

Supplementary Materials: Museum information on Ivory Gull samples

Canada Breeding samples

| Museum Sample | Region | Location | Year | Day |
|---------------|---------|-----------------------------------|------|--------|
| CMN06704 | Nunavut | N63.97E61.82 | 1904 | Sep22 |
| CMN23444 | Nunavut | Dundas Harbour | 1929 | Aug6 |
| CMN57268 | Nunavut | N74.68E94.83 | 1969 | July4 |
| CMN69123 | Nunavut | N79.10E75.87 | 1979 | Jun 18 |
| CMN69124 | Nunavut | N79.10E75.87 | 1979 | Jun 18 |
| CMN69193 | Nunavut | Pond Inlet | 1978 | Jun14 |
| CMN69194 | Nunavut | Pond Inlet | 1978 | July |
| CMN69195 | Nunavut | Pond Inlet | 1978 | July |
| CMN71689 | Nunavut | Seymour Island | 1975 | Aug17 |
| CMN71690 | Nunavut | Seymour Island | 1975 | Jul30 |
| CMN83462 | Nunavut | N/A | N/A | N/A |
| CMN83464 | Nunavut | Seymour Island | 1976 | Aug8 |
| CMN83465 | Nunavut | N/A | N/A | N/A |
| CMN83478 | Nunavut | N/A | N/A | N/A |
| CMN83479 | Nunavut | N/A | N/A | N/A |
| CMN83480 | Nunavut | N/A | N/A | N/A |
| CMN83481 | Nunavut | N/A | N/A | N/A |
| CMN83483 | Nunavut | Seymour Island | 1977 | July2 |
| CMN83633 | Nunavut | N/A | N/A | N/A |
| CMN84135 | Nunavut | N/A | N/A | N/A |
| CMN84138 | Nunavut | Grise Fjord | 1983 | July9 |
| CMN84139 | Nunavut | N/A | N/A | N/A |
| ROM79400 | Nunavut | Baffin Island | 1951 | Jun29 |
| CM129250 | NWT | Inuvik District | 1941 | Sep |
| CM161539 | Nunavut | Baffin District | 1937 | Aug17 |
| ANSP118867 | Nunavut | Ellesmere Island | 1934 | Sep8 |
| ANSP118869 | Nunavut | Taylor Inlet, Ellesmere Island | 1934 | Sep8 |
| ANSP118872 | Nunavut | Ellesmere Island | 1934 | Sep8 |

Canada Non-Breeding samples

| Museum Sample | Region | Location | Year | Day |
|----------------------|---------------|--------------------|-------------|------------|
| IVGU1 | NL | N/A | 2000s | N/A |
| IVGU2 | NL | N/A | 2000s | N/A |
| FA | NL | Fogo Island | 2000s | winter |
| FJ | NL | Fogo Island | 2000s | winter |
| B/I | NL | L'Anse Aux Meadows | 1980s | winter |
| PL6 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN-IL1 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN-IL2 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN-IL3 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN-IL4 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN-IL5 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN-AL1 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN-AL2 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN-AL3 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN-AL4 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN-AL5 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN-AL6 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN-AL7 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN-AL8 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN-AL9 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN-AL10 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN-AL11 | NL | L'Anse Aux Meadows | 1980s | winter |
| CMN29210 | Quebec | Natashquan | 1939 | Dec19 |
| CMN29217 | Quebec | N/A | N/A | N/A |
| CMN65716 | NWT | N70.17E116.50 | 1976 | Nov |
| ROM75016 | Ontario | Kenora District | 1956 | Jan |
| ANSP146497 | US | New Jersey | 1940 | Feb |

Norway Breeding samples

| Museum Samples | Location | Year | Day |
|-----------------------|-----------------|-------------|------------|
| OSLO7401 | Biskayerhuken | 1949 | Jul14 |
| OSLO7402 | Biskayerhuken | 1949 | Jul12 |
| OSLO7403 | Bjornehavn | 1949 | Jul3 |
| OSLO7537 | Mosselbay | 1954 | Jul28 |
| OSLO11145 | Svalbard | 1982 | Aug20 |
| OSLO11148 | Svalbard | 1982 | Aug20 |
| OSLO11149 | Svalbard | 1982 | Aug20 |
| OSLO11150 | Svalbard | 1982 | Aug20 |
| OSLO11166 | Svalbard | 1982 | Aug20 |
| OSLO11410 | N76.45E29.0 | 1986 | May25 |
| ZMUC28.912 | Siktefjeld | 1949 | Jul25 |
| ZMUC28.913 | Biskayernuken | 1949 | Jul15 |
| ZMUB2115 | Finnmark | N/A | N/A |
| ZMUB10375 | Svea | 1947 | Jul25 |
| ZMUB10376 | Svea | 1947 | Jul25 |
| ZMUB10379 | Svea | 1947 | Jul25 |
| ZMUB11629 | Kong Karls Land | 1960 | Aug7 |

