Supplementary Table 1. Dominance indexes for archaeological sites from different Aleutian Islands.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Fish | | | Bird | | | Mammals | | Fish |
| Island | Site | D | NISP | D | | D | NISP | | D |  |
| Near Islands (Western Part) | | | | | | | | | | | |
| Attu I. (medium) |  |  | - | 0.28 | | 211 |  | | - | Fridman, 1937 |
| Shemya I. | ATU-021 | 0.35 | 2083 | 0.47 | | 779 | 0.42 | | 56 | Lefevre et al, 2010 |
| (small) | ATU-022 |  | - | 0.31 | | 1004 | 0.58 | | 219 | Lefevre et al, 2010 |
|  | ATU-003 | 0.27 | 5249 | 0.42 | | 673 |  | | <50 | Lefevre et al, 2010 |
|  | ATU-061 Unit 1 | 0.51 | 5086 | 0.58 | | 164 |  | | <50 | Lefevre et al, 2010 |
|  | ATU-061 Unit 2 | 0.48 | 6545 | 0.39 | | 127 | 0.98 | | 374 | Lefevre et al, 2010 |
| Rats and Andreanofs Islands (Central part) | | | | | | | | | | | |
| Buldir I. | KIS-008 pit 1 |  | - | 0.61 | | 1180 | 1 | | ~1000 | Lefevre et al, 1997 |
| (small) | KIS-008 pit 2 |  | - | 0.83 | | 2089 |  | | <50 | Lefevre et al, 1997 |
| Small Kiska (small) |  |  | - | 0.18 | | 546 |  | | - | Fridman, 1937 |
| Rat I. (small) | RAT-00081 | 0.31 | 1184 | 0.38 | | 106 | 0.33 | | 55 | Funk, 2008 |
| Amchitka I. (medium) | RAT-31 |  | - | 0.28 | | 4724 | 0.46 | | 1263 | Desautels 1971, Harrington 1987 |
|  | RAT-036 |  | - | 0.19 | | 4441 |  | | - | Harrington 1987 Siegel-Causey et al., 1991 |
|  | RAT-060 |  | - | 0.19 | | 303 |  | | - | Harrington ,1987 |
|  | RAT-035 |  | - | 0.17 | | 1169 |  | | - | Harrington, 1987 |
|  | RAT-10 |  | - | 0.23 | | 835 |  | | - | Harrington, 1987 |
| Adak I. | ADK-011, F1/Unit 1 | 0.48 | 1202 | 0.26 | | 79 |  | | <50 | Lefevre et al, 2011 |
| (medium) | ADK-011, F1/Unit 2 | 0.35 | 5085 |  | | <50 |  | | <50 | Lefevre et al, 2011 |
|  | ADK-011, F2 |  | - | 0.26 | | 213 |  | | <50 | Lefevre et al, 2011 |
|  | ADK-011, units D-G |  | - | 0.35 | | 1278 | 0.34 | | 1196 | Crockford, 2012 |
|  | ADK-012 | 0.44 | 2560 | 0.64 | | 184 | 0.46 | | 139 | Crockford, 2012 |
|  | ADK-171 | 0.42 | 8873 | 0.29 | | 749 | 0.39 | | 138 | Savinetsky et al., 2012, birds – Savinetsky personal comm. |
|  | ADK-009 | 0.34 | 24682 | 0.54 | | 1199 |  | | <50 | Savinetsky et al., 2012, birds – Savinetsky personal comm. |
| Islands of Four Mountains (Central) | | | | | | | | | | | |
| Chuginadak I. (small) | CG-02 | 0.35 | 2530 | 0.88 | | 2417 |  | | <50 | Our data |
| Carlisle I. | CR-02 U4 | 0.36 | 2610 | 0.46 | | 535 | 0.39 | | 78 | Our data |
| (small) | CR-02 U5 | 0.41 | 7089 | 0.41 | | 1725 |  | | <50 | Our data |
|  | CR-02 U2 | 0.56 | 9697 | 0.86 | | 789 | 0.84 | | 282 | Crockford, 2016 |
| Fox Islands (East) | | | | | | | | | | | |
| Umnak I. | Chaluka |  | - | 0.22 | | 860 |  | |  | Yesner, Aigner, 1976 |
| (large) | Sheep Crick |  | - | 0.16 | | 125 | 0.31 | | 461 | Yesner 1977 |
|  | Anangula |  | - | 0.17 | | 135 | 0.43 | | 207 | Yesner 1977 |
|  | Oglodax |  | - | 0.22 | | 615 | 0.68 | | 1830 | Yesner 1977 |
|  | Ashishik Point | 0.98 | 493 | 0.25 | | 63 | 0.33 | | 85 | Denniston, 1972 |
| Unalaska I. | UNL-50 | 0.73 | 18208 | 0.33 | | 10965 | 0.35 | | 6444 | Crockford et al., 2004 |
| (large) | UNL-055 | 0.63 | 899 | 0.33 | | 1069 | 0.55 | | 5370 | Knecht and Davis, 2003 |
|  | Amaknak |  | - | 0.24 | | 107 |  | |  | Friedmann, 1934 |
|  | Unalaska |  | - | 0.28 | | 363 |  | |  | Friedmann, 1937 |
|  | UNL-048 |  | - |  | |  | 0.44 | | 5284 | Davis, 2001 |
| Akun I. (medium) |  |  | - | 0.36 | | 322 | 0.5 | | 104 | Turner and Turner, 1974 |

