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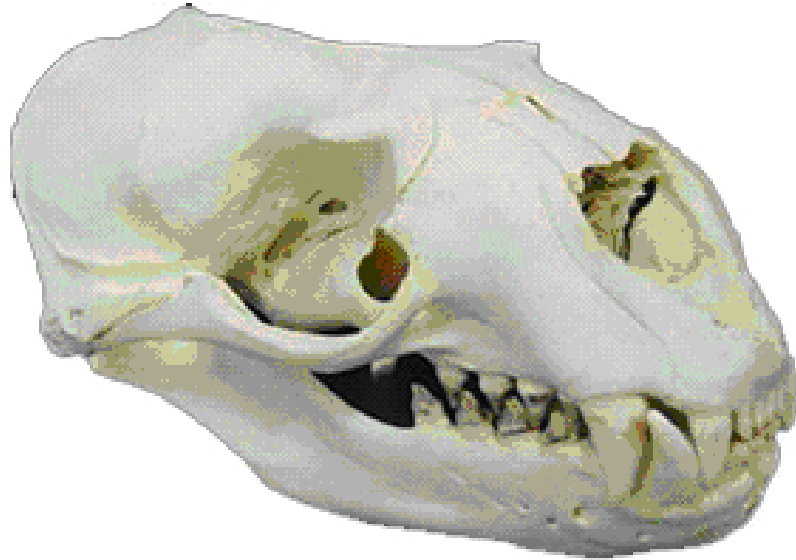


# Fisheries Centre Research Reports

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## INTERNATIONAL SURVEY OF SCIENTIFIC COLLECTIONS OF STELLER SEA LIONS



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**Fisheries Centre, University of British Columbia, Canada**

# International Survey of Scientific Collections of Steller Sea Lions<sup>†</sup>

by

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Edward H. Miller, Andrew W. Trites and Øystein Wiig

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## DIRECTOR'S FOREWORD

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In recent years, numerous new uses have been identified for the specimens in museum collections.

Indeed, the application of new analytic techniques to these specimens has transformed museums into veritable time machines, enabling us to reconstruct not only past flora and fauna, but entire ecosystems, and to test hypotheses about the processes that link organisms. Thus, for example, both diet compositions and phylogenies can be retrieved from bits of bones, via isotopes of Carbon and Nitrogen, and the DNA they contain, thereby complementing the morphological studies that were *en vogue* at the time the collections were started.

For the power of new techniques and studies to be unleashed, the locations and contents of available collections need to be identified. Various initiatives are underway to do just so, such as the one presented here, which should have an immense impact on research.

The decline of Steller sea lions in the Gulf of Alaska and Aleutian Islands is a puzzling mystery. Clues to resolving what has happened to them may well be locked in the bones of sea lions sitting in museums and private collections around the world. As such, the available collections of Steller sea lion artifacts and their contents that are listed in the following pages will help researchers to go back in time to test hypotheses about changes that occurred to sea lions and their ecosystems.

The value of such work cannot be overrated and is only made possible because of museums and the dedicated individuals who prepare and maintain the collections.

Daniel Pauly  
*Director Fisheries Centre UBC*

## INTERNATIONAL SURVEY OF SCIENTIFIC COLLECTIONS OF STELLER SEA LIONS

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### ABSTRACT

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We examined or obtained information on specimens of Steller sea lions in museums and other collections. We report on 1740 specimens (complete or partial skulls) in 44 collections in Canada, Germany, Japan, the Netherlands, Russia, the United Kingdom, and the United States. At least several hundred other specimens also exist, mainly in Japan and Russia. Collection dates range from 1842 to the present. Geographically, specimens are well represented in both “Western” and “Eastern” regions (separated at 144 W longitude): 509 and 956, respectively. Collection localities within Alaskan regions 2 (Eastern Gulf of Alaska) to 8 (Eastern Bering Sea) are represented by 290 specimens; another 566 specimens are from Japan and Russia and 462 from Alaska region 1 (Southeastern Alaska) southwards. Thus specimens are well spread across the species’ breeding range, including areas of population decline. Representation is also good for the period of population decline and earlier periods: 442 specimens are from before 1960, 352 from 1960-69, 370 from 1970-79, and 487 from 1980 onwards. There are some problems with quality of data, and with seasonal and geographic representation, but we conclude that ample specimens exist to permit research pertinent to population declines in parts of the species’ range.

## INTRODUCTION

---

Biological collections originated and grew for several reasons. Many early collections reflect explorations by Europeans. These have served as the basis of scientific descriptions of many new forms and for documenting geographic distributions. Much subsequent growth of collections resulted from scientific expeditions to particular places or from targeted collecting to close gaps in taxonomic or distributional knowledge. Enlarged collections enabled comprehensive taxonomic research and theoretically based investigations in many facets of systematic and evolutionary biology.

Collections have come to be used in non-traditional disciplines only relatively recently (Miller 1984, 1993; Miller and Scudder 1994; Odsjö 1991). For example, in recent years museum collections have been used increasingly for ecological and environmental studies because many collections are large and made over large geographic and temporal scales: stable isotopes inform about marine mammal diet, including geographic, age- and sex-related variation (Das et al. 2000; Hoelzel et al. 2002; Lesage et al. 2001; Walker and Macko 1999; Walker et al. 1999); time series of seal skulls collected over nearly two centuries reveal trends correlated with anthropogenic pollution (Bergman et al. 1992; Schandorff 1997; Zakharov and Yablokov 1990; Zakharov et al. 1997); etc.

The present study grew from a proposal by EHM and ØW to investigate museum specimens (skulls) of the Steller sea lion (*Eumetopias jubatus*) in relation to population declines in parts of the species' range (Committee on the Alaska Groundfish Fishery and Steller Sea Lions 2003). The North Pacific Universities Marine Mammal Research Consortium (NPUMMRC) suggested that a survey of collections be undertaken first, to determine whether adequate material exists to support such investigations; hence the present report.

## MATERIALS AND METHODS

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### *Collections surveyed*

We visited collections in Canada, Japan, Russia, the United Kingdom, and the United States, and obtained information on other collections through correspondence; overall we obtained information on 44 collections (Appendix A). During visits we inspected specimens, specimen labels, and catalogues, if possible. Here we include data on skulls or on specimens that have skulls (e.g., fetuses preserved in fluid). Some specimens are partial (e.g., broken cranium; isolated mandible), a few are teeth, and a few are subfossils; however the vast majority of specimens are more-or-less intact skulls. We exclude data on specimens represented by only tanned skins or postcranial material.

Specimen data varied in quality and completeness, reflecting the varied sources and purposes of specimens and standards of the day. For example, some early specimens have no or only general information about locality; some specimens represent zoo animals; etc. Most specimens are from animals killed or found dead in the wild however; most specimens collected in recent years represent animals found dead.

We recorded information on age and sex only if it was included on labels or in catalogues; we did not assign sex or correct obviously mis-sexed specimens because it would have biased the sample towards old males. Collection dates of some specimens were estimated based on latest possible dates. In some cases it was possible to set latest dates based upon a specimen's position in sequences of accession or catalogue numbers. In other cases an approximate range of dates enabled an estimate; e.g., "late 1800s" would have been included in the final decade of that century (i.e., 1890-99) for data analysis.

This survey is not complete because it was not possible to visit or obtain information on all collections. Some other important Russian and Japanese collections (totalling several hundred skulls) exist and should be included in future studies. Nevertheless, we think that >90% of existing specimens are included in our survey, hence that our analyses and conclusions are firm.

Raw data are summarized in two ways. Appendix B in this report summarizes data as discussed below. They are organized by country and by year of collection within country. Locality details are abbreviated.

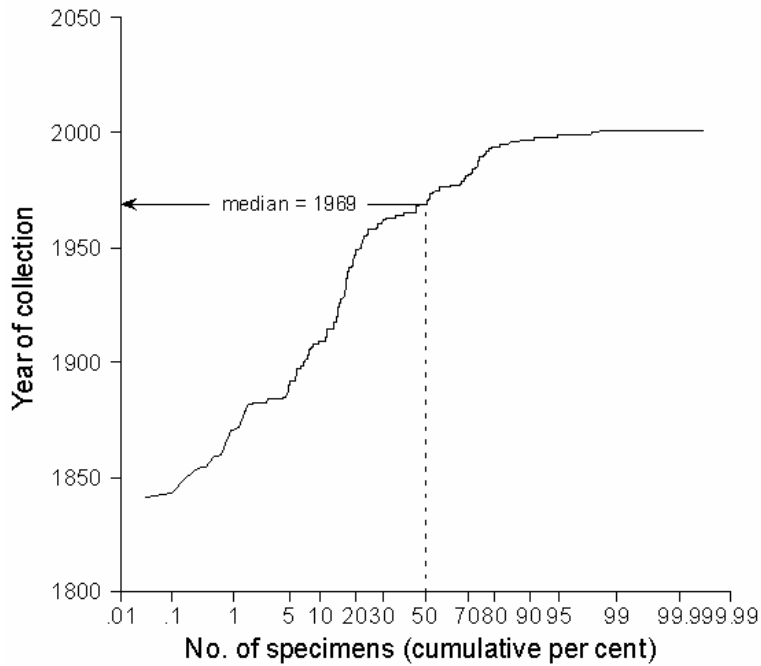
## RESULTS

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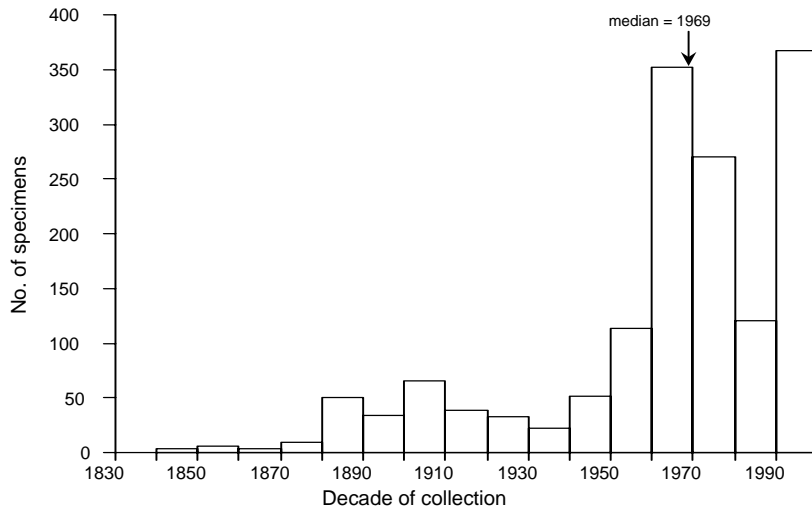
### *Collections analysis*

#### Year and season of collection

The oldest specimen was collected in 1842 and specimens continue to be collected; thus material exists that covers a span of approximately 160 years (Figures 1, 2). The median date of collection is 1969, thus specimens have been collected at a higher rate over the last 32 years than over the first 127 years of the sampling period. In addition, periods of high collecting activity are evident. For example, only 22 specimens pre-date 1880 but 50 were collected in the 1880s; 114 were collected in the 1950s but 352 in the 1960s; etc. (Table 1).



**Figure 1.** Specimens of Steller sea lions have been collected over more than 150 years, but rate of collecting has been uneven and has increased in recent decades.



**Figure 2.** Collection dates of specimens of Steller sea lions are skewed towards recent decades due to some targeted research programs plus salvages of animals found dead.



**Table 1.** Summary of specimens broken down by sex and year-range of collection.

Date of collection	Sex:		<b>Totals</b> <sup>1</sup>
	Females	Males	
1840-49	0	0	<b>3</b>
1850-59	0	4	<b>6</b>
1860-69	0	0	<b>4</b>
1870-79	1	1	<b>9</b>
1880-89	4	14	<b>50</b>
1890-99	8	11	<b>37</b>
<b>Totals pre-1900</b>	<b>13</b>	<b>30</b>	<b>109</b>
1900-09	23	34	<b>66</b>
1910-19	10	23	<b>39</b>
1920-29	7	18	<b>33</b>
1930-39	2	6	<b>22</b>
1940-49	13	34	<b>52</b>
1950-59	45	53	<b>114</b>
1960-69	136	184	<b>352</b>
1970-79	138	121	<b>270</b>
<b>Totals 1900-79</b>	<b>374</b>	<b>473</b>	<b>948</b>
<b>Totals pre-1980</b>	<b>387</b>	<b>503</b>	<b>1057</b>
1980-89	80	34	<b>120</b>
1990+	184	178	<b>367</b>
<b>Totals 1980+</b>	<b>264</b>	<b>212</b>	<b>487</b>

<sup>1</sup>Including specimens of unknown sex.

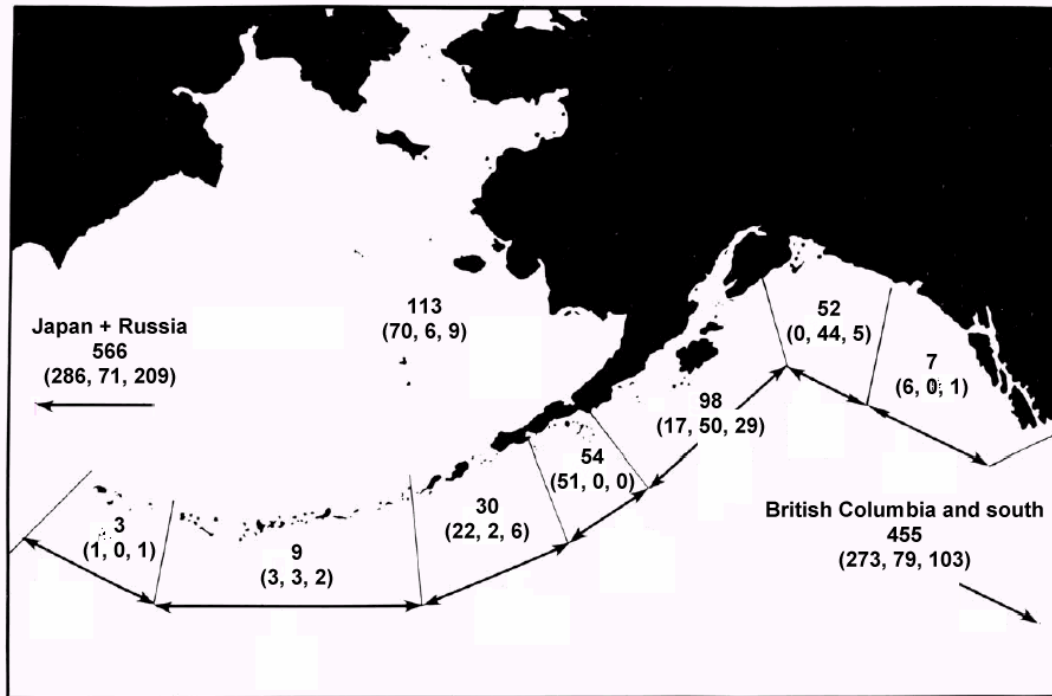
**Table 2.** Summary of specimens broken down by country/state/province and sex.

	Sex:		<b>Totals</b> <sup>1</sup>
	Females	Males	
California	148	129	<b>346</b>
Oregon	18	14	<b>38</b>
Washington	19	24	<b>49</b>
Alaska	186	239	<b>522</b>
<b>United States: total</b> <sup>2</sup>	<b>371</b>	<b>408</b>	<b>965</b> <sup>1,2</sup>
British Columbia	18	37	<b>68</b>
Russia	51	74	<b>160</b>
Japan	190	229	<b>427</b>
<b>Totals</b> <sup>3</sup>	<b>656</b>	<b>784</b>	<b>1740</b> <sup>1,2,3</sup>

<sup>1</sup>Including specimens of unknown sex.

