik, N.W.T.       | 4.8  | 13 | 4.3–5.3   | 0.24 | 1.7  | 14  | 1.6 - 1.8      | 0.07 | 16.6 | 14  | 15.5-17.2       | 0.40 | 19.2 | 13 | 18.1 - 20.1    | 0.52 |
| Grande Prairie, ALTA | 4.6  | 21 | 4.0-5.2   | 0.34 | 1.7  | 21  | 1.6-1.8        | 0.06 | 16.5 | 24  | 15.5–16.9       | 0.37 | 18.9 | 23 | 17.8-19.6      | 0.40 |
| Koyuk, AK            | 4.6  | 20 | 4.1 - 5.1 | 0.28 | 1.6  | 19  | 1.5 - 1.7      | 0.05 | 16.4 | 21  | 15.8-17.3       | 0.45 | 18.9 | 21 | 18.0-20.2      | 0.67 |
| Wasilla, AK          |      | 20 | 4.3-4.8   | 0.14 | 1.7  | 22  | 1.6–1.9        | 0.10 | 16.7 | 23  | 15.9–17.6       | 0.41 | 19.2 | 22 | 17.8 - 20.1    | 0.61 |
| Umnak Is., AK        |      | 22 | 4.9 - 6.1 | 0.36 | 2.1  | 23  | 1.9 - 2.2      | 0.08 | 17.8 | 23  | 17.218.8        | 0.44 | 20.8 | 23 | 18.9–21.9      | 0.71 |
| Cold Bay, AK         | 5.3  | 9  | 5.0-5.4   | 0.17 | 2.0  | 9   | 1.9 - 2.1      | 0.06 | 17.5 | ×   | 17.2–18.0       | 0.27 | 20.2 | ×  | 19.6-20.7      | 0.39 |
| Port Heiden, AK      | 5.1  | 12 | 4.6-5.5   | 0.25 | 1.8  | 13  | 1.6 - 2.0      | 0.09 | 16.8 | 12  | 16.4 - 17.2     | 0.28 | 19.4 | 13 | 18.7 - 20.1    | 0.44 |
| Middleton Is., AK    | 5.3  | 18 | 4.2-5.7   | 0.38 | 1.9  | 20  | 1.8 - 2.0      | 0.06 | 17.2 | 20  | 16.5-18.1       | 0.40 | 19.9 | 20 | 18.7 - 20.7    | 0.52 |
| Sheridan, WY         | 4.6  | 16 | 4.1 - 4.9 | 0.24 | 1.7  | 16  | 1.6 - 1.9      | 0.09 | 16.4 | 17  | 15.7-17.0       | 0.33 | 18.9 | 17 | 18.2-19.6      | 0.40 |
| Woodruff, UT         | 4.4  | 15 | 4.1 - 5.0 | 0.24 | 1.7  | 15  | 1.6 - 1.9      | 0.07 | 16.8 | 16  | 15.6-17.6       | 0.54 | 19.1 | 16 | 18.3-19.7      | 0.33 |
| Halleck, NV          | 4.3  | 6  | 4.3-4.7   | 0.31 | 1.7  | ×   | 1.6 - 1.8      | 0.09 | 16.4 | ×   | 15.8–17.1       | 0.43 | 19.0 | ×  | 17.9 - 20.0    | 0.67 |
| Creston, WA          |      | 19 | 4.1–5.1   | 0.28 | 1.7  | 19  | 1.6 - 1.9      | 0.07 | 16.7 | 19  | 15.8-17.8       | 0.53 | 19.2 | 19 | 17.7-20.5      | 0.67 |
| Hoquiam, WA          | 4.7  | 21 | 4.4 - 5.0 | 0.17 | 1.8  | 23  | 1.6 - 1.9      | 0.07 | 16.3 | 24  | 15.3-16.9       | 0.38 | 18.6 | 25 | 17.6–19.4      | 0.48 |
| Owen's Lake, CA      | 4.5  | 23 | 4.0 - 5.1 | 0.29 | 1.7  | 23  | 1.5-1.8        | 0.07 | 16.4 | 22  | 15.6–17.4       | 0.47 | 18.5 | 23 | 17.2-20.1      | 0.75 |
| Eureka, CA           | 4.9  | 14 | 4.3-5.6   | 0.40 | 1.8  | 13  | 1.7 - 2.1      | 0.11 | 16.4 | 14  | 15.6–17.3       | 0.56 | 19.0 | 14 | 18.0-20.6      | 0.74 |

58

APPENDIX 2. CONTINUED

| CONTINUED   |  |
|-------------|--|
| APPENDIX 2. |  |

|                           |      |    | Gonys     |      |      | Mai    | Mandible depth |      |      | Col | Coracoid length |      |      | Sc | Scapula length |      |
|---------------------------|------|----|-----------|------|------|--------|----------------|------|------|-----|-----------------|------|------|----|----------------|------|
| Locality                  | Mean | z  | Range     | S.D. | Mean | z      | Range          | S.D. | Mean | z   | Range           | S.D. | Mean | z  | Range          | S.D. |
| Morro Bay, CA             | 4.7  | 10 | 4.2-5.1   | 0.26 | 1.8  | 10     | 1.7-1.8        | 0.05 | 15.9 | =   | 15.4-16.4       | 0.36 | 18.3 | =  | 17.5-19.0      | 0.44 |
| San Diego, CA             | 5.0  | 12 | 4.2 - 5.4 | 0.29 | 1.8  | 14     | 1.7 - 1.9      | 0.08 | 16.1 | 15  | 15.3-16.8       | 0.41 | 17.9 | 14 | 16.6-18.8      | 0.68 |
| Bahia San Quintin, B.C.N. | 5.2  | 13 | 4.8 - 6.0 | 0.32 | 1.9  | Π      | 1.8 - 2.0      | 0.06 | 15.8 | 14  | 15.4 - 16.2     | 0.25 | 18.2 | 13 | 17.1 - 18.8    | 0.49 |
| Guerrero Negro, B.C.S.    | 5.4  | 19 | 4.5-5.9   | 0.28 | 2.0  | 20     | 1.8 - 2.1      | 0.08 | 16.2 | 22  | 15.4 - 16.7     | 0.28 | 18.4 | 21 | 17.7-19.1      | 0.40 |
| Bahia Magdalena, B.C.S.   | 5.9  | 10 | 5.4-6.5   | 0.36 | 2.1  | 1<br>4 | 2.0–2.3        | 0.08 | 16.7 | 15  | 16.2-17.4       | 0.30 | 18.6 | 13 | 17.7-19.8      | 0.51 |
| Puerto Peñasco, Sonora    | 5.5  | 4  | 5.0-5.8   | 0.33 | 2.3  | 4      | 2.2-2.5        | 0.13 | 16.3 | 4   | 16.1 - 16.6     | 0.22 | 18.2 | 4  | 17.5-19.0      | 0.61 |
| Bahia Kino, Sonora        | 5.8  | 11 | 5.4 - 6.2 | 0.28 | 2.3  | 13     | 2.1–2.4        | 0.09 | 16.7 | 12  | 16.1 - 17.4     | 0.37 | 18.6 | 14 | 17.4-19.2      | 0.47 |
| El Molino, Sinaloa        | 5.9  | 9  | 5.5-6.3   | 0.33 | 2.3  | ×      | 2.1-2.4        | 0.10 | 16.6 | 8   | 16.1–17.2       | 0.39 | 18.8 | ×  | 17.6-19.7      | 0.63 |
| Charco Redondo, Jalisco   | 4.7  | 9  | 4.4-4.9   | 0.19 | 1.7  | S      | 1.6 - 1.7      | 0.04 | 16.3 | 1   | 15.9–16.8       | 0.32 | 18.6 | 7  | 17.7-19.4      | 0.60 |
| Lerma, México             | 5.0  | S  | 4.7-5.3   | 0.24 | 1.9  | 5      | 1.8 - 1.9      | 0.05 | 17.2 | 9   | 16.7–17.3       | 0.23 | 19.3 | 9  | 18.7-19.9      | 0.46 |
|                           |      |    |           |      |      |        |                |      |      |     |                 |      |      |    |                |      |