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Supplementary Table 2. Cut marks on fish bones from IFM assemblages.

|  |  |  |  |
| --- | --- | --- | --- |
| Site and species | Element | NISP | Activity |
| Tanax̂ Agunax̂ site (SAM-0014) Unit 1 |  |  |  |
| *Gadus macrocephalus* | Dentale | 4 | Gills extraction |
|  | Hyomandibulare | 4 | Gills extraction |
|  | Palatinum | 1 | Gills extraction |
|  | Quadratum | 1 | Gills extraction? |
|  | Posttemporale | 1 | Filleting |
|  | Supracleithrum | 2 | Filleting |
| *Hemilepidotus* sp. | Operculum | 11 | ? |
| *Hippoglossus stenolepis* | Hyomandibulare | 1 | Gills extraction? |
| Ulyagan site (AMK-0003) Unit 4 |  |  |  |
| *Gadus macrocephalus* | Maxillare | 1 | Gills extraction? |
|  | Hyomandibulare | 3 | Gills extraction |
|  | Supracleithrum | 2 | Filleting |
| *Hemilepidotus* sp. | Maxillare | 1 | Gills extraction? |
| Scorpenidae | Supracleithrum | 1 | Filleting |
| *Hippoglossus stenolepis* | Maxillare | 1 | Gills extraction? |
| Ulyagan site (AMK-0003) Unit 5 |  |  |  |
| *Gadus macrocephalus* | Dentale | 134 | Gills extraction |
|  | Hyomandibulare | 78 | Gills extraction |
|  | Ceratohyale | 5 | Gills extraction |
|  | Praemaxillare | 1 | Gills extraction? |
|  | Quadratum | 1 | Gills extraction? |
|  | Supracleithrum | 3 | Filleting |
|  | Basioccipiitale | 2 | Filleting |
| *Hippoglossus stenolepis* | Quadratum | 1 | Gills extraction? |
| Ulyagan site (AMK-0003) Unit 2 |  |  |  |
| *Gadus macrocephalus* | Dentale | + | Gills extraction |
|  | Hyomandibulare | + | Gills extraction |
|  | Ceratohyale | + | Gills extraction |
|  | Posttemporale | + | Filleting |