<sup>2</sup>Including specimens from unknown states.

<sup>3</sup>Including specimens from unknown countries.



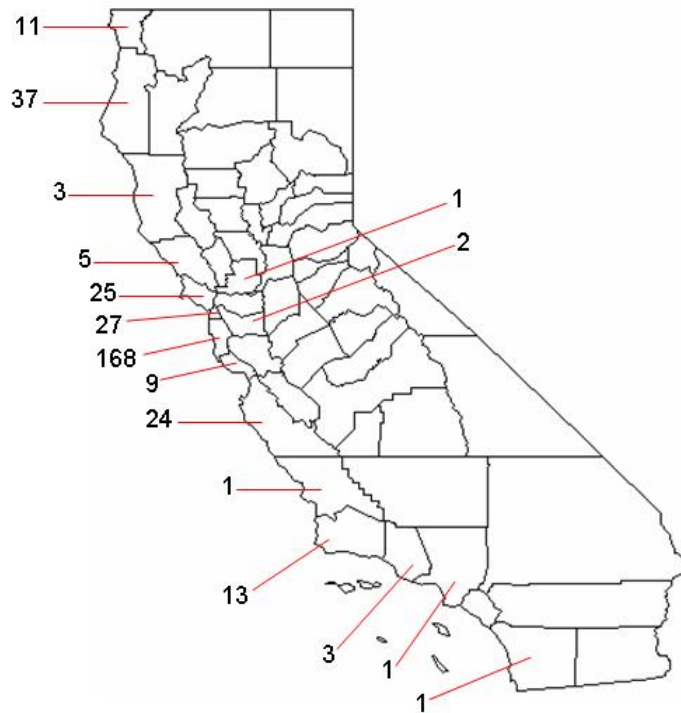
**Figure 3.** Specimens of Steller sea lions are well distributed across geographic divisions of the species' range (following Sease et al. 2001) and time. Numbers within each division refer to total number of specimens and (in parentheses) numbers of specimens collected before 1970, 1970-79, and after 1979.

For the four quarters of the year (January- March; April- June; July-September; October-December), 409, 295, 309, and 144 specimens exist, respectively.

#### Geographic representation

Most specimens have good locality information. Most (60%) specimens from known localities are from the United States (55% Alaska, 36% California, 5% Washington, 4% Oregon) (Table 2). This was followed by Japan (26%), Russia (10%), and Canada (British Columbia; 4%).

Geographic coverage in Alaska is uneven (Figure 3). Only seven specimens exist from Southeastern Alaska (Alaska region 1) and only 3 and 9 from the Western and Central Aleutian Islands (Alaska regions 6 and 7), respectively. However, other areas where the species has declined are well sampled: Gulf of Alaska (regions 2-4), 204 specimens; Eastern Aleutian Islands (region 5), 30 specimens; and Eastern Bering Sea (region 8), 113 specimens. In addition, there are 566 specimens from Japan plus Russia. Most of these are from Hokkaido, the Kuril Islands, and the Sea of Okhotsk (91%); the remainder are from Kamchatka, the Commander Islands, and the western Bering Sea generally. Further specimens from the latter three areas (collectively the region "Western Bering Sea" in included data files) have been collected recently and are continuing to be collected; others could not be included in our analyses (Sokolov et al. 1984; V. Burkhanov pers. comm.).



**Figure 4.** Specimens of Steller sea lions are unevenly distributed in California; numbers indicate the specimens documented for each county. San Mateo County, with the long-collected area centering at the breeding site Ano Nuevo Island, has 168 known specimens.

Uneven coverage is also apparent in the southern United States (Table 2). Within California, where most specimens originate, coastal counties account for from 1 to 168 specimens (Figure 4). Most come from San Mateo County, which includes the long-established breeding group on Ano Nuevo Island. Very few specimens exist from other breeding sites in California northwards to Southeastern Alaska.

#### Temporal and geographic representation considered jointly

The numbers of specimens in different geographic regions need to be broken down by year of collection to assess their potential for research relevant to population declines of the species. Contrasts between areas that differ in whether declines have occurred, and between time periods before, during, and after when declines were first documented, offer some logical comparisons.

Ample numbers of specimens from Japan plus Russia and Alaskan regions 2-8 represent various periods from the mid 1880s to the onset of documented population declines beginning in the late 1900s (Table 3). Particularly good collections were made in Japan in the 1960s, and moderately good collections (158 specimens) were made in those areas in the 1970s, especially in Alaska region 2 (Eastern Gulf of Alaska). Good-sized collections characterize other (southern) areas of North America for the same periods.

**Table 3.** Summary of specimens broken down by general locality and year-range of collection.

Years	Collection locality							Totals <sup>2</sup>
	Japan & Russia	Alaska Regions			British Columbia	Washington & Oregon	California	
		2-8	1	all <sup>1</sup>				
1840-99	31	25	0	25	2	1	34	<b>116</b>
1900-29	15	10	5	16	18	13	65	<b>138</b>
1930-59	13	97	0	104	22	15	27	<b>188</b>
1960-69	227	33	1	38	6	7	63	<b>352</b>
1970-79	71	87	0	119	9	9	61	<b>370</b>
1980-89	20	38	1	51	1	16	32	<b>120</b>
1990+	189	0	0	121	0	20	34	<b>367</b>
<b>Totals <sup>3</sup></b>	<b>566</b>	<b>290</b>	<b>7</b>	<b>474</b>	<b>58</b>	<b>81</b>	<b>316</b>	<b>1651</b>

<sup>1</sup> Including specimens from unknown Alaskan regions.

<sup>2</sup> Including specimens from unknown localities.

<sup>3</sup> Column totals only (thus excluding specimens with unknown dates of collection).

### Sex and age

Collections are slightly biased towards males (Tables 1, 2). Some information on age is available for 36% of specimens but many designations are general (e.g., “yearling”, “adult”). Estimates (in years) for adults exist for 29% of specimens, based primarily on tooth sections or tagged animals. The latter figure is an underestimate, because some specimen records indicate that animals had been tagged. Thus further searches of collection information could yield data; also some information on age could not be obtained for purposes of this report (e.g., age estimates for some Alaskan specimens from the 1980s).

## DISCUSSION

### *Biases and sources of error*

Specimens have been collected for diverse purposes and in diverse circumstances. Many early specimens were shot on breeding grounds (e.g., Pribilof Islands, Ano Nuevo Island) as representative specimens of the species and have become distributed around the world. We certainly did not find all these scattered specimens, so our summary of information from the 1800s, in particular, underestimates them. More would be turned up in future work.

Specimens were commonly exchanged or donated in the 1800s and early 1900s so accompanying documentation sometimes became incomplete. Further investigations would improve documentation of many early specimens. As an example, the single skull of this species in the National Museums of Scotland (NMS) came from Edinburgh University, where it had been donated to the anatomist Sir William Turner (A. Kitchener, pers. comm.). He received the skull from the Smithsonian Institution and, although he died in 1916, it is almost certain that the specimen had an earlier collection date – in our opinion likely coinciding with the active collecting of this species by the Smithsonian Institution (SI) in the late 1800s. Research into the latter’s records could inform on this matter. Also in the SI, specimens with unknown collection year but collected by W. H. Dall, C. M. Scammon, L. Stejneger, and other well known collectors would receive improved documentation through study of institutional records (C. Potter, pers. comm.).

Some collections were made for specific studies but, like most early specimens, also are based on shot animals (e.g., Alaska, Japan). Most such Alaskan specimens have been deposited in the National Marine Mammal Laboratory (NMML), National Museum of Natural History (NMNH; in the Smithsonian Institution), or University of Alaska Museum (Fairbanks; UAM).

Finally, many specimens (most in recent years) are from animals found dead. Carcasses may be from animals that have been dead for a long time and that traveled long distances. For such specimens, both date and locality of death are uncertain (the experienced collector Raymond Bandar estimated date of death for the 102 specimens he obtained in California). Specimens found dead have uncertain origins, dates of death, and causes of death, so can not be used for all types of studies. Nevertheless they may reveal broad spatiotemporal trends in condition or pathology (Lucas et al. 2003) or size-at-age, or geographic variation in morphology (Brunner 2002).

The purposes and circumstances of collection are important for treatment of specimen data and for making temporal and geographic comparisons. Collection locality is particularly important for questions pertaining to differing population trends throughout the species' range. Ideally, collection locality should be tied to natal site but this is rarely the case. However, through assessment of collection details such as collector name, collection date, and collecting trends at the time, it is often possible to tie specimens to breeding sites where they were shot (e.g., specimens shot during the breeding period on Ano Nuevo Island in early 1900s or on the Pribilof Islands in the 1800s).

### *Recommendations and concluding comments*

Even without new collections, existing collections of Steller sea lions are large and represent areas and times of interest for understanding population declines of the species. They would support several relevant research endeavours such as re-examining geographic variation in the species or investigating temporal or regional patterns and differences (e.g., in morphology, size, size-at-age, stable isotopes, pathology, fluctuating asymmetry). In addition to collections analyzed in this report, other collections in Japan and Russia should be included in such work.

We address collections access and use because the potential of overuse or misuse of collections exists. Large collections could become overused because it is efficient to rely on them (most specimens are concentrated in a few collections: NMML, 283; HUH, 199; UAM, 158; NMNH, 124; and BAND; 102; these total 60% of all specimens). Collections with poorly developed curatorial infrastructure and policies could permit excessive destructive sampling (e.g., for ageing or stable-isotope sampling), and could be challenged to properly support visitation, loan requests, and so on. In general there is no relationship between collections' size or scientific value and the level of institutional development dedicated to collections care. Well developed collections policies and state-of-the-art curatorial facilities characterize many collections regardless of size (e.g., CMN, MVZ, ROM, NMNH, UAM<sup>a</sup>) but several large collections differ. For example, the Bandar collection is stored at a private residence, and NMML (with the world's largest collection of Steller sea lions) is a government laboratory with high security but little infrastructure for collections care. We recommend that consideration be given by NPUMMRC and other potential user groups to the possible impacts of research on the existing irreplaceable collections of Steller sea lions, especially early specimens.

Future collections should be planned and undertaken at selected breeding sites and at specific times to provide good time series of specimens. Ethical considerations may dictate that most such specimens are animals (especially pups) found dead; if so, they may be unrepresentative of the population at large and this will have to be considered in designing the collection/research program. Plans to prepare and archive the specimens should be made with institutions that can provide and maintain proper support (see preceding remarks).

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<sup>a</sup> See Appendix A for acronyms.

## ACKNOWLEDGEMENTS

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**APPENDICES**

---

**Appendix A***Summary of surveyed collections with specimens*

- AM** Vertebrate Zoology/Mammalogy  
Australian Museum  
6 College Street  
Sydney  
NSW 2010  
AUSTRALIA
- AMNH** Department of Mammalogy  
American Museum of Natural History  
Central Park West at 79th Street  
New York, New York 10024-5192  
U.S.A.
- ANSP** Mammalogy Department  
The Academy of Natural Sciences  
1900 Benjamin Franklin Parkway  
Philadelphia, Pennsylvania 19103  
U.S.A.
- AUG** Asahi University School of Dentistry, Department of Oral Anatomy  
1851 Hozumi, Hozumi-cho, Motosu-gun  
Gifu, 501-0296  
JAPAN
- BAND** Collection of Raymond Bandar: contact CAS.
- BELL** Bell Museum of Natural History  
University of Minnesota  
10 Church Street SE  
Minneapolis, Minnesota 55455  
U.S.A.
- CAS** Ornithology and Mammalogy  
California Academy of Sciences  
55 Concourse Drive  
Golden Gate Park  
San Francisco, California 94118-4599  
U.S.A.
- CMN** Vertebrate Collections/Mammals  
Canadian Museum of Nature  
P.O. Box 3443 Station D  
Ottawa, Ontario K1P 6P4  
CANADA



- CMNH** Section of Mammals  
Carnegie Museum of Natural History  
4400 Forbes Avenue  
Philadelphia, Pennsylvania 15213  
U.S.A.
- CSLB** Biological Sciences  
California State University  
1250 Bellflower Boulevard  
Long Beach, California 90840  
U.S.A.
- DMNS** Zoology Department  
Denver Museum of Nature & Science  
2001 Colorado Boulevard  
Denver, Colorado 80205-5798  
U.S.A.
- FM** Division of Mammals  
The Field Museum  
1400 S. Lake Shore Drive  
Chicago, Illinois 60605-2496  
U.S.A.
- HSU** Department of Biological Sciences  
Humboldt State University  
1 Harpst Street  
Arcata, California 95521-8299  
U.S.A.
- HUH** Hokkaido University, Graduate School of Fisheries Sciences  
Minato-cho, Hakodate  
Hokkaido, 041 8611  
JAPAN
- KU** Natural History Museum and Biodiversity Research Center  
The University of Kansas  
1345 Jayhawk Boulevard  
Lawrence, Kansas 66045-7561  
U.S.A.
- LACM** Section of Marine Mammals  
Natural History Museum of Los Angeles County  
900 Exposition Boulevard  
Los Angeles, California 90024  
U.S.A.
- MCZ** Museum of Comparative Zoology  
Harvard University  
26 Oxford Street  
Cambridge, Massachusetts 02138  
U.S.A.
- MNHU** Museum für Naturkunde der Humboldt-Universität zu Berlin  
Berlin, Invalidenstrasse 43  
GERMANY

- MVZ** Museum of Vertebrate Zoology  
University of California  
3101 Valley Life Sciences Building  
Berkeley, California 94720-3160  
U.S.A.
- NAT** Naturalis: National Museum of Natural History  
Darwinweg, Leiden  
P.O. Box 9517  
NL-2300 RA Leiden  
THE NETHERLANDS
- NHM** The Natural History Museum  
Cromwell Road  
London SW7 5BD  
UNITED KINGDOM
- NMML** National Marine Mammal Laboratory  
7600 Sand Point Way NE F/AKC3  
Seattle, Washington 98115-6349  
U.S.A.
- NMNH** Vertebrate Zoology/Division of Mammals  
National Museum of Natural History  
10th Street and Constitution Avenue NW  
Washington, D.C. 20560  
U.S.A.
- NMS** Department of Geology and Zoology  
National Museums of Scotland  
Chambers Street  
Edinburgh EH1 1JF  
UNITED KINGDOM
- NSMT** National Science Museum  
3-23-1 Hyakunin-cho, Shinjuku-ku  
Tokyo 169-0073  
JAPAN
- OSU** Oregon Marine Mammal Stranding Network  
Marine Mammal Program, Oregon State University  
Hatfield Marine Science Center  
Newport, Oregon 97365  
U.S.A.
- RBCM** Vertebrate Zoology  
Royal British Columbia Museum  
675 Belleville Street  
Victoria, British Columbia V8W 9W2  
CANADA
- ROM** Centre for Biodiversity and Conservation Biology  
Royal Ontario Museum  
100 Queen's Park  
Toronto, Ontario M5S 2C6  
CANADA

- SBM** Vertebrate Zoology  
Santa Barbara Museum of Natural History  
2559 Puesta del Sol Road  
Santa Barbara, California 93105  
U.S.A.
- SDM** Birds and Mammals  
San Diego Natural History Museum  
P.O. Box 121390  
San Diego, California 92112-1390  
U.S.A.
- SOU** Biology Department  
Southern Oregon University  
1250 Siskiyou Boulevard  
Ashland, Oregon 97520  
U.S.A.
- TINR** Pacific Scientific Research Fisheries Centre, TINRO-Centre  
4, Shevchenko Alley  
Vladivostok, 690950  
RUSSIA
- UAM** Department of Mammalogy  
University of Alaska Museum  
P.O. Box 756960  
907 Yukon Drive  
Fairbanks, AK 99775-6960  
U.S.A.
- UAMZ** Museum of Zoology  
Biological Sciences  
University of Alberta  
Edmonton, Alberta T6G 2E9  
CANADA
- UBC** Cowan Museum  
Department of Zoology  
University of British Columbia  
6270 University Boulevard  
Vancouver, British Columbia V6T 1Z4  
CANADA
- UCLA** Dickey Bird and Mammal Collection  
University of California, Los Angeles  
Department of Organismal Biology, Ecology and Evolution  
621 Charles Young Drive South  
Los Angeles, California 90095-1606  
U.S.A.
- UF** Florida Museum of Natural History  
University of Florida - Powell Hall  
SW 34th Street and Hull Road  
PO Box 112710  
Gainesville FL 32611-2710  
U.S.A.