|                      |      |    | Femur length |      |      | ш<br>Ц | Femur width |      |      | Tibi | Tibiotarsus length |      |      | Tarson | Tarsometatarsus length |      |
|----------------------|------|----|--------------|------|------|--------|-------------|------|------|------|--------------------|------|------|--------|------------------------|------|
| Locality             | Mean | z  | Range        | S.D. | Mean | z      | Range       | S.D. | Mean | z    | Range              | S.D. | Mean | z      | Range                  | S.D. |
| Sable Is., N.S.      | 18.7 | 16 | 18.1–19.5    | 0.42 | 1.4  | 16     | 1.3-1.5     | 0.04 | 31.3 | 14   | 29.8-32.5          | 0.71 | 22.3 | 16     | 21.0-23.1              | 0.64 |
| Halifax, N.S.        | 17.2 | 15 | 16.6-17.6    | 0.27 | 1.2  | 15     | 1.2 - 1.4   | 0.06 | 28.7 | 14   | 27.5-29.4          | 0.51 | 20.7 | 15     | 19.9-21.5              | 0.46 |
| River John, N.S.     | 17.0 | 24 | 16.3-17.7    | 0.38 | 1.3  | 24     | 1.2 - 1.3   | 0.05 | 28.5 | 23   | 26.5 - 30.2        | 0.96 | 20.5 | 23     | 18.8-21.8              | 0.72 |
| Pasadena, NFLD       | 17.1 | 10 | 16.4 - 18.0  | 0.55 | 1.3  | 10     | 1.2-1.4     | 0.06 | 28.8 | ×    | 25.5-30.3          | 1.05 | 20.7 | 10     | 19.5-21.9              | 0.90 |
| St. Andrews, N.B.    | 16.9 | 17 | 16.3-17.5    | 0.27 | 1.2  | 17     | 1.1 - 1.3   | 0.06 | 28.1 | 15   | 27.1-29.2          | 0.62 | 20.3 | 15     | 19.4-21.2              | 0.53 |
| Matane, QUE          | 16.8 | 21 | 16.0 - 18.1  | 0.46 | 1.2  | 22     | 1.1 - 1.4   | 0.07 | 28.0 | 19   | 26.5 - 30.6        | 0.92 | 20.0 | 21     | 18.8-21.5              | 0.76 |
| Magdalen Is., QUE    | 17.3 | 15 | 16.9 - 17.6  | 0.21 | 1.3  | 15     | 1.3 - 1.4   | 0.04 | 29.0 | 15   | 27.8-29.6          | 0.49 | 20.9 | 15     | 20.2-21.7              | 0.49 |
| Kuujjuaq, QUE        | 16.9 | 24 | 15.9-17.7    | 0.43 | 1.3  | 24     | 1.1 - 1.4   | 0.07 | 28.5 | 21   | 26.9 - 29.7        | 0.59 | 20.4 | 24     | 18.7-21.1              | 0.56 |
| Brandonville, WV     | 16.7 | 1  | 16.2-17.2    | 0.30 | 1.3  | 11     | 1.2-1.4     | 0.04 | 27.9 | 11   | 27.1-28.9          | 0.62 | 20.0 | 10     | 18.7 - 20.9            | 0.70 |
| Wildfield, ON        | 17.1 | 11 | 16.4–17.5    | 0.34 | 1.3  | 11     | 1.2 - 1.3   | 0.04 | 28.4 | -    | 27.6-29.4          | 0.60 | 20.1 | 11     | 19.3-20.9              | 0.61 |
| Wallaceburg, ON      | 16.7 | 4  | 16.3-17.4    | 0.35 | 1.2  | 15     | 1.1 - 1.3   | 0.08 | 27.9 | 15   | 27.2-7             | 0.52 | 20.1 | 15     | 19.4 - 20.6            | 0.37 |
| Sowerby, ON          | 16.6 | 6  | 16.2 - 16.9  | 0.25 | 1.3  | 6      | 1.2 - 1.3   | 0.05 | 27.5 | 6    | 26.4 - 28.4        | 0.58 | 20.0 | 8      | 19.2-20.5              | 0.49 |
| Moosonee, ON         | 17.0 | 31 | 16.0 - 17.7  | 0.40 | 1.2  | 31     | 1.2 - 1.3   | 0.05 | 28.0 | 31   | 26.9–29.6          | 0.61 | 20.1 | 28     | 19.2-21.2              | 0.56 |
| Attawapiskat, ON     | 16.9 | 26 | 16.1–17.9    | 0.40 | 1.2  | 26     | 1.1 - 1.4   | 0.06 | 27.9 | 20   | 26.8-29.5          | 0.66 | 20.1 | 23     | 19.1–21.0              | 0.43 |
| Winisk, ON           | 17.1 | 21 | 16.3-17.5    | 0.30 | 1.2  | 21     | 1.2 - 1.3   | 0.05 | 28.3 | 17   | 27.0 - 29.5        | 0.59 | 20.2 | 19     | 19.2-21.1              | 0.48 |
| Thunder Bay, ON      | 16.7 | 12 | 16.2–17.4    | 0.42 | 1.2  | 12     | 1.1 - 1.3   | 0.06 | 27.5 | 12   | 26.5 - 28.4        | 0.59 | 19.7 | 12     | 19.1 - 20.3            | 0.39 |
| Delta, MAN           | 16.5 | 20 | 15.8-17.5    | 0.36 | 1.2  | 21     | 1.1 - 1.3   | 0.07 | 26.9 | 21   | 25.7–27.7          | 0.48 | 19.4 | 20     | 18.4 - 20.1            | 0.52 |
| Churchill, MAN       | 16.9 | 18 | 16.2-17.6    | 0.36 | 1.3  | 18     | 1.2 - 1.3   | 0.05 | 28.0 | 18   | 26.7–28.9          | 0.64 | 20.3 | 16     | 19.6-21.2              | 0.53 |
| Coppermine, N.W.T.   | 16.6 | 16 | 16.0–17.4    | 0.40 | 1.3  | 16     | 1.2 - 1.3   | 0.05 | 27.5 | 16   | 26.7–29.0          | 0.77 | 19.7 | 16     | 18.7-20.9              | 0.66 |
| Norman Wells, N.W.T. | 16.7 | 22 | 16.2-17.0    | 0.27 | 1.2  | 22     | 1.1 - 1.3   | 0.05 | 27.9 | 19   | 26.3–28.9          | 0.68 | 20.1 | 22     | 19.0-21.3              | 0.58 |
| Inuvik, N.W.T.       | 16.7 | 14 | 16.2-17.5    | 0.35 | 1.2  | 14     | 1.1 - 1.3   | 0.07 | 27.8 | 13   | 26.5-28.7          | 0.66 | 20.0 | 13     | 19.0-21.0              | 0.52 |
| Grande Prairie, ALTA | 16.5 | 23 | 15.5-17.3    | 0.43 | 1.2  | 24     | 1.1 - 1.3   | 0.06 | 26.9 | 17   | 26.0-28.2          | 0.62 | 19.3 | 22     | 18.3–20.3              | 0.50 |
| Koyuk, AK            | 16.5 | 21 | 15.8-17.2    | 0.38 | 1.1  | 21     | 1.0 - 1.3   | 0.07 | 27.4 | 21   | 25.9–28.2          | 0.66 | 19.8 | 21     | 18.7-20.8              | 0.54 |
| Wasilla, AK          | 16.6 | 21 | 16.1 - 17.4  | 0.32 | 1.3  | 23     | 1.1 - 1.4   | 0.07 | 27.7 | 21   | 26.9–28.5          | 0.56 | 20.0 | 23     | 19.1–21.2              | 0.56 |
| Umnak Is., AK        | 18.3 | 22 | 17.6-19.3    | 0.43 | 1.4  | 24     | 1.3-1.4     | 0.05 | 30.5 | 24   | 29.3–31.5          | 0.55 | 21.9 | 24     | 20.9–22.7              | 0.52 |
| Cold Bay, AK         | 17.7 | ∞  | 17.1 - 18.1  | 0.39 | 1.3  | 8      | 1.2–1.3     | 0.05 | 29.5 | ×    | 28.4 - 30.1        | 0.61 | 21.2 | œ      | 20.7-21.8              | 0.38 |
| Port Heiden, AK      | 17.2 | 13 | 16.3-18.0    | 0.42 | 1.3  | 13     | 1.1 - 1.4   | 0.07 | 28.6 | 13   | 26.7-29.6          | 0.72 | 20.6 | 13     | 19.6–21.3              | 0.46 |
| Middleton Is., AK    | 17.3 | 20 | 16.7 - 18.1  | 0.42 | 1.3  | 20     | 1.2–1.4     | 0.05 | 28.9 | 20   | 27.5 - 30.0        | 0.69 | 21.0 | 20     | 19.6-22.2              | 0.65 |
| Sheridan, WY         | 16.6 | 17 | 15.4–17.0    | 0.45 | 1.2  | 17     | 1.1 - 1.3   | 0.07 | 26.9 | 14   | 25.5–27.7          | 0.54 | 19.4 | 17     | 18.1 - 20.4            | 0.60 |
| Woodruff, UT         | 16.9 | 17 | 15.8-17.5    | 0.48 | 1.2  | 17     | 1.2 - 1.3   | 0.05 | 26.8 | 15   | 26.9–28.5          | 0.51 | 20.2 | 16     | 19.0-21.1              | 0.58 |
| Halleck, NV          | 16.6 | 6  | 16.1–17.3    | 0.42 | 1.2  | 6      | 1.2 - 1.3   | 0.04 | 27.4 | 6    | 26.6–28.3          | 0.61 | 19.7 | 6      | 18.9 - 20.4            | 0.51 |
| Creston, WA          | 16.7 | 18 | 16.1–17.7    | 0.51 | 1.2  | 19     | 1.1 - 1.4   | 0.08 | 27.5 | 19   | 26.3-28.9          | 0.72 | 19.5 | 19     |                        | 0.71 |
| <                    | 16.4 | 24 | 15.7-17.2    | 0.44 | 1.2  | 25     | 1.1 - 1.3   | 0.04 | 27.0 | 22   | 26.1 - 28.2        | 0.62 | 19.6 | 21     | 18.4 - 20.2            | 0.48 |
| Owen's Lake, CA      | 16.7 | 23 | 15.9–17.4    | 0.39 | 1.2  | 23     | 1.1 - 1.3   | 0.05 | 27.4 | 18   |                    | 0.58 | 19.7 | 23     | 18.7-20.9              | 0.59 |
| Eureka, CA           | 17.0 | 14 | 16.1–17.8    | 0.47 | 1.2  | 14     | 1.1 - 1.3   | 0.06 | 28.0 | 12   | 26.329.9           | 0.86 | 20.1 | 12     | 19.3–21.3              | 0.57 |