Supplementary Table 3. Age composition of bird bones from IFM assemblages.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Site and species | Adult | | Juvenile | | total | Nesting (medullar) |
|  | NISP | % | NISP | % | NISP | NISP |
| Tanax̂ Agunax̂ site (SAM-0014) Unit 1 |  |  |  |  |  |  |
| *Branta hutchinsii* | 25 | 86 | 4 | 14 | 29 |  |
| *Phalacrocorax* sp. | 24 | 92 | 2 | 8 | 26 |  |
| *Somateria mollissima* | 19 | 95 | 1 | 5 | 20 |  |
| *Aethia pygmaea* | 1278 | 99 | 12 | 1 | 1290 |  |
| Ulyagan site (AMK-0003) Unit 4 |  |  |  |  |  |  |
| *Hydrobates furcatus* | 15 | 88 | 2 | 12 | 17 |  |
| *Fulmarus glacialis* | 38 | 33 | 78 | 67 | 116 |  |
| *Phalacrocorax* sp. | 44 | 90 | 5 | 10 | 49 |  |
| *Aethia pygmaea* | 188 | 99.5 | 1 | 0.5 | 189 |  |
| *Synthliboramphus antiquus* | 83 | 98 | 2 | 2 | 85 |  |
| Ulyagan site (AMK-0003) Unit 5 |  |  |  |  |  |  |
| *Branta/Anser* | 38 | 86 | 6 | 14 | 44 |  |
| *Anas* sp. | – | – | 1 | 100 | 1 |  |
| *Hydrobates* sp. | 487 | 69 | 224 | 31 | 711 |  |
| *Fulmarus glacialis* | 34 | 76 | 11 | 24 | 45 |  |
| *Phalacrocorax* sp. | 55 | 87 | 8 | 13 | 63 |  |
| *Fratercula corniculata* | 11 | 92 | 1 | 8 | 12 |  |
| *Ptychoramphus aleuticus* | 20 | 95 | 1 | 5 | 21 |  |
| *Cyclorrhynchus psittacula* | 49 | 96 | 2 | 4 | 51 | 1 (femur) |
| *Aethia pusilla* | 2 | 67 | 1 | 33 | 3 |  |
| *Aethia pygmaea* | 410 | 97 | 12 | 3 | 422 | 2 (femur) |
| *Cepphus columba* | 3 | 75 | 1 | 25 | 4 |  |
| *Uria* sp. | 6 | 86 | 1 | 14 | 7 |  |
| *Larus glaucescens* | 3 | 75 | 1 | 25 | 4 |  |
| Ulyagan site (AMK-0003) Unit 2 |  |  |  |  |  |  |
| *Branta hutchinsii* | 2 | 67 | 1 | 33 | 3 |  |
| *Ardenna* sp*.* | 2 | 50 | 2 | 50 | 4 |  |
| Alcidae small | 126 | 98 | 2 | 2 | 128 |  |

Supplementary Table 4. Age composition of mammals bones from IFM assemblages.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Site and species | Adult/subadult | | Juvenile/newborn | | total |
|  | NISP | % | NISP | % | NISP |
| Tanax̂ Agunax̂ site (SAM-0014) Unit 1 |  |  |  |  |  |
| *Eumetopias jubatus* | 2 |  | – |  | 2 |
| *Phoca* sp. | 2 |  | – |  | 2 |
| *Enhydra lutris* | 2 |  | – |  | 2 |
| Ulyagan site (AMK-0003) Unit 4 |  |  |  |  |  |
| *Vulpes vulpes* | – |  | 3 |  | 3 |
| *Eumetopias jubatus* | 19 |  | 6 |  | 25 |
| *Callorhinus ursinus* | 14 |  | 5\* |  | 19 |
| *Phoca* sp. | 14 |  | 1 |  | 15 |
| *Enhydra lutris* | 16 |  | – |  | 16 |
| Ulyagan site (AMK-0003) Unit 5 |  |  |  |  |  |
| *Canis familiaris* | 1 |  | 1 |  | 2 |
| *Eumetopias jubatus* | 2 |  | 1 |  | 3 |
| *Callorhinus ursinus* | 4 |  | 2\* |  | 6 |
| *Phoca* sp. | 1 |  | – |  | 1 |
| Ulyagan site (AMK-0003) Unit 2 |  |  |  |  |  |
| *Callorhinus ursinus* | 5♂ | 10 | 45\* | 90 | 50 |
| *Eumetopias jubatus* | 27♂+3♀+2? | 16 | 173 | 84 | 205 |
| *Phoca largha* |  |  |  |  | 1 |
| *Phoca vitulina* |  |  |  |  | 20 |
| *Enhydra lutris* |  |  |  |  | 2 |