- UMMZ** Museum of Zoology  
University of Michigan  
1109 Geddes Avenue  
Ann Arbor, Michigan 48109-1079  
U.S.A.
- UPS** James R. Slater Museum of Natural History  
University of Puget Sound  
Tacoma, Washington 98416  
U.S.A.
- UWBM** Zoology Division  
Burke Museum of Natural History & Culture  
University of Washington  
Box 353010  
Seattle, Washington 98195  
U.S.A.
- WSU** Charles R. Conner Museum  
P.O. Box 644236  
Washington State University  
Pullman, Washington 99164-4236  
U.S.A.
- YPM** Peabody Museum of Natural History  
Yale University  
P.O. Box 208118  
170 Whitney Avenue  
New Haven, Connecticut 06520-8118  
U.S.A.
- ZIN** Zoological Institute, Russian Academy of Sciences  
Universitetskaya nab 1, 199034  
Saint Petersburg  
RUSSIA
- ZMMU** Zoological Museum of M.V. Lomonosov Moscow State University  
6, Bolshaya Nikitskaya Str.  
Moscow 103009  
RUSSIA

## **Appendix B**

### *Summary of selected specimen data*

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
CAN BC	Queen Charlotte Is.: Massett	1883	July	M		NMNH	A21108
CAN BC	Vancouver I.: W coast	1885				CMN	CMNMA 116
CAN BC	Cormorant I.: Alert Bay	1908	May	M	immature	RBCM	1442
CAN BC	Vancouver I.: Victoria	1914			adult	RBCM	2388
CAN BC	Vancouver I.: Barkley Sd.	1915	December	M		CMN	CMNMA 2601
CAN BC	Vancouver I.: Barkley Sd.	1915	December	M		CMN	CMNMA 2602
CAN BC	Vancouver I.: Barkley Sd.	1915	December	M		CMN	CMNMA 2604
CAN BC	Vancouver I.: Barkley Sd.	1915	December	F		CMN	CMNMA 2612
CAN BC	Vancouver I.: Barkley Sd.	1915	December	M		CMN	CMNMA 2600
CAN BC	Vancouver I.: Barkley Sd.	1915	December	M		CMN	CMNMA 2603
CAN BC	Vancouver I.: Barkley Sd.	1915	December	M		CMN	CMNMA 2605
CAN BC	Vancouver I.: Barkley Sd.	1915	December	F		CMN	CMNMA 2606
CAN BC	Vancouver I.: Barkley Sd.	1915	December	M		CMN	CMNMA 2607
CAN BC	Vancouver I.: Barkley Sd.	1915	December	M		CMN	CMNMA 2608
CAN BC	Vancouver I.: Barkley Sd.	1915	December	M		CMN	CMNMA 2609
CAN BC	Vancouver I.: Barkley Sd.	1915	December	M		CMN	CMNMA 2610
CAN BC	Vancouver I.: Barkley Sd.	1915	December	F		CMN	CMNMA 2611
CAN BC	Vancouver I.: Barkley Sd.	1915	December	M		CMN	CMNMA 2613
CAN BC	Queen Charlotte Is.: Graham I.: Tow Hill	1919	August	M		CMN	CMNMA 3721
CAN BC	Pender I.	1927	May	M	adult	RBCM	1472
CAN BC		1937	August		adult	RBCM	2075
CAN BC	Vancouver I.: Quatsino	1937	March	F	adult	RBCM	2389
CAN BC	Vancouver I.: Quatsino	1937		F	immature	RBCM	2436
CAN BC	Vancouver I.: Victoria	1942	June	M	adult	RBCM	4933
CAN BC	Malcolm I.: Sointula	1945	July	M	immature	RBCM	5201
CAN BC	Vancouver I.: Long Beach	1946	June	F		UBC	1836
CAN BC	Vancouver I.: Cape Scott	1950	July	M	adult	RBCM	5654
CAN BC	Vancouver I.: Quatsino Sd.	1951	August	M	adult	RBCM	5715
CAN BC	Vancouver I.: Ucluelet	1951	August	M	adult	RBCM	5716
CAN BC	Queen Charlotte Is.: Queen Charlotte City	1951		M		UBC	4063
CAN BC	Nass Harbour	1956	April			UAMZ	3208
CAN BC	Beresford I.	1956	July	M		UBC	7329
CAN BC	Beresford I.	1956	July	F		UBC	7330
CAN BC	Beresford I.	1956	July	M		UBC	7331
CAN BC	Beresford I.	1956	July	M		UBC	7332

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
CAN BC	Beresford I.	1956	July	M		UBC	7333
CAN BC	Beresford I.	1956	July	F		UBC	7334
CAN BC	Beresford I.	1956	June	F		UBC	6873
CAN BC	Beresford I.	1956	June	F		UBC	6874
CAN BC	Beresford I.	1956	June	F		UBC	6889
CAN BC	Beresford I.	1956	June	F		UBC	6907
CAN BC	Beresford I.	1956	June	F		UBC	6908
CAN BC	Queen Charlotte Is.: Langara I.	1960	June			UBC	7749
CAN BC	Sartine I.	1961	September	M		CMN	CMNMA 32799
CAN BC	Triangle I.	1961	September	F		CMN	CMNMA 32800
CAN BC	Queen Charlotte Is.:	1968	July			UAMZ	5213
CAN BC	Porcher I. (W coast)	1969	April			CMN	CMNMA 37037
CAN BC	Prince Rupert: Anian I.	1969	July			CMN	CMNMA 37036
CAN BC	Vancouver I.: Bonilla Pt.	1970	February	M	adult	RBCM	7193
CAN BC	Vancouver I.: Ardmore	1971	April	M	adult	RBCM	7712
CAN BC	Triangle I.	1972	June	M	adult	RBCM	8864
CAN BC	Triangle I.	1972	June	F	immature	RBCM	8863
CAN BC	Barkley Sd.: Folger I.	1976	December	F	adult	RBCM	9464
CAN BC	Barkley Sd.: Folger I.	1976	February	F	adult	RBCM	9290
CAN BC	Barkley Sd.: Folger I.	1976	February	F	immature	RBCM	9458
CAN BC	Port Neville	1977	November		immature	RBCM	9801
CAN BC	Vancouver I.: Long Beach	1979	September	M	immature	RBCM	10232
CAN BC	Vancouver I.: Victoria	1981	March	M	adult	RBCM	10226
CAN BC	Cormorant I.: Alert Bay			M	adult	RBCM	1473
CAN BC	Cormorant I.: Alert Bay			M	adult	RBCM	1481
CAN BC	Queen Charlotte Is.					UWBM	39429
CAN BC	Vancouver I.					UAMZ	3248
CAN BC	Vancouver I.: Barkley Sd.					CMN	CMNMA 2921
CAN BC	Vancouver I.: Barkley Sd.					CMN	CMNMA 2922
CAN BC	Vancouver I.: Campbell R.					UBC	6701
CAN BC	Vancouver I.: Tofino: 3 km S (Cox Bay)			M		CMN	NMCZ000174
CAN BC	Vancouver I.: Victoria			M	immature	RBCM	1354
CAN BC				M		CMN	CMNMA 17134
JAP HOK	Hokkaido	1872				NHM	1872.4.30.7
JAP HOK	Hokkaido	1963		F	6	NSMT	45

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
JAP	HOK Hokkaido: Erimo	1963		M	6	NSMT	14
JAP	HOK Hokkaido: Erimo	1963		M	6	NSMT	14
JAP	HOK Hokkaido: Erimo	1963		M	14	NSMT	23
JAP	HOK Hokkaido: Erimo	1963		M	14	NSMT	23
JAP	HOK Hokkaido: Shikabe	1963		M	2	NSMT	72
JAP	HOK Hokkaido: Shikabe	1963		M	2	NSMT	72
JAP	HOK Hokkaido: Shikabe	1963		M	2	NSMT	109
JAP	HOK Hokkaido: Shikabe	1963		M	2	NSMT	109
JAP	HOK Hokkaido: Shikabe	1963		M	3	NSMT	66
JAP	HOK Hokkaido: Shikabe	1963		M	3	NSMT	66
JAP	HOK Hokkaido: Shikabe	1963		M	3	NSMT	74
JAP	HOK Hokkaido: Shikabe	1963		M	3	NSMT	74
JAP	HOK Hokkaido: Shikabe	1963		F	3	NSMT	76
JAP	HOK Hokkaido: Shikabe	1963		F	3	NSMT	76
JAP	HOK Hokkaido: Shikabe	1963		M	4	NSMT	48
JAP	HOK Hokkaido: Shikabe	1963		M	4	NSMT	48
JAP	HOK Hokkaido: Shikabe	1963		F	4	NSMT	61
JAP	HOK Hokkaido: Shikabe	1963		F	4	NSMT	61
JAP	HOK Hokkaido: Shikabe	1963		M	4	NSMT	64
JAP	HOK Hokkaido: Shikabe	1963		M	4	NSMT	64
JAP	HOK Hokkaido: Shikabe	1963		M	4	NSMT	69
JAP	HOK Hokkaido: Shikabe	1963		M	4	NSMT	69
JAP	HOK Hokkaido: Shikabe	1963		M	4	NSMT	73
JAP	HOK Hokkaido: Shikabe	1963		M	4	NSMT	73
JAP	HOK Hokkaido: Shikabe	1963		M	4	NSMT	127
JAP	HOK Hokkaido: Shikabe	1963		M	4	NSMT	127
JAP	HOK Hokkaido: Shikabe	1963		M	4	NSMT	170
JAP	HOK Hokkaido: Shikabe	1963		M	5	NSMT	65
JAP	HOK Hokkaido: Shikabe	1963		M	5	NSMT	65
JAP	HOK Hokkaido: Shikabe	1963		M	5	NSMT	138
JAP	HOK Hokkaido: Shikabe	1963		M	5	NSMT	138
JAP	HOK Hokkaido: Shikabe	1963		M	7	NSMT	147
JAP	HOK Hokkaido: Shikabe	1963		M	7	NSMT	147
JAP	HOK Hokkaido: Shikabe	1963		M	11	NSMT	104
JAP	HOK Hokkaido: Shikabe	1963		M	11	NSMT	104



Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
JAP	HOK Hokkaido: Shikabe	1963		M		NSMT	75
JAP	HOK Hokkaido: Shikabe	1963		M		NSMT	75
JAP	HOK Hokkaido: Shikabe	1963		M		NSMT	105
JAP	HOK Hokkaido: Shikabe	1963		M		NSMT	105
JAP	HOK Hokkaido: Shikabe	1963		F		NSMT	119
JAP	HOK Hokkaido: Shikabe	1963		F		NSMT	119
JAP	HOK Hokkaido: Shikabe	1963		M		NSMT	120
JAP	HOK Hokkaido: Shikabe	1963		M		NSMT	120
JAP	HOK Hokkaido: Shikabe	1963		M		NSMT	124
JAP	HOK Hokkaido: Shikabe	1963		M		NSMT	124
JAP	HOK Hokkaido: Shikabe	1963		M	12	NSMT	171
JAP	HOK Hokkaido: Shiretoko: Rausu	1963		M		NSMT	51
JAP	HOK Hokkaido	1964		M	5	NSMT	153
JAP	HOK Hokkaido: Shikabe	1964		M	2	NSMT	153
JAP	HOK Hokkaido: Shikabe	1964		M	2	NSMT	145
JAP	HOK Hokkaido: Shikabe	1964		M	3	NSMT	145
JAP	HOK Hokkaido: Shikabe	1964		M	3	NSMT	177
JAP	HOK Hokkaido: Shikabe	1964		M	3	NSMT	177
JAP	HOK Hokkaido: Shikabe	1964		M	4	NSMT	3
JAP	HOK Hokkaido: Shikabe	1964		M	4	NSMT	63
JAP	HOK Hokkaido: Shikabe	1964		M	4	NSMT	63
JAP	HOK Hokkaido: Shikabe	1964		M	4	NSMT	170
JAP	HOK Hokkaido: Shikabe	1964		F	8	NSMT	148
JAP	HOK Hokkaido: Shikabe	1964		F	8	NSMT	148
JAP	HOK Hokkaido: Shikabe	1964		F	9	NSMT	18
JAP	HOK Hokkaido: Shikabe	1964		F	9	NSMT	18
JAP	HOK Hokkaido: Shikabe	1964		F	14	NSMT	129
JAP	HOK Hokkaido: Shikabe	1964		F	14	NSMT	129
JAP	HOK Hokkaido: Shikabe	1964		F	20	NSMT	166
JAP	HOK Hokkaido: Shikabe	1964		F	20	NSMT	166
JAP	HOK Hokkaido: Shikabe	1964		M	pup	NSMT	50
JAP	HOK Hokkaido: Shikabe	1964		M	pup	NSMT	50
JAP	HOK Hokkaido: Shikabe	1964		M		NSMT	13
JAP	HOK Hokkaido: Shikabe	1964		M		NSMT	13
JAP	HOK Hokkaido: Shikabe	1964		F		NSMT	44

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
JAP	HOK Hokkaido: Shikabe	1964		F		NSMT	44
JAP	HOK Hokkaido: Shiretoko: Rausu	1964		M	3	NSMT	157
JAP	HOK Hokkaido: Shiretoko: Rausu	1964		M	3	NSMT	157
JAP	HOK Hokkaido: Shiretoko: Rausu	1964		M	3	NSMT	164
JAP	HOK Hokkaido: Shiretoko: Rausu	1964		M	3	NSMT	164
JAP	HOK Hokkaido: Shiretoko: Rausu	1964		M	4	NSMT	71
JAP	HOK Hokkaido: Shiretoko: Rausu	1964		M	4	NSMT	71
JAP	HOK Hokkaido: Shiretoko: Rausu	1964		M	6	NSMT	122
JAP	HOK Hokkaido: Shiretoko: Rausu	1964		M	6	NSMT	122
JAP	HOK Hokkaido: Shiretoko: Rausu	1964		M	12	NSMT	171
JAP	HOK Hokkaido: Shiretoko: Rausu	1964		M		NSMT	19
JAP	HOK Hokkaido: Shiretoko: Rausu	1964		M		NSMT	19
JAP	HOK Hokkaido: Erimo	1965		M	1	NSMT	60
JAP	HOK Hokkaido: Erimo	1965		M	1	NSMT	60
JAP	HOK Hokkaido: Erimo	1965		M	2	NSMT	12
JAP	HOK Hokkaido: Erimo	1965		M	2	NSMT	12
JAP	HOK Hokkaido: Erimo	1965		F	4	NSMT	118
JAP	HOK Hokkaido: Erimo	1965		F	4	NSMT	118
JAP	HOK Hokkaido: Erimo	1965		M	9	NSMT	57
JAP	HOK Hokkaido: Erimo	1965		M	9	NSMT	57
JAP	HOK Hokkaido: Erimo	1965		F	22	NSMT	149
JAP	HOK Hokkaido: Erimo	1965		F	22	NSMT	149
JAP	HOK Hokkaido: Erimo	1965		F		NSMT	6
JAP	HOK Hokkaido: Erimo	1965		M		NSMT	29
JAP	HOK Hokkaido: Erimo	1965		M		NSMT	29
JAP	HOK Hokkaido: Erimo	1965		F		NSMT	59
JAP	HOK Hokkaido: Erimo	1965		F		NSMT	59
JAP	HOK Hokkaido: Erimo	1965		M		NSMT	107
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F	4	NSMT	156
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F	4	NSMT	156
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F	5	NSMT	56
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F	5	NSMT	56
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F	5	NSMT	158
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F	5	NSMT	158
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F	6	NSMT	139