60

APPENDIX 2. CONTINUED

| CONTINU     |  |
|-------------|--|
| r,          |  |
| NIC         |  |
| <b>PPEN</b> |  |

JED

|                           |      | ц  | emur length |      |      | Fe | Femur width |      |      | Tibi | ibiotarsus length |      |      | Tarson | Tarsometatarsus length |      |
|---------------------------|------|----|-------------|------|------|----|-------------|------|------|------|-------------------|------|------|--------|------------------------|------|
| Locality                  | Mean | z  | Range       | S.D. | Mean | z  | Range       | S.D. | Mean | z    | Range             | S.D. | Mean | z      | Range                  | S.D. |
| Morro Bay, CA             | 16.6 | 10 | 15.6-17.2   | 0.61 | 1.2  | 11 | 1.1-1.3     | 0.05 | 27.2 | 10   | 25.3-28.1         | 0.88 | 19.6 | =      | 18.4-20.7              | 0.75 |
| San Diego, CA             | 16.6 | 15 | 16.2 - 17.4 | 0.43 | 1.2  | 15 | 1.1 - 1.4   | 0.08 | 27.5 | 14   | 26.5-28.7         | 0.58 | 19.8 | 15     | 18.4 - 20.9            | 0.58 |
| Bahia San Quintin, B.C.N. | 16.5 | 15 | 15.9–17.3   | 0.37 | 1.1  | 15 | 1.1 - 1.2   | 0.05 | 27.5 | 15   | 26.2 - 28.4       | 0.70 | 19.7 | 15     | 18.7 - 20.6            | 0.58 |
| Guerrero Negro, B.C.S.    | 17.1 | 23 | 16.0-17.9   | 0.45 | 1.1  | 23 | 1.1 - 1.2   | 0.05 | 28.6 | 22   | 26.9-29.8         | 0.70 | 20.5 | 21     | 19.7-21.5              | 0.47 |
| Bahia Magdalena, B.C.S.   | 17.7 | 15 | 16.9 - 18.2 | 0.38 | 1.2  | 15 | 1.1 - 1.3   | 0.06 | 29.3 | 15   | 28.6 - 30.0       | 0.43 | 21.1 | 15     | 20.4 - 22.0            | 0.40 |
| Puerto Peñasco, Sonora    | 17.2 | 4  | 16.9–17.5   | 0.25 | 1.2  | 4  | 1.2 - 1.3   | 0.05 | 29.0 | 4    | 28.4 - 29.8       | 0.61 | 21.3 | 4      | 20.5-21.7              | 0.53 |
| Bahia Kino, Sonora        | _    | 14 | 16.3 - 18.3 | 0.46 | 1.2  | 14 | 1.1 - 1.3   | 0.05 | 29.1 | 12   | 26.9 - 30.3       | 0.91 | 21.1 | 13     | 19.2-22.6              | 0.83 |
| El Molino, Sinaloa        | 17.5 | ×  | 16.8 - 17.0 | 0.40 | 1.2  | ×  | 1.2 - 1.3   | 0.05 | 29.4 | ×    | 28.3-30.5         | 0.85 | 20.9 | 7      | 19.9-22.0              | 0.71 |
| Charco Redondo, Jalisco   | 17.0 | ٢  | 15.9–18.0   | 0.69 | 1.2  | 7  | 1.1 - 1.3   | 0.06 | 27.8 | ٢    | 26.2-29.3         | 0.92 | 20.4 | 9      | 19.6-21.0              | 0.48 |
| Lerma, México             | 17.4 | 9  | 16.7–18.2   | 0.50 | 1.3  | 9  | 1.2 - 1.3   | 0.05 | 28.5 | 9    | 27.7–29.1         | 0.56 | 20.7 | 9      | 20.0-21.2              | 0.39 |
|                           |      |    |             |      |      |    |             |      |      |      |                   |      |      |        |                        |      |