\*- all fur seal juveniles older then 4 month

Supplementary Table 5. Bird and mammal bones with cut marks.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Site and species | Cut marks | | | |  | |
|  | Element | NISP | | Activity | | Details |
| Tanax̂ Agunax̂ site (SAM-0014) Unit 1 |  |  |  | | |  |
| *Branta hutchinsii* | Humerus | 2 | Butchering | | |  |
| *Lunda cirrhata* | Tibiotarsus | 5 | Skinning | | |  |
| *Fratercula corniculata* | Tibiotarsus | 2 | Skinning | | |  |
| *Aethia pygmaea* | Tibiotarsus | 15 | Skinning | | |  |
| *Aethia cristatella* | Tibiotarsus | 1 | Skinning | | |  |
| *Synthliboramphus antiquus* | Tibiotarsus | 41 | Skinning | | |  |
| *Haliaeetus leucocephalus* | Humerus | 1 | Butchering | | |  |
| *Eumetopias jubatus* | Ulna | 1 | Butchering | | |  |
| Ulyagan site (AMK-0003) Unit 4 |  |  |  | | |  |
| *Somateria spectabilis* | Tibiotarsus | 1 | Skinning | | |  |
| *Somateria mollissima* | Tibiotarsus | 1 | Skinning | | |  |
| *Phoebastria albatrus* | Tibiotarsus | 1 | Skinning | | |  |
| *Phalacrocorax* sp. | Humerus | 1 | Butchering | | |  |
| *Fratercula corniculata* | Tibiotarsus | 1 | Skinning | | |  |
| *Synthliboramphus antiquus* | Tibiotarsus | 1 | Skinning | | |  |
| *Vulpes vulpes* | Ulna | 1 | Skinning | | |  |
| *Enhydra lutris* | Calcaneus | 2 | Skinning | | |  |
|  | Astragalus | 1 | Skinning | | |  |
|  | Femur | 1 | Butchering | | |  |
| *Eumetopias jubatus* (juvenile) | Calcaneus | 1 | Skinning | | |  |
|  | Tibia | 1 | Butchering | | | Marks on diaphysis |
|  | Humerus | 3 | Butchering | | | Marks on diaphysis |
| Fur seal | Scapula fetus | 1 | Butchering | | | Fetus, cuts on articulation surface |
|  | Humerus | 1 | Butchering | | | Cuts on diaphysis, 4-month juvenile |
|  | Femur | 1 | Butchering | | | subadult |
|  | Radius ad | 1 | Butchering | | | Adult |
|  | Mandibulare | 1 | Skinning | | | juvenile |
|  | Mandibulare | 1 | Skinning, | | | Juvenile, worked (abated) |
| Pinnipedia | Ribs | 2 | Butchering | | |  |
| Ulyagan site (AMK-0003) Unit 5 |  |  |  | | |  |
| *Branta hutchinsii* | Mandibulare | 1 | Skinning | | |  |
| Ulyagan site (AMK-0003) Unit 2 |  |  |  | | |  |
| *Eumetopias jubatus* | Hyoid | 1 | Butchering | | |  |

Supplementary Table 6. Worked and modified bones from IFM assemblages.

|  |  |  |  |
| --- | --- | --- | --- |
| Site and species | Element | NISP | Notes |
| Tanax̂ Agunax̂ site (SAM-0014) Unit 1 |  |  |  |
| *Phoebastria albatrus* | Carpometacarpus | 1 |  |
| Mammalia | unidentified | 39 | chunks |
| Ulyagan site (AMK-0003) Unit 4 |  |  |  |
| *Cygnus* sp. | Ulna | 1 |  |
| *Phalacrocorax* sp. | Humerus | 1 |  |
| Mammalia | unidentified | 15 | chunks |
| Ulyagan site (AMK-0003) Unit 5 |  |  |  |
| *Branta hutchinsii* | Furcula art | 1 |  |
| Lunda cirrhata | Radius art | 1 |  |
| Unidentified mammals | chunks | 92 |  |
| Ulyagan site (AMK-0003) Unit 2 |  |  |  |
| *Somateria mollissima* | furculum | 1 |  |
| *Phoebastria albatrus* | carpometacarpus | 1 |  |
|  | tibiotarsus | 1 |  |
| *Phalacrocorax* sp. | ulna | 1 |  |
| *Eumetopias jubatus* | rib | 1 |  |
| *Enhydra lutris* | rib | 1 |  |
| Unidentified mammals | Chunks and worked | 280 |  |