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F	6	NSMT	139
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F	9	NSMT	146
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F	9	NSMT	146
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F	14	NSMT	49
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F	14	NSMT	49
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F	15	NSMT	2
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F	15	NSMT	2
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F		NSMT	53
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F		NSMT	53
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F		NSMT	54
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F		NSMT	54
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		M	3	NSMT	137
JAP	HOK Hokkaido	1965		M	4	NSMT	111
JAP	HOK Hokkaido	1965		M		NSMT	1
JAP	HOK Hokkaido	1965		F		NSMT	11
JAP	HOK Hokkaido	1965		F		NSMT	16
JAP	HOK Hokkaido	1965		M		NSMT	21
JAP	HOK Hokkaido	1965		M		NSMT	40
JAP	HOK Hokkaido	1965		M		NSMT	47
JAP	HOK Hokkaido	1965		F		NSMT	55
JAP	HOK Hokkaido	1965		F		NSMT	58
JAP	HOK Hokkaido	1965		F		NSMT	62
JAP	HOK Hokkaido	1965		M		NSMT	68
JAP	HOK Hokkaido	1965		F		NSMT	125
JAP	HOK Hokkaido	1965		F		NSMT	128
JAP	HOK Hokkaido	1965		F		NSMT	131
JAP	HOK Hokkaido	1965		M		NSMT	132
JAP	HOK Hokkaido	1965		F		NSMT	134
JAP	HOK Hokkaido	1965		F		NSMT	135
JAP	HOK Hokkaido	1965		M		NSMT	136
JAP	HOK Hokkaido	1965		F		NSMT	154
JAP	HOK Hokkaido	1965		F		NSMT	159
JAP	HOK Hokkaido	1965		M		NSMT	160
JAP	HOK Hokkaido	1965		F		NSMT	165
JAP	HOK Hokkaido	1965		M		NSMT	168

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
JAP	HOK Hokkaido	1965		M		NSMT	173
JAP	HOK Hokkaido: Erimo	1965		M		NSMT	42
JAP	HOK Hokkaido: Shikabe	1965		F		NSMT	67
JAP	HOK Hokkaido: Shiretoko: Rausu	1965		F		NSMT	52
JAP	HOK Hokkaido: Syakoran	1965		M		NSMT	167
JAP	HOK Hokkaido: Syakoran	1965		M		NSMT	15
JAP	HOK Hokkaido: Syakoran	1965		M		NSMT	169
JAP	HOK Hokkaido: Rebun I. (northern)	1968	December	M	10.6	AUG	1030
JAP	HOK Hokkaido: Rebun I. (northern)	1968	winter	M	15.6	AUG	1328
JAP	HOK Hokkaido: Rishiri I.	1969	April	M	14.1	AUG	1323
JAP	HOK Hokkaido: Shiretoko: Rausu	1969	April	M	1.1	AUG	1047
JAP	HOK Hokkaido: Shiretoko: Rausu	1969	April	M	2.1	AUG	1179
JAP	HOK Hokkaido: Shiretoko: Rausu	1969	April	M	2.1	AUG	1181
JAP	HOK Hokkaido: Shiretoko: Rausu	1969	April	F	2.1	AUG	1184
JAP	HOK Hokkaido: Shiretoko: Rausu	1969	April	M	2.1	AUG	1430
JAP	HOK Hokkaido: Shiretoko: Rausu	1969	April	F	3.1	AUG	1185
JAP	HOK Hokkaido: Shiretoko: Rausu	1969	April	F	5.1	AUG	1050
JAP	HOK Hokkaido: Shiretoko: Rausu	1969	April	F	7.1	AUG	1052
JAP	HOK Hokkaido: Shiretoko: Rausu	1969	April	F	12.1	AUG	1180
JAP	HOK Hokkaido: Shiretoko: Rausu	1969	April	F	adult	AUG	1049
JAP	HOK Hokkaido: Shiretoko: Rausu	1969	April	F		AUG	1048
JAP	HOK Hokkaido: nr. Nemuro	1969	April-June	M	1.9	AUG	1337
JAP	HOK Hokkaido: Rebun I. (northern)	1969	February	M	7.7	AUG	1032
JAP	HOK Hokkaido: Rebun I. (northern)	1969	February	M	11.7	AUG	1033
JAP	HOK Hokkaido: Rebun I. (northern)	1969	February	M	13.7	AUG	1031
JAP	HOK Hokkaido: Shiretoko: Rausu: Misaki-Cho	1969	February	M	young	AUG	1733
JAP	HOK Hokkaido: Shiretoko: Rausu: Misaki-Cho	1969	February			AUG	1732
JAP	HOK Hokkaido: Mouth of Akkeshi Bay	1969	March	F	1.8	AUG	1037
JAP	HOK Hokkaido: Mouth of Akkeshi Bay	1969	March	F	5.8	AUG	1035
JAP	HOK Hokkaido: Mouth of Akkeshi Bay	1969	March	F	5.8	AUG	1036
JAP	HOK Hokkaido: Mouth of Akkeshi Bay	1969	March	F	8.8	AUG	1034
JAP	HOK Hokkaido: Mouth of Akkeshi Bay	1969	March	M	fetus	AUG	1034's fetus
JAP	HOK Hokkaido: Mouth of Akkeshi Bay	1969	March	F	fetus	AUG	1035's fetus
JAP	HOK Hokkaido: Mouth of Akkeshi Bay	1969	March	M	fetus	AUG	1036's fetus
JAP	HOK Hokkaido: nr. Daikoku I.	1969	March	F	4.8	AUG	1038

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
JAP	HOK Hokkaido: nr. Daikoku I.	1969	March	F	9.8	AUG	1039
JAP	HOK Hokkaido: nr. Daikoku I.	1969	March	F	12.8	AUG	1040
JAP	HOK Hokkaido: nr. Daikoku I.	1969	March	M	fetus	AUG	1038's fetus
JAP	HOK Hokkaido: nr. Daikoku I.	1969	March	F	fetus	AUG	1039's fetus
JAP	HOK Hokkaido: nr. Daikoku I.	1969	March	M	fetus	AUG	1040's fetus
JAP	HOK Hokkaido: nr. Nemuro	1969	May	M	1.9	AUG	1332
JAP	HOK Hokkaido: nr. Nemuro	1969	May	M	2.9	AUG	1333
JAP	HOK Hokkaido: Rebun I. (northern)	1969	May	M		AUG	1326
JAP	HOK Hokkaido: Rebun I. (northern)	1969	May	M		AUG	1330
JAP	HOK Hokkaido: Rebun I. (northern)	1969	winter	M	4.6	AUG	1327
JAP	HOK Hokkaido: Rebun I. (northern)	1969	winter	M	4.6	AUG	1329
JAP	HOK Hokkaido: Rebun I. (northern)	1969	winter	M	5.6	AUG	1331
JAP	HOK Hokkaido: Rebun I. (northern)	1969	winter	M	7.6	AUG	1324
JAP	HOK Hokkaido: Rebun I. (northern)	1969	winter	M	9.6	AUG	1325
JAP	HOK Hokkaido: Shiretoko: Rausu	1969	winter	F	2.6	AUG	1186
JAP	HOK Hokkaido: Shiretoko: Rausu	1969	winter	F	9.6	AUG	1187
JAP	HOK Hokkaido: nr. Yururi I.	1970	June	F	3	AUG	1719
JAP	HOK Hokkaido: Erimo Cape	1974	April	M	young	AUG	1730
JAP	HOK Hokkaido: Rebun I. (northern)	1974		M	17-18	AUG	75K25
JAP	HOK Hokkaido: Rebun I. (northern)	1975	December	M	5.5	AUG	75K 2
JAP	HOK Hokkaido: Rebun I. (northern)	1975	December	M	6.5	AUG	75K 4
JAP	HOK Hokkaido: Rebun I. (northern)	1975	December	M	9.5	AUG	75K 3
JAP	HOK Hokkaido: Rebun I. (northern)	1975	December	M	16.5	AUG	75K 1
JAP	HOK Hokkaido: Rebun I.: Hirajima Rocks	1975	December	M	5.5	AUG	75K 7
JAP	HOK Hokkaido: Rebun I.: Hirajima Rocks	1975	December	M	8.5	AUG	75K 6
JAP	HOK Hokkaido: Rebun I.: Tanejima Rocks	1975	December	M	4.5	AUG	75K 5
JAP	HOK Hokkaido: Rebun I.: Hirajima Rocks	1976	December	M	14.6	AUG	75K 9
JAP	HOK Hokkaido: Rebun I. (southern)	1976	February	M	15.7	AUG	75K26
JAP	HOK Hokkaido: Rebun I.: Hamanaka	1976	January	M	4-5	AUG	1734
JAP	HOK Hokkaido: Rebun I.: Hirajima Rocks	1976	January	M	6.6	AUG	75K 8
JAP	HOK Hokkaido: Rebun I. (northern)	1976	January-February	M	0.6	AUG	75K12
JAP	HOK Hokkaido: Rebun I. (northern)	1976	January-February	M	1.6	AUG	75K22
JAP	HOK Hokkaido: Rebun I. (northern)	1976	January-February	M	1.6	AUG	75K19
JAP	HOK Hokkaido: Rebun I. (northern)	1976	January-February	M	3.6	AUG	75K21
JAP	HOK Hokkaido: Rebun I. (northern)	1976	January-February	M	4.6	AUG	75K10

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
JAP	HOK Hokkaido: Rebun I. (northern)	1976	January-February	M	5.6	AUG	75K11
JAP	HOK Hokkaido: Rebun I. (northern)	1976	January-February	M	7.6	AUG	75K14
JAP	HOK Hokkaido: Rebun I. (northern)	1976	January-February	M	7.6	AUG	75K15
JAP	HOK Hokkaido: Rebun I. (northern)	1976	January-February	M	8.6	AUG	75K18
JAP	HOK Hokkaido: Rebun I. (northern)	1976	January-February	M	8.6	AUG	75K23
JAP	HOK Hokkaido: Rebun I. (northern)	1976	January-February	M	8.6	AUG	75K17
JAP	HOK Hokkaido: Rebun I. (northern)	1976	January-February	M	10.6	AUG	75K16
JAP	HOK Hokkaido: Rebun I. (northern)	1976	January-February	M	11.6	AUG	75K24
JAP	HOK Hokkaido: Rebun I. (northern)	1976	January-February	M	12.6	AUG	75K13
JAP	HOK Hokkaido: Rebun I. (northern)	1976	January-February	M	12.6	AUG	75K20
JAP	HOK Hokkaido: Shiretoko: Rausu	1979	May	F	1.9	AUG	Shibano-1
JAP	HOK Hokkaido	1983		F		HUH	83N8
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	February	M	3	HUH	94003
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	February	F	4	HUH	94004
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	February	F	9	HUH	94005
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	M	3	HUH	94012
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	F	3	HUH	94016
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	M	3	HUH	94018
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	M	4	HUH	94006
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	M	4	HUH	94007
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	M	4	HUH	94009
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	M	4	HUH	94010
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	F	5	HUH	94011
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	F	5	HUH	94020
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	F	6	HUH	94008
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	F	6	HUH	94015
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	F	6	HUH	94017
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	F	7	HUH	94021
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	F	7	HUH	94023
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	F	7	HUH	94024
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	F	7	HUH	94025
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	F	11	HUH	94022
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	F	12	HUH	94019
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	F	13	HUH	94026
JAP	HOK Hokkaido: Shiretoko: Rausu	1994	March	F	15	HUH	94014

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	M	2	HUH	95005
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	M	5	HUH	95007
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	M	5	HUH	95010
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	M	5	HUH	95012
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	6	HUH	95002
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	6	HUH	95021
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	M	7	HUH	95003
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	M	7	HUH	95022
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	7	HUH	95023
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	8	HUH	95008
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	8	HUH	95014
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	8	HUH	95016
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	8	HUH	95020
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	M	8	HUH	95025
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	9	HUH	95001
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	9	HUH	95006
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	9	HUH	95013
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	10	HUH	95009
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	10	HUH	95011
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	10	HUH	95026
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	11	HUH	95004
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	11	HUH	95024
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	12	HUH	95015
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	12	HUH	95019
JAP	HOK Hokkaido: Shiretoko: Rausu	1995	February	F	14	HUH	95018
JAP	HOK Hokkaido: Shiretoko: Rausu	1996	February	F	3	HUH	96205
JAP	HOK Hokkaido: Rebun I.	1996	February	M	pup	HUH	96206
JAP	HOK Hokkaido: Rebun I.	1996	February	M	5	HUH	96102
JAP	HOK Hokkaido: Shakotan	1996	February	M	9	HUH	96101
JAP	HOK Hokkaido: Shakotan	1996	February	M	3	HUH	96012
JAP	HOK Hokkaido: Shiretoko: Rausu	1996	February	M	3	HUH	96013
JAP	HOK Hokkaido: Shiretoko: Rausu	1996	February	M	3	HUH	96011
JAP	HOK Hokkaido: Shiretoko: Rausu	1996	February	M	4	HUH	96015
JAP	HOK Hokkaido: Shiretoko: Rausu	1996	February	F	4	HUH	96010
JAP	HOK Hokkaido: Shiretoko: Rausu	1996	February	F	5	HUH	96008