| CONTINUED.  |  |
|-------------|--|
| APPENDIX 2. |  |

|                      |      | Hu | Humerus length |      |      |    | Ulna length |      |      | Carpor | Carpometacarpus length |      |      | H  | Hallux length |      |
|----------------------|------|----|----------------|------|------|----|-------------|------|------|--------|------------------------|------|------|----|---------------|------|
| Locality             | Mean | z  | Range          | S.D. | Mean | z  | Range       | S.D. | Mean | z      | Range                  | S.D. | Mean | z  | Range         | S.D. |
| Sable Is., N.S.      | 19.7 | 15 | 19.0-22.0      | 0.75 | 22.2 | 14 | 21.5-22.7   | 0.40 | 12.5 | 16     | 12.0-13.1              | 0.32 | 9.2  | 16 | 8.5-10.1      | 0.40 |
| Halifax, N.S.        | 18.0 | 15 | 17.7–18.5      | 0.25 | 20.7 | 15 | 20.2-21.3   | 0.31 | 11.4 | 15     | 11.0 - 11.9            | 0.28 | 8.3  | 14 | 8.0 - 8.8     | 0.25 |
| River John, N.S.     | 17.9 | 24 | 17.2-18.8      | 0.43 | 20.4 | 24 | 19.3–21.5   | 0.52 | 11.3 | 21     | 10.7-11.7              | 0.26 | 8.1  | 24 | 7.7-8.8       | 0.26 |
| Pasadena, NFLD       | 17.8 | ×  | 17.2–18.8      | 0.50 | 20.6 | 6  | 19.8–21.3   | 0.49 | 11.3 | ×      | 11.0-11.7              | 0.26 | 8.2  | 10 | 7.8-8.7       | 0.31 |
| St. Andrews, N.B.    | 17.9 | 16 | 17.4–18.6      | 0.33 | 20.6 | 18 | 19.9–21.4   | 0.35 | 11.4 | 18     | 10.9-11.7              | 0.24 | 8.0  | 16 | 7.6-8.5       | 0.26 |
| Matane, QUE          | 17.8 | 21 | 17.0–9.3       | 0.46 | 20.4 | 20 | 19.7-21.9   | 0.49 | 11.1 | 20     | 10.1 - 12.0            | 0.38 | 8.0  | 21 | 7.5-8.4       | 0.25 |
| Magdalen Is., QUE    | 18.1 | 14 | 17.2–18.5      | 0.31 | 20.7 | 15 | 20.2–21.1   | 0.27 | 11.4 | 15     | 11.1-11.9              | 0.23 | 8.3  | 15 | 7.8-8.9       | 0.34 |
| Kuujjuaq, QUE        | 17.9 | 53 | 17.0-18.6      | 0.43 | 20.5 | 24 | 19.4–21.3   | 0.52 | 11.3 | 24     | 10.8-12.0              | 0.30 | 7.9  | 24 | 7.5-8.4       | 0.26 |
| Brandonville, WV     | 17.8 | Ξ  | 17.4–18.4      | 0.29 | 20.2 | 10 | 19.6 - 20.7 | 0.35 | 11.2 | 10     | 10.7-11.5              | 0.22 | 7.9  | 10 | 7.3-8.3       | 0.32 |
| Wildfield, ON        | 18.1 | 11 | 17.5-18.8      | 0.34 | 20.8 | Ξ  | 20.4–21.7   | 0.39 | 11.4 | Ξ      | 11.0-11.8              | 0.24 | 8.0  | 11 | 7.5-8.5       | 0.29 |
| Wallaceburg, ON      | 17.7 | 14 | 17.3-18.0      | 0.23 | 20.4 | 15 | 19.8–20.9   | 0.32 | 11.2 | 15     | 10.7-11.8              | 0.27 | 7.9  | 14 | 7.5-8.2       | 0.23 |
| Sowerby, ON          | 17.7 | 6  | 17.2 - 18.0    | 0.27 | 20.2 | 6  | 19.8–20.6   | 0.25 | 11.1 | 6      | 10.9-11.5              | 0.19 | 7.8  | 6  | 7.4-8.3       | 0.29 |
| Moosonee, ON         | 18.1 | 31 | 17.3-19.2      | 0.42 | 20.8 | 31 | 20.0-22.3   | 0.49 | 11.5 | 28     | 11.0–12.1              | 0.24 | 7.9  | 28 | 7.5-8.9       | 0.30 |
| Attawapiskat, ON     | 17.9 | 26 | 17.0–18.6      | 0.43 | 20.6 | 25 | 19.7–21.3   | 0.40 | 11.3 | 26     | 10.6-11.8              | 0.27 | 7.8  | 26 | 7.3-8.3       | 0.23 |
| Winisk, ON           | 18.2 | 18 | 17.4–18.8      | 0.33 | 20.9 | 21 | 20.1-21.5   | 0.44 | 11.6 | 20     | 11.1-12.0              | 0.27 | 7.9  | 17 | 7.5-8.3       | 0.29 |
| Thunder Bay, ON      | 17.8 | 12 | 17.2-18.3      | 0.33 | 20.3 | 12 | 19.8–21.0   | 0.41 | 11.3 | 12     | 10.8 - 11.8            | 0.30 | 7.8  | 11 | 7.5-8.3       | 0.27 |
| Delta, MAN           | 17.7 | 20 | 16.7 - 18.2    | 0.40 | 20.1 | 20 | 19.1–21.0   | 0.54 | 11.1 | 17     | 10.6-11.8              | 0.31 | 7.6  | 21 | 6.8 - 8.3     | 0.36 |
| Churchill, MAN       | 18.0 | 18 | 17.5-18.9      | 0.39 | 20.7 | 18 | 19.6–21.6   | 0.53 | 11.5 | 18     | 10.9–12.2              | 0.32 | 7.8  | 14 | 7.4 - 8.4     | 0.27 |
| Coppermine, N.W.T.   | 17.8 | 15 | 17.4-18.4      | 0.29 | 20.3 | 15 | 19.1–21.2   | 0.57 | 11.2 | 16     | 10.6–11.9              | 0.35 | 7.6  | 15 | 7.2-8.0       | 0.25 |
| Norman Wells, N.W.T. | 17.8 | 22 | 17.1–18.1      | 0.27 | 20.5 | 21 | 19.6–21.3   | 0.40 | 11.3 | 19     | 10.8-11.8              | 0.28 | 7.8  | 17 | 7.4-8.3       | 0.23 |
| Inuvik, N.W.T.       | 17.8 | 14 | 16.9–18.2      | 0.26 | 20.5 | 4  | 19.8–20.9   | 0.34 | 11.4 | 14     | 11.0-11.8              | 0.23 | 7.9  | 14 | 7.5-8.3       | 0.26 |
| Grande Prairie, ALTA | 17.6 | 52 | 17.0–18.5      | 0.38 | 20.1 | 22 | 19.2–20.8   | 0.46 | 11.2 | 53     | 10.6 - 11.7            | 0.27 | 7.7  | 24 | 7.0-8.5       | 0.36 |
| Koyuk, AK            | 17.4 | 21 | 16.8 - 18.1    | 0.34 | 20.2 | 21 | 19.4–21.1   | 0.38 | 11.3 | 21     | 10.8-11.7              | 0.25 | 7.7  | 21 | 7.1–8.1       | 0.25 |
| Wasilla, AK          | 17.6 | 23 | 16.9 - 18.4    | 0.36 | 20.5 | 23 | 19.8–21.2   | 0.38 | 11.4 | 23     | 10.9–12.1              | 0.29 | 7.8  | 21 | 7.4-8.3       | 0.23 |
| Umnak Is., AK        | 18.8 | 24 | 18.2–19.4      | 0.37 | 21.8 | 24 | 21.2–22.7   | 0.47 | 12.4 | 24     | 11.8-12.8              | 0.30 | 8.5  | 24 | 8.1-9.0       | 0.24 |
| Cold Bay, AK         | 18.4 | ×  | 17.8–19.0      | 0.42 | 21.2 | ×  | 20.3-21.7   | 0.45 | 11.9 | ٢      | 11.6-12.1              | 0.17 | 8.3  | ×  | 8.0-8.7       | 0.24 |
| Port Heiden, AK      | 17.8 | 12 | 17.0 - 18.4    | 0.35 | 20.6 | 13 | 19.8–21.3   | 0.35 | 11.7 | 12     | 11.2-11.8              | 0.17 | 8.1  | 13 | 7.5-8.5       | 0.30 |
| Middleton Is., AK    | 18.1 | 20 | 17.4 - 18.8    | 0.42 | 21.0 | 20 | 20.0-21.9   | 0.48 | 11.8 | 20     | 11.3-12.3              | 0.29 | 8.2  | 20 | 7.9–8.6       | 0.21 |
| Sheridan, WY         | 17.7 | 17 | 16.9–18.3      | 0.39 | 20.2 | 17 | 19.1–21.0   | 0.51 | 11.2 | 17     | 10.6 - 11.7            | 0.31 | 7.6  | 17 | 7.2-8.0       | 0.24 |
| Woodruff, UT         | 18.0 | 15 | 17.2-18.6      | 0.39 | 20.8 | 15 | 20.0 - 21.4 | 0.36 | 11.5 | 15     | 11.0-11.8              | 0.28 | 7.9  | 13 | 7.5-8.3       | 0.26 |
| Halleck, NV          | 17.8 | 6  | 17.1 - 18.4    | 0.38 | 20.6 | 6  | 19.9–21.4   | 0.41 | 11.3 | 6      | 10.8 - 11.8            | 0.34 | 7.8  | 6  | 7.1-8.4       | 0.41 |
| Creston, WA          | 17.8 | 17 | 17.3-19.2      | 0.45 | 20.6 | 19 | 20.0 - 21.9 | 0.53 | 11.3 | 19     | 10.7 - 12.1            | 0.32 | 7.6  | 19 | 7.2-8.4       | 0.33 |
| Hoquiam, WA          | 17.4 | 21 | 16.7 - 18.0    | 0.43 | 19.9 | 24 | 19.1 - 20.6 | 0.43 | 11.0 | 22     | 10.5 - 11.4            | 0.26 | 7.8  | 24 | 7.3-8.4       | 0.32 |
| Owen's Lake, CA      | 17.7 | 23 | 17.0–18.5      | 0.45 | 20.3 | 22 | 19.3–21.2   | 0.43 | 11.1 | 22     | 10.7 - 12.0            | 0.30 | T.T  | 22 | 7.2–8.2       | 0.31 |
| Eureka, CA           | 17.6 | 14 | 17.0–18.4      | 0.41 | 20.0 | 13 | 19.3–21.1   | 0.50 | 11.1 | 14     | 10.7-11.8              | 0.33 | 8.1  | 14 | 7.7–8.9       | 0.38 |