Greenland Breeding samples

| Museum Sample | Location | Year | Day |
|----------------------|-----------------------|-------------|------------|
| ZMUC14.147 | Isenv. Kap Stephensen | 1932 | Jul22 |
| ZMUC14.148 | Isenv. Kap Stephensen | 1932 | Jul22 |
| ZMUC14.149 | Isenv. Kap Stephensen | 1932 | Jul23 |
| ZMUC14.150 | Isenv. Kap Stephensen | 1932 | Jul23 |
| ZMUC14.151 | Isenv. Kap Stephensen | 1932 | Aug15 |
| ZMUC14.190 | Scoresby Lund | 1933 | Aug25 |
| ZMUC57.689 | Kane Basin | 1941 | Jun5 |
| ZMUC57.690 | Kane Basin | 1941 | Jun5 |
| ZMUC57.691 | Kane Basin | 1941 | Jun5 |
| ZMUC57.692 | Kane Basin | 1941 | Jun5 |
| ANSP118864 | Melville Bay (W) | 1934 | Jul31 |
| CM161522 | N/A | 1937 | Jul24 |
| CM161523 | N/A | 1937 | Aug3 |
| CM161524 | N/A | 1940 | Aug8 |
| MVZ101400 | Melville Bay | 1925 | Jul30 |

Greenland Non-Breeding samples

| Museum Samples | Location | Year | Day |
|-----------------------|-----------------------|-------------|------------|
| ZMUC14.145 | Isenv. Kap Stephensen | 1934 | Jan |
| ZMUC55.659 | Holsteinborg | 1935 | Mav2 |
| ZMUC57.693 | Smith's Sound | 1940 | May |
| ZMUC57.694 | Smith's Sound | 1940 | May |
| ZMUC57.695 | Smith's Sound | 1940 | May |
| ZMUC64.171 | Angmaqssalik | 1976 | N/A |
| ZMUC64.215I | Sarqaq, Disko | 1948 | Dec |
| ZMUC64.217 | Sarqaq, Disko | 1948 | Dec |
| ZMUC65.822 | Godthaab | 1964 | Jan |
| ZMUB3904 | Godhavn | 1907 | Nov5 |
| MVZ101401 | Egedesminde | 1925 | Sep18 |

Alaska Non-Breeding samples

| Museum Samples | Location | Year | Day |
|-----------------------|-------------------|-------------|------------|
| CRCM76-474 | N/A | 1976 | Apr17 |
| FM158416 | Barrow | 1928 | Sep11 |
| FM158417 | Barrow | 1930 | May19 |
| FM158418 | Barrow | 1929 | Oct25 |
| FM158420 | Barrow | 1930 | May19 |
| FM158421 | Barrow | 1929 | Oct12 |
| FM158423 | Barrow | 1929 | Oct7 |
| FM158424 | Barrow | 1931 | Sep26 |
| FM158425 | Barrow | 1930 | May19 |
| FM158431 | Barrow | 1927 | Oct11 |
| FM160631 | Barrow | 1931 | Oct6 |
| FM160632 | Barrow | 1929 | Oct11 |
| FM160633 | Barrow | 1929 | Oct7 |
| FM160634 | Barrow | 1930 | May23 |
| FM160635 | Barrow | 1927 | Oct5 |
| FM160636 | Barrow | 1927 | Oct11 |
| FM160637 | Barrow | 1927 | Oct8 |
| FM160638 | Barrow | 1927 | Oct11 |
| FM160639 | Barrow | 1927 | Oct4 |
| FM160640 | Barrow | 1929 | Oct4 |
| FM160641 | Barrow | 1927 | Oct11 |
| USNM253120 | St. George Island | 1916 | Feb18 |
| USNM255117 | St. George Island | 1917 | Mar27 |
| USNM469300 | Old Crow | 1958 | Jan26 |
| USNM479604 | St. Paul Island | 1962 | Jan24 |
| USNM479605 | St. Paul Island | 1962 | Jan25 |
| USNM479606 | St. Paul Island | 1962 | Jan28 |
| MVZ45096 | Wainwright | 1924 | May23 |
| MVZ82095 | Barrow | 1930 | May29 |
| ROM81716 | Barrow | 1931 | Sep25 |
| UBC5647 | Barrow | 1931 | Sep25 |

NL = Newfoundland and Labrador

NWT = Northwest Territories

Museum Abbreviations:

CMN = Canadian Museum of Nature

ROM = Royal Ontario Museum

CM = Carnegie Museum of Natural History

ANSP = Academy of National Sciences

OSLO = Natural History Museum, University of Oslo

ZMUC = Zoological Museum, University of Copenhagen

ZMUB = Museum of Zoology, University of Bergen

MVZ = Museum of Vertebrate Zoology, University of California

CRCM= Charles R. Connor Museum, Washington State University

FM = Field Museum of Natural History

USNM = Smithsonian Institution, National Museum of Natural History

UBC = Cowan Vertebrate Museum, University of British Columbia

UWBM = Burke Museum of Natural History, University of Washington