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
JAP	HOK Hokkaido: Shiretoko: Rausu	1996	February	F	11	HUH	96014
JAP	HOK Hokkaido: Shiretoko: Rausu	1996	February	F	13	HUH	96009
JAP	HOK Hokkaido: Rebun I.	1996	January	F	2	HUH	96201
JAP	HOK Hokkaido: Rebun I.	1996	January	M	3	HUH	96203
JAP	HOK Hokkaido: Rebun I.	1996	January	F	8	HUH	96204
JAP	HOK Hokkaido: Rebun I.	1996	January	F	12	HUH	96202
JAP	HOK Hokkaido: Shiretoko: Rausu	1996	January	F	4	HUH	96002
JAP	HOK Hokkaido: Shiretoko: Rausu	1996	January	F	6	HUH	96006
JAP	HOK Hokkaido: Shiretoko: Rausu	1996	January	F	6	HUH	96007
JAP	HOK Hokkaido: Shiretoko: Rausu	1996	January	F	7	HUH	96005
JAP	HOK Hokkaido: Shiretoko: Rausu	1996	January	F	10	HUH	96001
JAP	HOK Hokkaido: Shiretoko: Rausu	1996	January	F	11	HUH	96003
JAP	HOK Hokkaido: Rebun I.	1996	March	M	9	HUH	96207
JAP	HOK Hokkaido: Rebun I.	1997	February	F	4	HUH	97207
JAP	HOK Hokkaido: Rebun I.	1997	February	F	8	HUH	97208
JAP	HOK Hokkaido: Rebun I.	1997	February	M	9	HUH	97209
JAP	HOK Hokkaido: Rebun I.	1997	February	M	12	HUH	97206
JAP	HOK Hokkaido: Rebun I.	1997	February	M	12	HUH	97210
JAP	HOK Hokkaido: Shakotan	1997	February	F	12	HUH	97106
JAP	HOK Hokkaido: Shiretoko: Rausu	1997	February	M	2	HUH	97020
JAP	HOK Hokkaido: Shiretoko: Rausu	1997	February	M	3	HUH	97017
JAP	HOK Hokkaido: Shiretoko: Rausu	1997	February	M	4	HUH	97019
JAP	HOK Hokkaido: Shiretoko: Rausu	1997	February	M	4	HUH	97021
JAP	HOK Hokkaido: Shiretoko: Rausu	1997	February	F	7	HUH	97012
JAP	HOK Hokkaido: Shiretoko: Rausu	1997	February	F	8	HUH	97011
JAP	HOK Hokkaido: Rebun I.	1997	January	M	2	HUH	97202
JAP	HOK Hokkaido: Rebun I.	1997	January	M	14	HUH	97205
JAP	HOK Hokkaido: Rebun I.	1997	January	F	20	HUH	97203
JAP	HOK Hokkaido: Rebun I.	1997	January	M	pup	HUH	97204
JAP	HOK Hokkaido: Shakotan	1997	January	M	6	HUH	97103
JAP	HOK Hokkaido: Shakotan	1997	January	M	9	HUH	97105
JAP	HOK Hokkaido: Shakotan	1997	January	M	10	HUH	97104
JAP	HOK Hokkaido: Shiretoko: Rausu	1997	January	M	2	HUH	97002
JAP	HOK Hokkaido: Shiretoko: Rausu	1997	January	M	2	HUH	97009
JAP	HOK Hokkaido: Shiretoko: Rausu	1997	January	F	2	HUH	97010



Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
JAP	HOK Hokkaido: Shiretoko: Rausu	1997	January	M	10	HUH	97001
JAP	HOK Hokkaido: Shiretoko: Rausu	1997	January	F	10	HUH	97005
JAP	HOK Hokkaido: Rebun I.	1997	March	M	1	HUH	97211
JAP	HOK Hokkaido: Rebun I.	1997	March	M	10	HUH	97212
JAP	HOK Hokkaido	1997		M	6	HUH	97ST01
JAP	HOK Hokkaido: Shakotan	1997		M	6	HUH	97109
JAP	HOK Hokkaido: Shakotan	1997		M	6	HUH	97110
JAP	HOK Hokkaido: Shakotan	1997		M	7	HUH	97108
JAP	HOK Hokkaido: Shiretoko: Rausu	1997		M	1	HUH	97015
JAP	HOK Hokkaido: Shiretoko: Rausu	1997		M	2	HUH	97016
JAP	HOK Hokkaido: Rebun I.	1998	February	F	2	HUH	98202
JAP	HOK Hokkaido: Rebun I.	1998	February	F	10	HUH	98203
JAP	HOK Hokkaido: Rebun I.	1998	February	M		HUH	98204
JAP	HOK Hokkaido: Rebun I.	1998	February	F		HUH	98205
JAP	HOK Hokkaido: Rebun I.	1998	February	F		HUH	98206
JAP	HOK Hokkaido: Shakotan	1998	February	M	3	HUH	98102
JAP	HOK Hokkaido: Shakotan	1998	February	M	4	HUH	98103
JAP	HOK Hokkaido: Shakotan	1998	February	M	5	HUH	98101
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	February	M	2	HUH	98024
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	February	F	2	HUH	98026
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	February	F	3	HUH	98027
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	February	F	6	HUH	98025
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	February	F	9	HUH	98028
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	February	F	13	HUH	98030
JAP	HOK Hokkaido: Rebun I.	1998	January	F	20	HUH	98201
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	M	3	HUH	98005
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	M	3	HUH	98015
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	F	3	HUH	98019
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	F	4	HUH	98013
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	F	5	HUH	98020
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	F	6	HUH	98014
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	F	7	HUH	98011
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	F	8	HUH	98008
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	F	9	HUH	98002
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	F	10	HUH	98016

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	F	11	HUH	98017
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	F	12	HUH	98022
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	F	13	HUH	98012
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	F	14	HUH	98009
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	F		HUH	98003
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	M		HUH	98004
JAP	HOK Hokkaido: Shiretoko: Rausu	1998	January	F		HUH	98007
JAP	HOK Hokkaido: Rebun I.	1998	March	F	15	HUH	98207
JAP	HOK Hokkaido: Rebun I.	1998	March	M	pup	HUH	98208
JAP	HOK Hokkaido: Rebun I.	1998	March	F	pup	HUH	98209
JAP	HOK Hokkaido: Shakotan	1998	March	M	6	HUH	98106
JAP	HOK Hokkaido: Shakotan	1998	March		7	HUH	98107
JAP	HOK Hokkaido: Shakotan	1998	March	M	8	HUH	98105
JAP	HOK Hokkaido: Shakotan	1998	March	M	9	HUH	98104
JAP	HOK Hokkaido: Shakotan	1998	March	M		HUH	98108
JAP	HOK Hokkaido	1998		M	5	HUH	98ST02
JAP	HOK Hokkaido	1998		M	8	HUH	98CH02
JAP	HOK Hokkaido	1998		M	14	HUH	98ST01
JAP	HOK Hokkaido	1998		F		HUH	98NT02
JAP	HOK Hokkaido: Rebun I.	1998		M	3	HUH	98210
JAP	HOK Hokkaido: Rebun I.	1998		F	18	HUH	98211
JAP	HOK Hokkaido: Shiretoko: Rausu	1998		F	2	HUH	98031
JAP	HOK Hokkaido: Rebun I.	1999	February	F	2	HUH	99203
JAP	HOK Hokkaido: Rebun I.	1999	February	F	pup	HUH	99205
JAP	HOK Hokkaido: Shiretoko: Rausu	1999	February	M	3	HUH	99017
JAP	HOK Hokkaido: Shiretoko: Rausu	1999	February	M	3	HUH	99019
JAP	HOK Hokkaido: Shiretoko: Rausu	1999	February	F	9	HUH	99015
JAP	HOK Hokkaido: Shiretoko: Rausu	1999	February	F	14	HUH	99018
JAP	HOK Hokkaido: Shiretoko: Rausu	1999	February	M	pup	HUH	99016
JAP	HOK Hokkaido: Rebun I.	1999	January	F	1	HUH	99201
JAP	HOK Hokkaido: Rebun I.	1999	January	M	2	HUH	99202
JAP	HOK Hokkaido: Rebun I.	1999	January	F		HUH	99204
JAP	HOK Hokkaido: Shakotan	1999	January	M	7	HUH	99101
JAP	HOK Hokkaido: Shakotan	1999	January	M	7	HUH	99102
JAP	HOK Hokkaido: Shakotan	1999	January	M	8	HUH	99104

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
JAP	HOK Hokkaido: Shakotan	1999	January	M	14	HUH	99103
JAP	HOK Hokkaido: Shakotan	1999	January	M		HUH	99105
JAP	HOK Hokkaido: Shiretoko: Rausu	1999	January	F	2	HUH	99006
JAP	HOK Hokkaido: Shiretoko: Rausu	1999	January	M	2	HUH	99011
JAP	HOK Hokkaido: Shiretoko: Rausu	1999	January	F	4	HUH	99004
JAP	HOK Hokkaido: Shiretoko: Rausu	1999	January	F	4	HUH	99010
JAP	HOK Hokkaido: Shiretoko: Rausu	1999	January	M	4	HUH	99012
JAP	HOK Hokkaido: Shiretoko: Rausu	1999	January	F	4	HUH	99014
JAP	HOK Hokkaido: Shiretoko: Rausu	1999	January	F	5	HUH	99005
JAP	HOK Hokkaido: Shiretoko: Rausu	1999	January	F	8	HUH	99013
JAP	HOK Hokkaido: Shiretoko: Rausu	1999	January	F		HUH	99008
JAP	HOK Hokkaido: Rebun I.	1999	March	M	1	HUH	99206
JAP	HOK Hokkaido: Rebun I.	1999	March	M	7	HUH	99208
JAP	HOK Hokkaido: Rebun I.	1999	March	M	10	HUH	99207
JAP	HOK Hokkaido: Shakotan	1999	March	F	16	HUH	99107
JAP	HOK Hokkaido: Shiretoko: Rausu	1999		F	6	HUH	99001
JAP	HOK Hokkaido: Shiretoko: Rausu	1999		F	6	HUH	99003
JAP	HOK Hokkaido: Shiretoko: Rausu	1999		F	10	HUH	99002
JAP	HOK Hokkaido: Shiretoko: Rausu	2001	December	F		HUH	200101
JAP	HOK Hokkaido: Shiretoko: Rausu	2001	December	F		HUH	200102
JAP	HOK Hokkaido: Shiretoko: Rausu	2001	December	F		HUH	200103
JAP	HOK Hokkaido: Shiretoko: Rausu	2001	December	F		HUH	200104
JAP	HOK Hokkaido: Shiretoko: Rausu	2001	December	F		HUH	200105
JAP	HOK Hokkaido: Shiretoko: Rausu	2001	December	F		HUH	200106
JAP	HOK Hokkaido: Shiretoko: Rausu	2001	December	F		HUH	200109
JAP	HOK Hokkaido: Shiretoko: Rausu	2001	December	F		HUH	200110
JAP	HOK Hokkaido:				fetus	AUG	Shibano-2
JAP	HOK Hokkaido			M	adult	HUH	K2
JAP	HOK Hokkaido			M	adult	HUH	K3
JAP	HOK Hokkaido			M	adult	HUH	K4
JAP	HOK Hokkaido			M	adult	HUH	K5
JAP	HOK Hokkaido			M	adult	HUH	K6
JAP	HOK Hokkaido			M	adult	HUH	K7
JAP	HOK Hokkaido			M	adult	HUH	K8
JAP	HOK Hokkaido			M	adult	HUH	K9

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
JAP	HOK Hokkaido					HUH	K10
JAP	HOK Hokkaido: Erimo	1863		M		NSMT	42
JAP	HOK Hokkaido: Shikabe	1881		F		NSMT	67
JAP	HOK Hokkaido: Shiretoko: Rausu	1882		F		NSMT	52
JAP	HOK Hokkaido: Syakoran	1883		M		NSMT	167
RUS	Sitha I.	1883				ZIN	725
RUS	WBS Commander Is.: Bering I.	1881				ZIN	3251
RUS	HOK Sea of Okhotsk	1882			adult	NMNH	13984
RUS	HOK Sakhalinskaya: Tyuleniy Island	1883				NMNH	13968
RUS	HOK Sakhalinskaya: Tyuleniy Island	1883				NMNH	13969
RUS	HOK Sakhalinskaya: Tyuleniy Island	1883				NMNH	A21297
RUS	HOK Sakhalinskaya: Tyuleniy Island	1883				NMNH	A21299
RUS	HOK Sakhalinskaya: Tyuleniy Island	1883				NMNH	A21302
RUS	HOK Sakhalinskaya: Tyuleniy Island	1883		M		NMNH	A21303
RUS	HOK Sakhalinskaya: Tyuleniy Island	1883		M		NMNH	A21304
RUS	HOK Sakhalinskaya: Tyuleniy Island	1883		M		NMNH	A21305
RUS	HOK Sakhalinskaya: Tyuleniy Island	1883		M		NMNH	A21307
RUS	HOK Sakhalinskaya: Tyuleniy Island	1883		F		NMNH	A21309
RUS	HOK Sea of Okhotsk: Tjuleni I.	1884		M	adult	ZIN	11465
RUS	HOK Sea of Okhotsk: Tjuleni I.	1884				ZIN	3264
RUS	HOK Sea of Okhotsk: Tjuleni I.	1884				ZIN	3293
RUS	HOK Sea of Okhotsk: Tjuleni I.	1884				ZIN	6637
RUS	HOK Sea of Okhotsk: Tjuleni I.	1884				ZIN	6794
RUS	HOK Sea of Okhotsk: Tjuleni I.	1884				ZIN	6795
RUS	HOK Sea of Okhotsk: Tjuleni I.	1884				ZIN	6796
RUS	HOK Sea of Okhotsk: Tjuleni I.	1884				ZIN	6798
RUS	HOK Sea of Okhotsk: Tjuleni I.	1884				ZIN	6799
RUS	HOK Sea of Okhotsk: Tjuleni I.	1884				ZIN	6800
RUS	HOK Sea of Okhotsk: Tjuleni I.	1884				ZIN	6801
RUS	HOK Sea of Okhotsk: Tjuleni I.	1884		M		ZIN	11464
RUS	WBS Commander Is.: Bering I.	1884				ZIN	3250
RUS	WBS Commander Is.: Bering I.	1884				ZIN	3257
RUS	WBS Commander Is.: Bering I.	1886		M	juvenile	ZIN	3128
RUS	WBS Commander Is.: Bering I.	1892	June			NMNH	A47104
RUS	WBS Kamchatka	1892				ZIN	6792

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
RUS	WBS Kamchatka	1905				ZMMU	1587
RUS	WBS Kamchatka: Kamchatka Cape	1909	June	M	adult	ZIN	11451
RUS	WBS Kamchatka: Kamchatka Cape	1909	June	M	adult	ZIN	11452
RUS	WBS Kamchatka: Kamchatka Cape	1909	June	F	adult	ZIN	11454
RUS	WBS Kamchatka: Kamchatka Cape	1909	June	F	adult	ZIN	11455
RUS	WBS Kamchatka: Kamchatka Cape	1909	June	F	adult	ZIN	11456
RUS	WBS Kamchatka: Kamchatka Cape	1909	June	F	adult	ZIN	11458
RUS	WBS Kamchatka: Kamchatka Cape	1909	June	M	adult	ZIN	11459
RUS	WBS Kamchatka: Kamchatka Cape	1909	June	M	adult	ZIN	11460
RUS	WBS Kamchatka: Kamchatka Cape	1909	June	F	adult	ZIN	11461
RUS	WBS Commander Is.	1910		M	adult	ZIN	11466
RUS	HOK Sea of Okhotsk: Ol'skiy I.	1928	July	M		ZMMU	82944
RUS	WBS Commander Is.: Bering I.	1928		M		NHM	1928.4.21.68
RUS	WBS Commander Is.: Bering I.	1928		M		NHM	1928.4.21.69
RUS	WBS Commander Is.: Bering I.	1928		M		NHM	1928.4.21.70
RUS	WBS Commander Is.	1931	March	M		ZIN	16050
RUS	WBS Commander Is.: Bering I.	1931	May	M		ZIN	18571
RUS	HOK Sea of Okhotsk: Sivuch Cape	1938	July	M		ZIN	21661
RUS	HOK Sea of Okhotsk: St. Jona I.	1940	July	F		ZMMU	45048
RUS	HOK Sea of Okhotsk: St. Jona I.	1940	July	F		ZMMU	45052
RUS	HOK Sea of Okhotsk: St. Jona I.	1942	July	F	juvenile	ZMMU	45049
RUS	HOK Sea of Okhotsk: St. Jona I.	1942	July	M		ZMMU	45053
RUS	WBS Kamchatka: Kronotskiy	1942	July	M		ZMMU	45054
RUS	HOK Sea of Okhotsk: St. Jona I.	1948		F		ZMMU	49263
RUS	HOK Sea of Okhotsk: St. Jona I.	1948		F		ZMMU	49264
RUS	HOK Sea of Okhotsk: St. Jona I.	1950	May	F	juvenile	ZMMU	64800
RUS	WBS Kamchatka	1951				ZMMU	53357
RUS	HOK Kuril Is.	1959				ZMMU	60150
RUS	WBS Commander Is.	1962	February			ZMMU	69372
RUS	WBS Commander Is.	1962	July	F		ZMMU	69474
RUS	WBS Commander Is.	1962	June	M		ZMMU	69529
RUS	WBS Commander Is.	1962	June	M		ZMMU	69530
RUS	WBS Commander Is.	1962	June	M		ZMMU	69535
RUS	WBS Commander Is.	1962	September	M		ZMMU	69538
RUS	HOK Kuril Is.	1963	July	F		TINR	N39