| CONTINUED.  |  |
|-------------|--|
| APPENDIX 2. |  |

|                           |      | Hu | Humerus length |      |      |            | Ulna length |      |      | Carpom | Carpometacarpus length |      |      | Ë  | Hallux length |      |
|---------------------------|------|----|----------------|------|------|------------|-------------|------|------|--------|------------------------|------|------|----|---------------|------|
| Locality                  | Mean | z  | Range          | S.D. | Mean | z          | Range       | S.D. | Mean | z      | Range                  | S.D. | Mean | z  | Range         | S.D. |
| Morro Bay, CA             | 17.3 | 10 | 16.9-17.8      | 0.30 | 19.6 | 11         | 18.9-20.1   | 0.33 | 10.8 | 11     | 10.3-11.2              | 0.24 | 7.6  | =  | 7.2-7.9       | 0.24 |
| San Diego, CA             | 17.1 | 15 | 16.7-17.5      | 0.30 | 19.3 | 15         | 18.7-19.8   | 0.32 | 10.7 | 13     | 10.4 - 11.1            | 0.22 | 7.6  | 15 | 7.3-8.0       | 0.20 |
| Bahia San Quintin, B.C.N. | 17.1 | 14 | 16.5-17.6      | 0.32 | 19.3 | <b>1</b> 4 | 18.9 - 20.2 | 0.40 | 10.7 | 15     | 10.3-11.2              | 0.24 | 7.6  | 14 | 7.2-8.3       | 0.33 |
| Guerrero Negro, B.C.S.    | 17.5 | 22 | 16.6 - 18.2    | 0.37 | 19.8 | 21         | 18.7 - 20.4 | 0.38 | 11.0 | 21     | 10.0 - 11.8            | 0.32 | T.T  | 23 | 7.2-8.2       | 0.27 |
| Bahia Magdalena, B.C.S.   | 18.0 | 14 | 17.5-18.2      | 0.19 | 20.4 | 15         | 19.9-20.8   | 0.25 | 11.2 | 14     | 10.9 - 11.8            | 0.21 | 7.9  | 15 | 7.5-8.2       | 0.20 |
| Puerto Peñasco, Sonora    | 17.9 | 4  | 17.6 - 18.4    | 0.34 | 20.6 | 4          | 20.0 - 20.9 | 0.39 | 11.5 | 4      | 11.2-11.6              | 0.19 | 7.8  | 4  | 7.5-8.0       | 0.22 |
| Bahia Kino, Sonora        | 18.1 | 13 | 17.0 - 18.6    | 0.45 | 20.5 | 12         | 19.2-21.2   | 0.65 | 11.3 | 13     | 10.7 - 11.8            | 0.30 | 7.7  | 13 | 7.5-8.2       | 0.24 |
| El Molino, Sinaloa        | 18.0 | ×  | 17.3-18.6      | 0.46 | 20.5 | ٢          | 19.8-21.3   | 0.56 | 11.3 | ×      | 10.9 - 11.6            | 0.22 | 7.6  | 8  | 7.2–8.1       | 0.30 |
| Charco Redondo, Jalisco   | 17.9 | 9  | 17.6-18.6      | 0.37 | 20.6 | 9          | 20.0-21.4   | 0.57 | 11.1 | 2      | 10.8 - 11.5            | 0.24 | 8.0  | 9  | 7.6-8.5       | 0.33 |
| Lerma, México             | 18.5 | 9  | 18.4 - 18.8    | 0.16 | 21.5 | S          | 21.4–21.6   | 0.09 | 11.4 | 9      | 11.1-11.6              | 0.22 | 8.0  | 9  | 7.9–8.2       | 0.12 |
|                           |      |    |                |      |      |            |             |      |      |        |                        |      |      |    |               |      |

| APPENDIX 2. CONTINUED | VUED. |     |                |      |      |      |               |      |      |    |             |   |
|-----------------------|-------|-----|----------------|------|------|------|---------------|------|------|----|-------------|---|
|                       |       | Ste | Sternum length |      |      | Ster | Sternum depth |      |      |    | Keel length |   |
| Locality              | Mean  | z   | Range          | S.D. | Mean | z    | Range         | S.D. | Mean | z  | Range       | S |
| Sable Is., N.S.       | 21.5  | 16  | 20.3-22.0      | 0.46 | 10.0 | 16   | 9.4-10.9      | 0.40 | 20.3 | 16 | 18.6-21.6   | 0 |
| Halifax, N.S.         | 19.8  | 14  | 18.6 - 20.6    | 0.56 | 8.8  | 14   | 8.3-9.5       | 0.37 | 18.3 | 14 | 17.0-19.6   | 0 |
| River John, N.S.      | 19.5  | 23  | 18.6 - 20.6    | 0.59 | 9.0  | 23   | 8.2-9.5       | 0.36 | 18.2 | 21 | 17.3-19.4   | 0 |
| Pasadena, NFLD        | 19.9  | 9   | 19.4-21.1      | 0.66 | 8.9  | L    | 8.1 - 9.4     | 0.42 | 18.9 | ŝ  | 18.5-19.3   | 0 |
| St. Andrews, N.B.     | 19.7  | 16  | 19.2-20.5      | 0.41 | 8.9  | 17   | 8.2 - 9.4     | 0.37 | 18.3 | 16 | 17.1-19.6   | 0 |
| Matane, QUE           | 19.4  | 20  | 18.2-21.2      | 0.62 | 8.9  | 20   | 8.39.4        | 0.32 | 18.1 | 22 | 17.0-19.7   | 0 |
| Magdalen Is., QUE     | 19.4  | 13  | 18.2 - 20.4    | 0.56 | 8.6  | 13   | 8.1 - 9.0     | 0.22 | 17.9 | 13 | 16.7-19.4   | 0 |
| Kuujjuaq, QUE         | 19.3  | 22  | 18.7-20.4      | 0.51 | 8.8  | 23   | 7.9 - 9.4     | 0.37 | 18.1 | 23 | 16.8-19.9   | 0 |
| Brandonville, WV      | 19.3  | 10  | 19.1-19.7      | 0.18 | 8.7  | 11   | 8.3-9.1       | 0.24 | 18.0 | 10 | 17.4–18.5   | 0 |
| Wildfield, ON         | 19.5  | 6   | 18.6-20.3      | 0.56 | 8.7  | 10   | 8.3-9.2       | 0.27 | 18.4 | 10 | 17.5-19.2   | 0 |
| Wallaceburg. ON       | 19.2  | 15  | 18.2-20.2      | 0.63 | 8.9  | 15   | 8.3-9.8       | 0.39 | 18.1 | Ś  | 17,1-19,5   | C |