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
RUS	HOK Kuril Is.: Antsiferovo I.	1963	July	M	5	TINR	N33
RUS	HOK Kuril Is.: Chirinkotan I.	1963	July	M	4	TINR	N34
RUS	HOK Kuril Is.	1963				TINR	132
RUS	HOK Kuril Is.	1963				TINR	134
RUS	HOK Kuril Is.	1963				TINR	383
RUS	HOK Kuril Is.	1964	August	M	4	TINR	189
RUS	HOK Kuril Is.	1964	August	M	5	TINR	177
RUS	HOK Kuril Is.: Rashua I.	1964	August	M	7	TINR	186
RUS	HOK Kuril Is.: Raykoke I.	1964	August	F	5	TINR	179
RUS	HOK Kuril Is.: Raykoke I.	1964	August	F	11	TINR	184
RUS	HOK Kuril Is.: Raykoke I.	1964	August	F	15	TINR	178
RUS	HOK Kuril Is.: Raykoke I.	1964	August	F	20	TINR	185
RUS	HOK Kuril Is.: Raykoke I.	1964	August	M	pup	TINR	182
RUS	HOK Kuril Is.: Raykoke I.	1964	August	M	pup	TINR	183
RUS	HOK Kuril Is.: Antsiferovo I.	1964	July	M	10	TINR	158
RUS	HOK Kuril Is.: Raykoke I.	1964	May	F	5	TINR	148
RUS	HOK Kuril Is.: Iturup I.	1965	June	F	16	TINR	196
RUS	HOK Kuril Is.: Iturup I.	1965	June	M	pup	TINR	198
RUS	HOK Kuril Is.: Antsiferovo I.	1966		F	7	TINR	N (W?) 6
RUS	HOK Kuril Is.: Lovushki I.	1968		F	pup	TINR	168
RUS	HOK Kuril Is.: Lovushki I.	1968		M	pup	TINR	169
RUS	HOK Kuril Is.: Rashua I.	1969		M		TINR	20117
RUS	WBS Commander Is.: Bering I.	1969	October	M	adult	ZIN	33720
RUS	WBS Commander Is.: Bering I.	1969	October		adult	ZIN	33721
RUS	WBS Commander Is.: Bering I.	1969	October	M	adult	ZIN	33722
RUS	WBS Commander Is.: Bering I.	1969	October	M	adult	ZIN	33723
RUS	WBS Commander Is.: Bering I.	1969	October	M	adult	ZIN	33724
RUS	WBS Commander Is.: Bering I.	1969		F	adult	ZIN	33719
RUS	HOK Kuril Is. (southern)	1970	June	M	0.9	AUG	1696
RUS	HOK Kuril Is. (southern)	1970	May	M	0.9	AUG	1646
RUS	HOK Kuril Is. (southern)	1970		M	0.9	AUG	1631
RUS	HOK Kuril Is.: Chernyye Bratya I.	1972	June	M	5	TINR	260
RUS	HOK Kuril Is.: Ketoy I.	1972	June	M	5	TINR	267
RUS	HOK Kuril Is.: Matua I.	1972	June	F	20	TINR	265
RUS	HOK Kuril Is.: Iturup I.	1972	March	F	6	TINR	270

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
RUS	WBS Commander Is.	1974		M		ZMMU	100249
RUS	WBS Commander Is.	1974		M		ZMMU	100250
RUS	WBS Commander Is.	1974		M		ZMMU	100251
RUS	WBS Commander Is.	1974		M		ZMMU	100252
RUS	WBS Commander Is.	1974		M		ZMMU	100253
RUS	WBS Commander Is.	1974		M		ZMMU	100254
RUS	WBS Commander Is.	1974		M		ZMMU	100255
RUS	WBS Commander Is.	1974		M		ZMMU	100256
RUS	WBS Commander Is.	1974		M		ZMMU	100257
RUS	WBS Commander Is.	1974		M		ZMMU	100258
RUS	HOK Kuril Is.: Lovushki I.	1975	September	F		TINR	N4
RUS	HOK Kuril Is.: Shishkotan I.	1975	September	M		TINR	N2
RUS	HOK Kuril Is.	1976		F		TINR	N5
RUS	HOK Kuril Is.: Chernyye Brat'ya I.	1976		M	7	TINR	263
RUS	HOK Kuril Is.	1976		F	8	TINR	N22
RUS	HOK Kuril Is.	1976		M		TINR	15
RUS	HOK Kuril Is.	1976		M		TINR	110
RUS	HOK Kuril Is.	1976		M		TINR	135
RUS	HOK Kuril Is.	1976		F		TINR	20112
RUS	HOK Kuril Is.	1976		M		TINR	20114
RUS	HOK Kuril Is.	1976		M		TINR	20332
RUS	HOK Kuril Is.	1976		M		TINR	20351
RUS	HOK Kuril Is.	1976		F		TINR	20354
RUS	HOK Kuril Is.	1976		M		TINR	20442
RUS	HOK Kuril Is.	1976		M		TINR	20443
RUS	HOK Kuril Is.	1976		M		TINR	20445
RUS	HOK Kuril Is.	1976		M		TINR	20446
RUS	HOK Kuril Is.	1976		M		TINR	20447
RUS	HOK Kuril Is.	1976		M		TINR	20451
RUS	HOK Kuril Is.	1976		M		TINR	20454
RUS	HOK Kuril Is.	1976		F		TINR	20459
RUS	HOK Kuril Is.	1976		F		TINR	20460
RUS	HOK Kuril Is.	1976		F		TINR	20467
RUS	HOK Kuril Is.	1976		F		TINR	N1
RUS	WBS Bering Sea (western)	1981	April	M		NMML	1661

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
RUS	HOK Kuril Is.: Kurashir I.	1985	August			ZIN	32196
RUS	HOK Kuril Is.: Ketoy	1989	July	M		NMML	1344
RUS	HOK Kuril Is.: Ketoy	1989	July	M		NMML	1345
RUS	HOK Kuril Is.: Lovushki: Dolgoi	1989	July	F		NMML	1346
RUS	HOK Kuril Is.: Lovushki: Dolgoi	1989	July	F		NMML	1347
RUS	HOK Kuril Is.: Lovushki: Dolgoi	1989	July	F		NMML	1348
RUS	HOK Kuril Is.: Lovushki: Dolgoi	1989	July	F		NMML	1349
RUS	HOK Kuril Is.: Lovushki: Dolgoi	1989	July	F		NMML	1350
RUS	HOK Kuril Is.: Lovushki: Dolgoi	1989	July	F		NMML	1351
RUS	HOK Kuril Is.: Lovushki: Dolgoi	1989	July	F		NMML	1352
RUS	HOK Kuril Is.: Lovushki: Dolgoi	1989	July	F		NMML	1353
RUS	HOK Kuril Is.: Lovushki: Dolgoi	1989	July	F		NMML	1354
RUS	HOK Kuril Is.: Lovushki: Dolgoi	1989	July	F		NMML	1355
RUS	HOK Kuril Is.: Lovushki: Dolgoi	1989	July	F		NMML	1356
RUS	HOK Kuril Is.: Lovushki: Dolgoi	1989	July	F		NMML	1357
RUS	HOK Kuril Is.: Brat Chirpoyev	1989	June	F		NMML	1343
RUS	HOK Kuril Is.: Lovushki	1989	June	F		NMML	1342
RUS	HOK Kuril Is.: Srednego (Khitraya)	1989	June	F		NMML	1341
RUS	HOK Kuril Is.		May	F		TINR	-
RUS	HOK Sea of Okhotsk: Zavjalova I.					ZIN	27200
RUS	WBS Commander Is.			M		ZIN	9484
RUS	WBS Commander Is.: Bering I.			M		NMNH	A22071
RUS	WBS Commander Is.: Bering I.			M		NMNH	A22072
RUS	WBS Commander Is.: Bering I.			M		NMNH	A22077
RUS	WBS Kamchatka			F		MNHU	2782
USA	Aleutian Is.	1853				NAT	13440
USA	AK AK-5 Insel Unalashka	1860				ZIN	728
USA	AK AK-8 Pribilof Is.: St. George I.	1864				NAT	13441
USA	AK AK-8 Pribilof Is.: St. Paul I.	1869	November			NMNH	11225
USA	AK AK-8 Pribilof Is.: St. Paul I.	1872				MNHU	72815
USA	AK AK-8 Pribilof Is.: St. Paul I.	1879	August			NMNH	13157
USA	AK AK-8 Pribilof Is.: St. Paul I.	1879				NMNH	A16309
USA	AK AK-8 Pribilof Is.: St. Paul I.	1882			juvenile	NMNH	188985
USA	AK AK-8 Pribilof Is.: St. Paul I.	1884				CAS	9045
USA	AK AK-5 Insel Unalashka	1886		F	juvenile	ZIN	744



	Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA	AK	AK-5 Insel Unalashka	1886		M		ZIN	746
USA	AK	AK-8 Pribilof Is.	1890	June	M		NMNH	A34835
USA	AK	AK-8 Pribilof Is.: St. Paul I.	1890	May	M		NMNH	A34836
USA	AK	AK-8 Pribilof Is.: St. Paul I.	1891	August	M		NMNH	188981
USA	AK	AK-8 Pribilof Is.: St. Paul I.	1892	August	M		NMNH	188982
USA	AK	AK-8 Pribilof Is.: St. Paul I.	1892			juvenile	NMNH	188983
USA	AK	AK-8 Pribilof Is.: St. Paul I.	1892			juvenile	NMNH	188984
USA	AK	AK-8 Pribilof Is.: St. Paul I.	1896	July	F		CAS	16110
USA	AK	AK-8 Pribilof Is.: St. Paul I.	1896				MNHU	70692
USA	AK	AK-8 Pribilof Is.: St. Paul I.	1897		M	adult	NMNH	83887
USA	AK	AK-8 Pribilof Is.: St. Paul I.	1897				NHM	1897.2.17.1
USA	AK	AK-8 Pribilof Is.: St. George I.	1897		M		NHM	1897.1.18.5
USA	AK	AK-8 Pribilof Is.: St. George I.	1897		F		NHM	1897.1.18.7
USA	AK	AK-8 Pribilof Is.: St. George I.	1897				NHM	1897.1.18.8
USA	AK	AK-5 Aleutian Is.: Bogoslof I.	1899	July	F	juvenile	NMNH	98070
USA	AK	AK-8 Pribilof Is.: St. Paul I.	1902	July	M		NMNH	114830
USA	AK	AK-3 Seldovia	1904				NMNH	133235
USA	AK		1905		M		NHM	1905.11.8.1
USA	AK	AK-1 Barrier I.	1908				NMNH	154013
USA	AK	AK-8 Togiak Bay	1911				NMNH	202705
USA	AK	AK-4 Nagai/Shumagin Is.	1912	June			MNHU	37702
USA	AK	AK-5 Aleutian Is.: Bogoslof I.	1913	June	F		CMNH	21005
USA	AK	AK-8 Pribilof Is.	1914	September			NMNH	199611
USA	AK	AK-1 Hawk Inlet	1915	August	F		NMNH	211101
USA	AK	AK-8 Pribilof Is.: St. Paul I.	1916				NMS	
USA	AK	AK-1 Chichagof I.: Port Frederick	1917	spring	M		NMNH	229226
USA	AK	AK-1 Sitka	1918	April	M		NMNH	228877
USA	AK	AK-1 Kruzof Island: Mount Edgecombe	1919		M		NMNH	233505
USA	AK	AK-8 Pribilof Is.: St. Paul I.	1920				CAS	3683
USA	AK	AK-8 Pribilof Is.: St. Paul I.	1920				CAS	3684
USA	AK	AK-8 Pribilof Is.: St. Paul I.	1923	June			NMNH	239368
USA	AK	AK-3 Kodiak I.	1930				NMNH	256492
USA	AK	AK-3 Kodiak I.: Chiniak Cape	1931	July		juvenile	ANSP	14400
USA	AK	AK-3 Kodiak I.: Chiniak Cape	1931	July	M		ANSP	14424
USA	AK	AK-5 Aleutian Is.: Unalaska I.: Dutch Harbor	1936	summer			NMNH	261229

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA	AK AK-6 Aleutian Is.: Little Kiska I.	1936	summer			NMNH	261231
USA	AK AK-7 Aleutian Is.: Attu I.	1936	summer			NMNH	261230
USA	AK AK-6 Aleutian Is.: Kagamil I.	1937	summer			NMNH	267526
USA	AK AK-5 Aleutian Is.: Bogoslof I.	1938	August	M		NMNH	270971
USA	AK AK-8 Pribilof Is.: St. Paul I.	1940	July	M		NMNH	270972
USA	AK AK-8 Pribilof Is.: St. Paul I.	1940	July	M		NMNH	270973
USA	AK AK-8 Pribilof Is.: St. Paul I.	1941	November	M		NMNH	270969
USA	AK AK-8 Pribilof Is.: St. Paul I.	1941	September	M		NMNH	270970
USA	AK AK-8 Pribilof Is.: St. Paul I.	1944	June	M	neonate	NMNH	276038
USA	AK AK-8 Pribilof Is.: St. Paul I.	1944	June	M	neonate	NMNH	276039
USA	AK AK-8 Pribilof Is.: St. Paul I.	1944	May	M	juvenile	NMNH	276361
USA	AK AK-8 Pribilof Is.: St. Paul I.	1944	May	F	neonate	NMNH	276037
USA	AK AK-8 Pribilof Is.: St. Paul I.	1946	July	M	adult	NMNH	276031
USA	AK AK-8 Pribilof Is.: St. Paul I.	1947	August			NMNH	276207
USA	AK AK-8 Pribilof Is.: St. Paul I.	1947	July	F		NMNH	276040
USA	AK AK-8 Pribilof Is.: St. Paul I.	1947	July	F		NMNH	276208
USA	AK AK-8 Pribilof Is.: St. Paul I.	1947	June	M	1	NMML	317
USA	AK AK-8 Pribilof Is.: St. Paul I.	1947	September		pup	NMNH	276036
USA	AK AK-8 Pribilof Is.: St. Paul I.	1948	July	M	adult	NMNH	276354
USA	AK AK-8 Pribilof Is.: St. Paul I.	1948	July	F		NMNH	276209
USA	AK AK-8 Pribilof Is.: St. Paul I.	1949	August	M		NHM	1950.3.29.9
USA	AK AK-8 Pribilof Is.: St. George I.	1949	July	M	yearling	NMNH	285747
USA	AK AK-8 Pribilof Is.: St. Paul I.	1949	July	F		NHM	1950.3.29.10
USA	AK AK-8 Pribilof Is.: St. Paul I.	1949	July	M		NHM	1950.3.29.12
USA	AK AK-8 Pribilof Is.: St. George I.	1949	July	M		NHM	1950.3.29.11
USA	AK AK-8 Pribilof Is.: St. Paul I.	1949	June	M	adult	NMNH	285509
USA	AK AK-8 Pribilof Is.: St. Paul I.	1949	June	M	juvenile	NMNH	285505
USA	AK AK-8 Pribilof Is.: St. Paul I.	1949	June	M	subadult	NMNH	285507
USA	AK AK-8 Pribilof Is.: St. Paul I.	1949	June	M	subadult	NMNH	285508
USA	AK AK-8 Pribilof Is.: St. Paul I.	1949	June	M	yearling	NMNH	285506
USA	AK AK-8 Pribilof Is.: St. Paul I.	1950	June	M	adult	NMML	316
USA	AK AK-8 Pribilof Is.: St. Paul I.	1950	June	F	adult	NMML	318
USA	AK AK-8 Pribilof Is.: St. Paul I.	1950	June	M	neonate	MVZ	113626
USA	AK AK-8 Pribilof Is.: St. Paul I.	1950	June	M		UWBM	19896
USA	AK AK-8 St. Lawrence I.	1951	June	M		UPS	3203