Č A PPENDIY 2

|                      |      | Ste | Sternum length |      |      | Ster | Sternum depth |      |      |    | Keel length |      |      | Syns | Synsacrum width |      |
|----------------------|------|-----|----------------|------|------|------|---------------|------|------|----|-------------|------|------|------|-----------------|------|
| Locality             | Mean | z   | Range          | S.D. | Mean | N    | Range         | S.D. | Mean | z  | Range       | S.D. | Mean | z    | Range           | S.D. |
| Sable Is., N.S.      | 21.5 | 16  | 20.3-22.0      | 0.46 | 10.0 | 16   | 9.4 - 10.9    | 0.40 | 20.3 | 16 | 18.6-21.6   | 0.83 | 11.6 | 16   | 10.9-12.4       | 0.41 |
| Halifax, N.S.        | 19.8 | 14  | 18.6-20.6      | 0.56 | 8.8  | 14   | 8.3–9.5       | 0.37 | 18.3 | 14 | 17.0-19.6   | 0.74 | 10.4 | 14   | 9.8-11.2        | 0.40 |
| River John, N.S.     | 19.5 | 23  | 18.6–20.6      | 0.59 | 9.0  | 23   | 8.2–9.5       | 0.36 | 18.2 | 21 | 17.3-19.4   | 0.59 | 10.3 | 23   | 9.7 - 10.8      | 0.26 |
| Pasadena, NFLD       | 19.9 | 9   | 19.4-21.1      | 0.66 | 8.9  | 7    | 8.1 - 9.4     | 0.42 | 18.9 | ŝ  | 18.5-19.3   | 0.34 | 10.5 | ×    | 10.0 - 10.9     | 0.28 |
| St. Andrews, N.B.    | 19.7 | 16  | 19.2–20.5      | 0.41 | 8.9  | 17   | 8.2–9.4       | 0.37 | 18.3 | 16 | 17.1-19.6   | 0.78 | 10.4 | 17   | 9.7-11.1        | 0.35 |
| Matane, QUE          | 19.4 | 20  | 18.2-21.2      | 0.62 | 8.9  | 20   | 8.3-9.4       | 0.32 | 18.1 | 22 | 17.0-19.7   | 0.59 | 10.2 | 20   | 9.7-10.8        | 0.32 |
| Magdalen Is., QUE    | 19.4 | 13  | 18.2–20.4      | 0.56 | 8.6  | 13   | 8.1 - 9.0     | 0.22 | 17.9 | 13 | 16.7 - 19.4 | 0.76 | 10.5 | 15   | 9.9 - 11.1      | 0.35 |
| Kuujjuaq, QUE        | 19.3 | 22  | 18.7-20.4      | 0.51 | 8.8  | 23   | 7.9–9.4       | 0.37 | 18.1 | 23 | 16.8-19.9   | 0.81 | 10.4 | 23   | 9.8-10.9        | 0.28 |
| Brandonville, WV     | 19.3 | 10  | 19.1–19.7      | 0.18 | 8.7  | 11   | 8.3-9.1       | 0.24 | 18.0 | 10 | 17.4 - 18.5 | 0.37 | 10.2 | 6    | 9.8-10.5        | 0.24 |
| Wildfield, ON        | 19.5 | 6   | 18.6-20.3      | 0.56 | 8.7  | 10   | 8.3–9.2       | 0.27 | 18.4 | 10 | 17.5-19.2   | 0.63 | 10.4 | 11   | 10.0 - 10.8     | 0.23 |
| Wallaceburg, ON      | 19.2 | 15  | 18.2-20.2      | 0.63 | 8.9  | 15   | 8.3-9.8       | 0.39 | 18.1 | 15 | 17.1-19.5   | 0.75 | 10.3 | 14   | 9.7 - 10.8      | 0.28 |
| Sowerby, ON          | 19.0 | 6   | 18.4–19.6      | 0.45 | 8.6  | 6    | 8.2–9.1       | 0.29 | 17.9 | 6  | 16.9-19.2   | 0.63 | 10.0 | 6    | 9.5-10.5        | 0.31 |
| Moosonee, ON         | 19.6 | 30  | 18.9 - 20.7    | 0.49 | 9.0  | 30   | 8.0 - 10.0    | 0.43 | 18.6 | 29 | 17.4 - 20.0 | 0.66 | 10.4 | 28   | 9.9 - 11.0      | 0.23 |
| Attawapiskat, ON     | 19.3 | 26  | 18.0-20.5      | 0.73 | 9.0  | 25   | 8.3–9.6       | 0.34 | 18.3 | 24 | 18.6-20.3   | 0.97 | 10.3 | 23   | 9.7 - 11.0      | 0.36 |
| Winisk, ON           | 19.5 | 19  | 18.7-20.4      | 0.48 | 8.9  | 21   | 8.4-9.9       | 0.34 | 18.2 | 18 | 16.9 - 19.0 | 0.66 | 10.5 | 17   | 10.0 - 11.1     | 0.31 |
| Thunder Bay, ON      | 19.3 | 11  | 18.0-20.2      | 0.70 | 8.5  | 10   | 8.0 - 9.3     | 0.43 | 18.2 | Ξ  | 16.9-19.5   | 0.82 | 10.1 | 12   | 9.7 - 10.4      | 0.22 |
| Delta, MAN           | 19.3 | 20  | 17.6-20.5      | 0.72 | 8.7  | 20   | 8.0 - 9.4     | 0.41 | 18.1 | 21 | 16.2 - 19.9 | 0.92 | 10.0 | 15   | 9.0-10.3        | 0.33 |
| Churchill, MAN       | 19.8 | 16  | 19.2–20.5      | 0.43 | 8.6  | 15   | 8.0 - 9.1     | 0.34 | 18.7 | 16 | 17.5-19.8   | 0.52 | 10.5 | 16   | 9.9-11.3        | 0.32 |
| Coppermine, N.W.T.   | 19.0 | 4   | 18.2 - 20.0    | 0.49 | 8.4  | 14   | 7.8–9.0       | 0.38 | 17.9 | 15 | 17.0-19.2   | 0.55 | 10.2 | 16   | 9.6-10.8        | 0.30 |
| Norman Wells, N.W.T. | 19.3 | 22  | 18.2–20.2      | 0.58 | 8.8  | 19   | 8.2–9.6       | 0.35 | 18.3 | 20 | 17.1–19.4   | 0.56 | 10.2 | 22   | 9.7-10.9        | 0.28 |
| Inuvik, N.W.T.       | 19.3 | 14  | 18.5-20.4      | 0.43 | 8.6  | 14   | 7.8–9.1       | 0.36 | 18.5 | 14 | 17.5–19.4   | 0.47 | 10.3 | 14   | 10.0 - 10.9     | 0.23 |
| Grande Prairie, ALTA | 19.1 | 22  | 17.7–19.9      | 0.55 | 8.6  | 22   | 8.2 - 9.1     | 0.28 | 18.0 | 22 | 16.7-19.2   | 0.69 | 10.1 | 19   | 9.7 - 10.7      | 0.29 |
| Koyuk, AK            | 19.2 | 21  | 18.2 - 20.6    | 0.73 | 8.6  | 21   | 7.7–9.5       | 0.46 | 18.2 | 21 | 16.5-20.4   | 1.05 | 10.3 | 21   | 9.9 - 10.8      | 0.23 |
| Wasilla, AK          | 19.4 | 23  | 18.2 - 20.3    | 0.56 | 8.8  | 23   | 8.2–9.2       | 0.28 | 18.5 | 23 | 17.0–19.4   | 0.72 | 10.2 | 22   | 9.7 - 10.7      | 0.26 |
| Umnak Is., AK        | 21.0 | 23  | 19.7–22.6      | 0.57 | 9.3  | 23   | 7.8–10.2      | 0.50 | 19.6 | 23 | 18.6-21.7   | 0.57 | 11.3 | 23   | 10.8-12.2       | 0.36 |
| Cold Bay, AK         | 20.6 | ×   | 19.5-21.8      | 0.90 | 9.1  | L    | 8.4–9.6       | 0.42 | 19.2 | ~  | 18.0 - 20.2 | 0.82 | 10.8 | 2    | 10.5 - 11.0     | 0.21 |
| Port Heiden, AK      | 20.0 | 12  | 19.2–20.9      | 0.47 | 9.1  | 12   | 8.2 - 10.0    | 0.47 | 18.8 | 12 | 18.0-20.4   | 0.74 | 10.6 | 13   | 10.2-11.3       | 0.31 |
| Middleton Is., AK    | 20.3 | 20  | 19.5-21.3      | 0.53 | 8.7  | 20   | 8.1–9.3       | 0.31 | 18.7 | 19 | 17.5-20.2   | 0.69 | 10.8 | 19   | 9.8 - 11.5      | 0.43 |
| Sheridan, WY         | 19.2 | 16  | 18.3 - 20.0    | 0.56 | 8.7  | 16   | 8.1–9.1       | 0.30 | 18.2 | 16 | 16.9 - 19.5 | 0.75 | 10.0 | 16   | 9.3-10.6        | 0.29 |
| Woodruff, UT         | 19.4 | 17  | 17.6–20.1      | 0.58 | 8.6  | 17   | 7.8–9.0       | 0.37 | 18.6 | 17 | 16.7-19.6   | 0.67 | 10.2 | 16   | 9.7 - 10.6      | 0.26 |
| Halleck, NV          | 19.1 | 2   | 18.6–19.8      | 0.50 | 8.7  | 2    | 8.2-9.2       | 0.36 | 18.2 | 6  | 17.5-18.9   | 0.54 | 10.1 | 6    | 9.7 - 10.8      | 0.31 |
| Creston, WA          | 19.3 | 19  | 18.1–21.1      | 0.79 | 8.7  | 19   | 8.3–9.4       | 0.34 | 18.4 | 18 | 16.6-19.6   | 0.75 | 10.2 | 19   | 9.6-10.7        | 0.30 |
| Hoquiam, WA          | 18.9 | 23  | 17.9–19.9      | 0.52 | 8.8  | 24   | 8.1-9.4       | 0.31 | 18.1 | 23 | 17.0 - 19.4 | 0.73 | 10.1 | 25   | 9.1 - 10.8      | 0.41 |
| Owen's Lake, CA      |      | 21  | 17.3–20.2      | 0.73 | 8.4  | 22   | 7.6–9.3       | 0.43 | 17.7 | 21 | 16.3 - 19.8 | 0.80 | 9.6  | 22   | 9.2 - 10.3      | 0.26 |
| Eureka, CA           | 19.1 | 13  | 18.3-20.5      | 0.69 | 8.6  | 14   | 8.0 - 9.0     | 0.30 | 18.0 | 13 | 16.8–19.4   | 0.76 | 10.4 | 13   | 10.0-10.8       | 0.20 |
|                      |      |     |                |      |      |      |               |      |      |    |             |      |      |      |                 |      |

|                                |      | Ste | crnum length |      |      | Ster | Sternum depth |      |      |    | Keel length |      |      | Syn | Synsacrum width |      |
|--------------------------------|------|-----|--------------|------|------|------|---------------|------|------|----|-------------|------|------|-----|-----------------|------|
| Locality                       | Mean | z   | Range        | S.D. | Mean | z    | Range         | S.D. | Mean | z  | Range       | S.D. | Mean | z   | Range           | S.D. |
| Morro Bay, CA                  | 18.6 | 11  | 17.9–19.5    | 0.47 | 8.4  | =    | 7.6-8.6       | 0.29 | 17.0 | 11 | 15.7-18.2   | 0.74 | 10.4 | 10  | 10.1-10.6       | 0.19 |
| San Diego, CA                  | 18.6 | 15  | 17.8-19.6    | 0.49 | 8.4  | 15   | 7.9-8.8       | 0.32 | 17.1 | 15 | 15.5 - 18.2 | 0.69 | 10.1 | 14  | 9.7 - 10.4      | 0.23 |
| Bahia San Ouintin, B.C.N. 18.3 | 18.3 | 12  | 17.4 - 18.9  | 0.45 | 8.3  | 14   | 7.6-9.1       | 0.47 | 16.9 | 13 | 15.7-17.7   | 0.61 | 10.3 | 12  | 10.0 - 10.7     | 0.24 |
| Guerrero Negro, B.C.S.         | 18.8 | 21  | 18.2-19.6    | 0.38 | 8.6  | 20   | 8.1 - 9.0     | 0.24 | 17.4 | 21 | 16.5-18.7   | 0.58 | 10.7 | 20  | 10.1 - 11.3     | 0.30 |
| Bahia Magdalena, B.C.S.        | 19.0 | 15  | 18.5-19.7    | 0.33 | 8.8  | 15   | 8.4 - 9.4     | 0.27 | 17.6 | 15 | 17.1 - 18.4 | 0.38 | 10.7 | 15  | 9.9–11.1        | 0.29 |
| Puerto Peñasco, Sonora         | 18.5 | 4   | 18.2-18.8    | 0.25 | 8.2  | 4    | 7.9-8.4       | 0.22 | 18.9 | 4  | 16.4-17.6   | 0.57 | 10.4 | 4   | 10.3 - 10.5     | 0.08 |
| Bahia Kino, Sonora             | 19.1 | 13  | 18.0-20.3    | 0.69 | 8.7  | 13   | 8.1–9.2       | 0.28 | 18.0 | 13 | 16.2-19.2   | 0.85 | 10.8 | 12  | 10.4 - 11.4     | 0.33 |
| El Molino, Sinaloa             | 19.2 | ×   | 18.2-20.0    | 0.59 | 8.5  | 8    | 8.1-8.8       | 0.26 | 17.7 | ×  | 16.4-18.5   | 0.80 | 10.9 | ×   | 10.6 - 11.2     | 0.23 |
| Charco Redondo, Jalisco        | 18.8 | 7   | 18.1–19.6    | 0.51 | 8.5  | 7    | 8.28.9        | 0.28 | 17.7 | ٢  | 16.7-19.2   | 0.8  | 10   | 9   | 9.2-10.5        | 0.44 |
| Lerma, México                  | 19.5 | S   | 18.7 - 20.4  | 0.62 | 8.7  | Ś    | 8.2-9.3       | 0.47 | 18.3 | Ś  | 17.9–19.2   | 0.53 | 10.1 | 4   | 9.8-10.3        | 0.24 |