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA	AK AK-8 Pribilof Is.: St. Paul I.	1952	August		1-2	NMML	319
USA	AK AK-3 Kodiak I.: Uyak Bay: 2 mi NE Uyak	1953	May	F		UMMZ	103351
USA	AK AK-8 St. Lawrence I.	1953	August	M		UBC	4502
USA	AK	1953	June	M	adult	UAM	1531
USA	AK	1953	June	F	neonate	UAM	1532
USA	AK	1953	June	M	yearling	UAM	1528
USA	AK AK-8 Pribilof Is.: St. Paul I.	1954	June	M	neonate	UWBM	51174
USA	AK AK-8 Pribilof Is.: St. Paul I.	1954	June	F	neonate	UWBM	51175
USA	AK AK-3 Cape Barnabas: Sitkalidak I.	1955	June	F	adult	WSU	55-382
USA	AK AK-3 Cape Barnabas: Sitkalidak I.	1955	June	M	adult	WSU	55-383
USA	AK AK-3 Cape Barnabas: Sitkalidak I.	1955	June	M	adult	WSU	55-384
USA	AK AK-3 Cape Barnabas: Sitkalidak I.	1955	June	M	fetus	WSU	55-381
USA	AK AK-3 Cape Barnabas: Sitkalidak I.	1955	June	F	yearling	WSU	55-380
USA	AK AK-8 St. Lawrence I.: Stolbi Rocks	1955	July	F		UPS	4982
USA	AK	1956	February	F	juvenile	UAM	11502
USA	AK	1956	July	M	adult	UAM	4233
USA	AK AK-4 Shumagin Is.: Atkin I.	1957	August	M		UWBM	32571
USA	AK	1957	July	F	neonate	UAM	11508
USA	AK AK-3 Walrus Is.: (55 35 N, 160 18 W)	1958	June	M	1	NMML	365
USA	AK AK-3 Walrus Is.: (55 35 N, 160 18 W)	1958	June	M	15	NMML	364
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	1	NMML	321
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	F	2	NMML	337
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	5	NMML	351
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	7	NMML	354
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	8	NMML	341
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	9	NMML	326
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	9	NMML	345
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	9	NMML	350
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	9	NMML	361
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	F	10	NMML	322
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	10	NMML	325
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	11	NMML	335
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	11	NMML	336
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	11	NMML	346
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	F	11	NMML	348

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	F	11	NMML	356
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	F	12	NMML	333
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	12	NMML	342
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	12	NMML	360
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	F	13	NMML	347
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	F	13	NMML	357
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	F	14	NMML	331
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	F	14	NMML	332
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	15	NMML	349
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	15	NMML	359
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	F	15	NMML	363
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	16	NMML	320
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	F	17	NMML	344
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	F	18	NMML	353
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	19	NMML	352
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	F	20	NMML	334
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	July	M	~1 month	NMML	340
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	June	M	3	NMML	330
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	June	M	3	NMML	358
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	June	F	9	NMML	324
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	June	M	9	NMML	329
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	June	M	10	NMML	338
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	June	F	10	NMML	355
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	June	M	11	NMML	328
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	June	F	12	NMML	323
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	June	F	12	NMML	339
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	June	M	13	NMML	327
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	June	F	16	NMML	343
USA	AK AK-4 Shumagin Is.: Chernabura I.	1958	June	F	18	NMML	362
USA	AK	1958	March			UAM	5011
USA	AK AK-1 Alexander Archipelago: Dall I.	1960		M		DMNS	8655
USA	AK AK-3 Afognak I.: Tonki Cape: 6 mi E	1960	May	F	fetus	NMML	369
USA	AK AK-3 Marmot I. (Gulf of )	1960	May	F	4	NMML	370
USA	AK AK-3 Marmot I.: Marmot Cape: 14 mi E	1960	May	F	1	NMML	368
USA	AK AK-4 Bering Sea: Amak I.	1960	July	F	1	NMML	373

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA	AK AK-4 Bering Sea: Amak I.	1960	July	M	~6 months	NMML	377
USA	AK AK-4 Bering Sea: Amak I.	1960	July	F		NMML	378
USA	AK AK-4 Little Koniugi I. (Gulf of): 2 mi S	1960	June	F	5	NMML	372
USA	AK AK-4 Simeonof I. (Gulf of): 8 mi E (54 54 N, 158 58	1960	June	M	4	NMML	371
USA	AK AK-5 Unimak Pass (54 23 N, 165 23 W)	1960	July	F	3	NMML	375
USA	AK AK-5 Unimak Pass (54 27 N, 165 34 W)	1960	July	M	3	NMML	374
USA	AK AK-8 Pribilof Is.: St. Paul I.	1960	July			LACM	52330
USA	AK AK-8 Pribilof Is.: Walrus I.	1960	July	M	~1 month	NMML	376
USA	AK	1960	September	M	adult	UAM	11507
USA	AK	1961	September	M	first year	UAM	11505
USA	AK AK-5 Unimak Pass (54 15 N, 165 12 W)	1962	June	F	2	NMML	383
USA	AK AK-5 Unimak Pass (54 19 N, 164 35 W)	1962	June	M	2	NMML	381
USA	AK AK-5 Unimak Pass (54 23 N, 165 24 W)	1962	June	F	4	NMML	384
USA	AK AK-5 Unimak Pass (54 25 N, 165 03 W)	1962	June	M	2	NMML	382
USA	AK AK-5 Unimak Pass (54 11 N, 165 02 W)	1962	May	F	5	NMML	380
USA	AK AK-5 Unimak Pass (54 09 N, 164 25 W)	1962	September	M	2	NMML	392
USA	AK AK-5 Unimak Pass (54 14 N, 164 45 W)	1962	September	F	1	NMML	386
USA	AK AK-5 Unimak Pass (54 15 N, 164 47 W)	1962	September	F	2	NMML	387
USA	AK AK-5 Unimak Pass (54 15 N, 164 55 W)	1962	September	M	1	NMML	391
USA	AK AK-5 Unimak Pass (54 17 N, 165 19 W)	1962	September	M	3	NMML	390
USA	AK AK-5 Unimak Pass (54 21 N, 165 15 W)	1962	September	F	2	NMML	385
USA	AK AK-3 Barren Is.: Sugarloaf I.	1964	June			NMML	ADF&G SL 24
USA	AK AK-3 Barren Is.: Sugarloaf I.	1964	June	F		NMML	ADF&G SL 29
USA	AK AK-5 Bering Sea (54 00 N, 166 28 W)	1964	September	F		NMML	389
USA	AK AK-8 Bering Sea: Walrus I.: 54 mi E	1964	August	M		NMML	388
USA	AK AK-8 Pribilof Is.: Walrus I.	1965	June	M	pup	NMML	396
USA	AK AK-8 Pribilof Is.: Walrus I.	1965	June	F	pup	NMML	397
USA	AK AK-8 Pribilof Is.: nr. St. Paul I.	1965	November	M		NMML	394
USA	AK AK-8 Pribilof Is.: nr. St. Paul I.	1965	November	M	~5 months	NMML	393
USA	AK	1965	July	M	1	UAM	11510
USA	AK	1966	May	F	first year	UAM	11509
USA	AK AK-5 Aleutian Is.: Bogoslof I.	1968	May	M	neonate	NMML	398
USA	AK AK-6 Aleutian Is.: Adak I.	1969	July	M		UPS	19187
USA	AK AK-8 Pribilof Is.: St. George I.	1971	June	M		UPS	14041
USA	AK AK-8 Pribilof Is.: St. George I.: Sea Lion Pt.	1971	June	F		UPS	14040



Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA	AK AK-3 Chirikof I. (55.46.5 N, 155.39.5 W)	1976	October	F	20	NMML	1532
USA	AK AK-3 Kodiak I.: Marmot I. (58.14.0 N, 151.47.5 W)	1976	October	F	1	NMML	1537
USA	AK AK-3 Kodiak I.: Marmot I. (58.14.0 N, 151.47.5 W)	1976	October	F	1	NMML	1543
USA	AK AK-3 Kodiak I.: Marmot I. (58.14.0 N, 151.47.5 W)	1976	October	F	4	NMML	1539
USA	AK AK-3 Kodiak I.: Marmot I. (58.14.0 N, 151.47.5 W)	1976	October	F	8	NMML	1538
USA	AK AK-3 Kodiak I.: Marmot I. (58.14.0 N, 151.47.5 W)	1976	October	F	13	NMML	1536
USA	AK AK-3 Kodiak I.: Marmot I. (58.14.0 N, 151.47.5 W)	1976	October	F	15	NMML	1542
USA	AK AK-3 Kodiak I.: Sea Otter I.	1976	October	F	2	NMML	1531
USA	AK AK-3 Kodiak I.: Sea Otter I.	1976	October	F	3	NMML	1541
USA	AK AK-3 Kodiak I.: Sea Otter I.	1976	October	F	11	NMML	1535
USA	AK AK-3 Marmot I. (Gulf of)	1976	October	F	adult	CAS	21756
USA	AK AK-3 Semidi Is.: Chowiet I.	1976	October	F	2	NMML	1530
USA	AK AK-3 Katmai National Monument: Hallo Bay	1976	September	M		UPS	21812
USA	AK AK-3 Katmai National Monument: Hallo Bay	1976	September	M		UPS	21813
USA	AK AK-5 Aleutian Is.: Bogoslof I.	1976	October	F		NMML	1294
USA	AK AK-5 Aleutian Is.: Bogoslof I.	1976	October	M		NMML	1295
USA	AK AK-8 Bering Sea (eastern)	1976	March	F	adult	NMML	ADF&G SUV-1-76
USA	AK AK-8 Bering Sea (eastern)	1976	March	F	juvenile	NMML	ADF&G SUV-2-76
USA	AK AK-8 Bering Sea (eastern)	1976	March	M	juvenile	NMML	ADF&G SUV-4-76
USA	AK AK-8 Bering Sea (eastern)	1976	March	M		NMML	ADF&G SUV-5-76
USA	AK AK-8 Bering Sea (eastern)	1976		F		NMML	ADF&G SUV-25-76
USA	AK AK-2 Cape St. Elias (Gulf of)	1977	April	M		NMML	.DF&G CSE # 3 4-21-7
USA	AK AK-2 Prince William Sd. (Gulf of): Goose Is.	1977	February	F	4	NMML	1544
USA	AK AK-2 Prince William Sd. (Gulf of): Goose Is.	1977	February	F	4	NMML	1545
USA	AK AK-2 Prince William Sd. (Gulf of): Goose Is.	1977	February	F	4	NMML	1547
USA	AK AK-2 Prince William Sd. (Gulf of): Port Fidalgo	1977	February	F	4	NMML	1548
USA	AK AK-2 Prince William Sd. (Gulf of): Port Fidalgo	1977	February	F	4	NMML	1580
USA	AK AK-2 Prince William Sd. (Gulf of): Port Fidalgo	1977	February	F	5	NMML	1546
USA	AK AK-2 Prince William Sd. (Gulf of): Port Fidalgo	1977	February	F	5	NMML	1581
USA	AK AK-2 Prince William Sd. (Gulf of): Port Fidalgo	1977	February	F	12	NMML	1549
USA	AK AK-2 Prince William Sd.: Port Fidalgo	1977	February	F		NMML	1296
USA	AK AK-2 Cape St. Elias (Gulf of): Kayak I.	1977	March	F	7	NMML	1572
USA	AK AK-2 Cape St. Elias (Gulf of): Kayak I.	1977	March	F	8	NMML	1573
USA	AK AK-2 Kenai Peninsula Borough: Atalik Cape	1977	March	F	2	NMML	1582
USA	AK AK-2 Kenai Peninsula Borough: Atalik Cape	1977	March	F	3	NMML	1555

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA	AK AK-2 Kenai Peninsula Borough: Aialik Cape	1977	March	F		NMML	1556
USA	AK AK-2 Prince William Sd. (Gulf of): Pleiades Is.	1977	March	F	8	NMML	1550
USA	AK AK-2 Cape St. Elias (Gulf of): Kayak I.	1977	May	M	2	NMML	1299
USA	AK AK-2 Prince William Sd. (Gulf of)	1977	November	M	5	NMML	1568
USA	AK AK-2 Prince William Sd. (Gulf of): Chenega I.	1977	November	F	14	NMML	1566
USA	AK AK-2 Prince William Sd. (Gulf of): Glacier I.	1977	November	F	8	NMML	1565
USA	AK AK-2 Prince William Sd. (Gulf of): Glacier I.	1977	November	M		NMML	1298
USA	AK AK-2 Prince William Sd. (Gulf of): Goose Is.	1977	November	M	4	NMML	1569
USA	AK AK-2 Prince William Sd. (Gulf of): Pleiades Is.	1977	November	M	5	NMML	1567
USA	AK AK-2 Prince William Sd. (Gulf of): Pt. Eleanor	1977	November	F	2	NMML	1571
USA	AK AK-2 Prince William Sd. (Gulf of): Pt. Eleanor	1977	November	M	3	NMML	1570
USA	AK K-2 or Kenai Peninsula: Resurrection Bay	1977	February	F		NMML	ADF&G FW-1-77
USA	AK K-2 or Kenai Peninsula: Resurrection Bay	1977	February	F		NMML	ADF&G FW-2-77
USA	AK AK-3 Kodiak Archipelago	1977	April	F	4	NMML	1557
USA	AK AK-3 Kodiak I. (Gulf of)	1977	April	F		NMML	1297
USA	AK AK-3 Outer (Pye) I. (Gulf of)	1977	March	M	1	NMML	1552
USA	AK AK-3 Outer (Pye) I. (Gulf of)	1977	March	F	16	NMML	1554
USA	AK AK-3 Outer (Pye) I. (Gulf of)	1977	March	M	18	NMML	1553
USA	AK AK-3 Outer (Pye) I. (Gulf of)	1977	March	F	21	NMML	1551
USA	AK AK-3 Barren Is.: Sugarloaf I.	1977	May	M	2	NMML	1588
USA	AK AK-3 Barren Is.: Sugarloaf I.	1977	May	M	11	NMML	1559
USA	AK AK-3 Kodiak Archipelago	1977	May	F	9	NMML	1560
USA	AK AK-3 Kodiak Archipelago: Kodiak I.: Barnabus	1977	May	F	3	NMML	1584
USA	AK AK-3 Kodiak Archipelago: Kodiak I.: Barnabus	1977	May	F	11	NMML	1583
USA	AK AK-3 Kodiak Archipelago: Kodiak I.: Cape Chiniak	1977	May	F	2	NMML	1591
USA	AK AK-3 Kodiak Archipelago: Kodiak I.: Cape Chiniak	1977	May	F	5	NMML	1590
USA	AK AK-3 Kodiak Archipelago: Kodiak I.: Cape Chiniak	1977	May	F	6	NMML	1589
USA	AK AK-3 Kodiak I.: Latax Rocks	1977	May	F	10	NMML	1561
USA	AK AK-3 Kodiak I.: Marmot I.	1977	May	F	4	NMML	1564
USA	AK AK-3 Kodiak I.: Marmot I.	1977	May	F	6	NMML	1563
USA	AK AK-3 Kodiak I.: Marmot I.	1977	May	F	13	NMML	1562
USA	AK AK-3 Kodiak I.: Sea Otter I.	1977	May	M	3	NMML	1558
USA	AK AK-3 Kodiak I.: Sea Otter I.	1977	May	M	3	NMML	1587
USA	AK AK-3 Kodiak I.: Sea Otter I.	1977	May	F	7	NMML	1585
USA	AK AK-3 Kodiak I.: Sea Otter I.	1977	May	F	10	NMML	1586



Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA	AK AK-3 Marmot I. (Gulf of )	1977	May	F	adult	CAS	21755
USA	AK	1977				NMML	1592
USA	AK	1977				NMML	ADF&G SL-11-75?
USA	AK	1977				NMML	ADF&G SL-135-75(77?)
USA	AK	1978				NMML	ADF&G CSE-171-78
USA	AK AK-2 Cape St. Elias (Gulf of)	1978				NMML	1575
USA	AK AK-3 Alaska Peninsula: Wide Bay-Cape Douglas	1978	April	M	3	NMML	1574
USA	AK AK-3 Alaska Peninsula: Wide Bay-Cape Douglas	1978	April	F	7	NMML	1577
USA	AK AK-3 Kodiak Archipelago: Two-headed Is.	1978	August	M	4	NMML	ADF&G
USA	AK AK-3 Barren Is.: Sugarloaf I.	1978		F		NMML	ADF&G
USA	AK AK-3 Barren Is.: Sugarloaf I.	1978		M		NMML	ADF&G
USA	AK 3, -4, c Alaska Peninsula: Wide Bay-Unimak Pass	1978	June	F	7	NMML	1576
USA	AK	1978	April	F	6.8	JAM	18552
USA	AK AK-3 Kodiak Archipelago: Marmot I.	1982	March	F		NMML	ADF&G SL-2-82
USA	AK AK-3 Kodiak Archipelago: Marmot I.	1982	March	F		NMML	ADF&G SL-3-82
USA	AK AK-3 Kodiak Archipelago: Marmot I.	1982	March	F		NMML	ADF&G SL-5-82
USA	AK AK-3 Kodiak Peninsula: Marmot I.	1982	March	F		NMML	ADF&G SL-9-82
USA	AK AK-3 Marmot I.	1982	March	M		NMML	ADF&G SL-1-82
USA	AK AK-3 Marmot I.	1982	March	F		NMML	ADF&G SL-6-82
USA	AK AK-3 Marmot I.	1982	March	M		NMML	ADF&G SL-7-82
USA	AK AK-3 Marmot I.	1982	March	M		NMML	ADF&G SL-8-82
USA	AK AK-5 Aleutian Is.: Krenitzin Is.: Akutan I.	1982	October	F	pup	NMML	1302
USA	AK AK-5 Aleutian Is.: Krenitzin Is.: Akutan I.	1982	October	F		NMML	1300
USA	AK AK-5 Aleutian Is.: Krenitzin Is.: Akutan I.	1982	October	M		NMML	1301
USA	AK AK-3 Shelikof Strait (Gulf of)	1983	March	M	3	NMML	1306
USA	AK AK-8 Pribilof Is.: St. Paul I.: Northeast Pt.	1983	May	M		NMML	1303
USA	AK AK-8 Pribilof Is.: St. Paul I.: Pobvania (sp?) Sands	1983	May	M		NMML	1304
USA	AK AK-8 Pribilof Is.: St. Paul I.: Zapadni Bay	1983	May	M		NMML	1305
USA	AK AK-3 Shelikof Strait (Gulf of)	1984	February	M		NMML	1307
USA	AK AK-3 Shelikof Strait (Gulf of)	1984	February	F		NMML	1309
USA	AK AK-3 Shelikof Strait (Gulf of)	1984	March	F		NMML	1308
USA	AK AK-3 Shelikof Strait (Gulf of)	1984	March	F		NMML	1310
USA	AK AK-3 Shelikof Strait (Gulf of)	1984	March	F		NMML	1311
USA	AK AK-3 Shelikof Strait (Gulf of)	1984	March	F		NMML	1312
USA	AK AK-3 Shelikof Strait (Gulf of)	1984	March	F		NMML	1313
USA	AK AK-3 Shelikof Strait (Gulf of)	1984	March	F		NMML	1314

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA	AK AK-3 Shelikof Strait (Gulf of)	1984	March	M		NMML	1315
USA	AK AK-3 Shelikof Strait (Gulf of)	1984	March	F		NMML	1316
USA	AK AK-3 Shelikof Strait (Gulf of)	1984	March	F		NMML	1317
USA	AK AK-3 Shelikof Strait (Gulf of)	1984	March	F		NMML	1318
USA	AK AK-3 Shelikof Strait (Gulf of)	1984	March	F		NMML	1319
USA	AK AK-3 Shelikof Strait (Gulf of)	1984	March	F		NMML	1320
USA	AK AK-3 Shelikof Strait (Gulf of)	1984	March	M		NMML	1321
USA	AK AK-3 Shelikof Strait (Gulf of)	1984	March	F		NMML	1322
USA	AK AK-3 Kodiak Archipelago: Izhut Bay	1985	October	F	7	NMML	1631
USA	AK AK-3 Kodiak I.: Marmot I.	1985	October	F	6	NMML	1630
USA	AK AK-3 Kodiak I.: Sea Otter I.	1985	October	F	4	NMML	1632
USA	AK AK-3 Kodiak I.: Sea Otter I.	1985	October	F	10	NMML	1633
USA	AK AK-7 Aleutian Is.: Attu I.	1985	August	F		UWBM	34119
USA	AK AK-8 Bering Sea (59 22.3 N, 172 50.9 W)	1985	March	M	2	NMML	1639
USA	AK AK-8 Bering Sea (59 22.3 N, 172 50.9 W)	1985	March	M	4	NMML	1637
USA	AK AK-8 Bering Sea (59 22.3 N, 172 50.9 W)	1985	March	M	4	NMML	1638
USA	AK AK-8 Bering Sea (59 22.3 N, 172 50.9 W)	1985	March	M	10	NMML	1636
USA	AK AK-8 Bering Sea (59 22.3 N, 172 50.9 W)	1985	March	M	11	NMML	1635
USA	AK AK-1 Alexander Archipelago: Timbered I.	1986	May	M	12	NMML	1634
USA	AK AK-2 Cape Saint Elias: SW end of Kayak I.	1987	March	F	adult	UWBM	
USA	AK AK-2 Cape Saint Elias: SW end of Kayak I.	1987	March	F	adult	UWBM	
USA	AK AK-2 Cape Saint Elias: SW end of Kayak I.	1987	March	F	fetus	UWBM	
USA	AK AK-6 Aleutian Is.: Andreanof Is.	1987	May	F	adult	UAM	64001
USA	AK AK-8 Pribilof Is.: St. Paul I.	1988				SBM	4038
USA	AK K-2 or Kenai Peninsula: Blying Sd.-Gore Pt.	1989	July	F		UWBM	39481
USA	AK K-2 or Kenai Peninsula: Blying Sd.-Gore Pt.	1989	spring-summer	M	adult	UWBM	39483
USA	AK K-2 or Kenai Peninsula: Blying Sd.-Gore Pt.	1989	spring-summer	F		UWBM	39482
USA	AK	1989	June		juvenile	UAM	24092
USA	AK	1993	June	M	adult	UAM	31946
USA	AK	1993	June	M	adult	UAM	31947
USA	AK	1993	May	M	adult	UAM	23417
USA	AK	1993	May	M	adult	UAM	31951
USA	AK	1993	May	M		UAM	33980
USA	AK	1994	May	F	adult	UAM	31916
USA	AK	1994	May	M	juvenile	UAM	32730

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA AK		1994	May	M		UAM	32731
USA AK		1994	May	M	juvenile	UAM	30175
USA AK		1994	May	M		UAM	30176
USA AK		1994	May	F		UAM	30177
USA AK		1994	May	M		UAM	30178
USA AK		1994	May	M		UAM	30179
USA AK		1994	May	M		UAM	30180
USA AK		1994	May	M		UAM	30181
USA AK		1994	May	M		UAM	32732
USA AK		1994	May	M		UAM	32733
USA AK		1994	October	M		UAM	24982
USA AK		1994	October	F		UAM	31948
USA AK		1994	October	M		UAM	31949
USA AK		1994	October	M		UAM	31952
USA AK		1994	October	M		UAM	31965
USA AK		1994	October	M		UAM	33979
USA AK		1994	October	M		UAM	33981
USA AK		1994	winter			UAM	35426
USA AK	AK-2 Prince William Sd.	1995		F		UAM	31904
USA AK		1995	April	M		UAM	31953
USA AK		1995	April	M		UAM	31954
USA AK		1995	August	F		UAM	43375
USA AK		1995	February	M		UAM	30426
USA AK		1995	March	M		UAM	31950
USA AK		1995	May	M		UAM	31955
USA AK		1995	May	M		UAM	31956
USA AK		1995	May	M		UAM	31957
USA AK		1995	May	M		UAM	31958
USA AK		1995	May	M		UAM	31959
USA AK		1995	May			UAM	31960
USA AK		1995	May			UAM	31961
USA AK		1995	May	M		UAM	31962
USA AK		1995	May			UAM	31963
USA AK		1995	November	M		UAM	43371
USA AK		1995	September			UAM	44534

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA	AK	1996	April	M		UAM	43365
USA	AK	1996	April	F		UAM	43368
USA	AK	1996	February	M		UAM	43367
USA	AK	1996	February	M		UAM	43369
USA	AK	1996	January	F		UAM	43381
USA	AK	1996	January	M		UAM	44533
USA	AK	1996	June	F		UAM	41596
USA	AK	1996	June	F		UAM	41597
USA	AK	1996	June	M		UAM	41598
USA	AK	1996	June	F		UAM	41599
USA	AK	1996	March	M		UAM	43372
USA	AK	1996	March	F		UAM	43373
USA	AK	1996	March	M		UAM	43374
USA	AK	1996	May	M		UAM	43370
USA	AK	1996		M		UAM	43366
USA	AK	1996				UAM	47295
USA	AK	1997	April	M		UAM	51656
USA	AK	1997				UAM	51657
USA	AK	1997				UAM	52246
USA	AK	1997	February	M		UAM	44535
USA	AK	1997	April	F		UAM	47293
USA	AK	1997	April	F		UAM	47298
USA	AK	1997	April	M		UAM	47302
USA	AK	1997	January	M		UAM	47294
USA	AK	1997	March	M	2	UAM	47296
USA	AK	1997	March	M	2	UAM	47296
USA	AK	1997	May	F		UAM	47290
USA	AK	1997	May	M		UAM	47291
USA	AK	1997	May	M		UAM	47292
USA	AK	1997	May	M		UAM	47297
USA	AK	1997	May	M		UAM	47305
USA	AK	1997	May	M		UAM	47306
USA	AK	1998	February	M		UAM	79781
USA	AK	1998	February	F		UAM	79783
USA	AK	1998	January	F		UAM	79788

AK-5 Aleutian Is.: Fox Is.  
 AK-5 Aleutian Is. Fox Is.  
 AK-5 Aleutian Is. Fox Is.  
 AK-6 Aleutian Is.: Andreanof Is.

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA AK		1998	January	M		UAM	79789
USA AK		1998	May	M		UAM	56101
USA AK		1998	May	M		UAM	56102
USA AK		1998	May	M		UAM	56103
USA AK		1998	May	M		UAM	56104
USA AK		1998	May	M		UAM	56105
USA AK		1998	May	M		UAM	56106
USA AK		1998	May	M		UAM	79777
USA AK		1998	May	M		UAM	79780
USA AK		1998	May	M		UAM	79786
USA AK		1998	May	M		UAM	79787
USA AK		1998	October			UAM	72009
USA AK		1999	April	M		UAM	70597
USA AK		1999	April			UAM	72007
USA AK		1999	March	M		UAM	79778
USA AK		1999	May	M		UAM	56073
USA AK		1999	May			UAM	70789
USA AK		1999	May			UAM	70790
USA AK		1999	May	M		UAM	83391
USA AK		1999	October		juvenile	UAM	62412
USA AK		1999	October		juvenile	UAM	62414
USA AK		1999	October	M	yearling	UAM	62411
USA AK		1999	October	F	yearling	UAM	62413
USA AK		1999				UAM	72008
USA AK		1999				UAM	72011
USA AK		1999				UAM	72012
USA AK		1999				UAM	83389
USA AK		2000	March			UAM	62410
USA AK		2000	October			UAM	66469
USA AK		2000	October			UAM	66470
USA AK		2001	August			UAM	63042
USA AK	AK-2 Prince William Sd.	2001	April	F		UAM	66471
USA AK		2001	April			UAM	83508
USA AK		2001	February	M		UAM	62888
USA AK		2001	February	M		UAM	62889

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA	AK	2001	February	F		UAM	62890
USA	AK	2001	February	M		UAM	62891
USA	AK	2001	February	F		UAM	62892
USA	AK	2001	February	F		UAM	62893
USA	AK	2001	February	M		UAM	62894
USA	AK	2001	February	M		UAM	62895
USA	AK	2001	February	M		UAM	62896
USA	AK	2001	February	M		UAM	62897
USA	AK	2001	March			UAM	66472
USA	AK			M		NMNH	246499
USA	AK		April			MVZ	4770
USA	AK			M	adult	UAM	11506
USA	AK			F		UAM	11503
USA	AK			M	first year	UAM	7236
USA	AK					NMNH	140754
USA	AK		June	F		NMML	none
USA	AK		June	M		NMML	
USA	AK			M		NMNH	A38214
USA	AK					MCZ	44260
USA	AK			F	adult	UAM	64105
USA	AK		September	M		NMNH	A37913
USA	AK					MCZ	10685
USA	AK			M		NMNH	12488
USA	AK					MCZ	24011
USA	AK					MCZ	37615
USA	AK					NMNH	239367
USA	AK					NMNH	484525
USA	AK			F	old adult	NMNH	A49438
USA	AK					UMMZ	156577
USA	AK			M		NMNH	A08162
USA	AK					NMNH	A08163
USA	AK			M		NMNH	A49730
USA	AK				fetus	MCZ	56935
USA	AK				fetus	MCZ	56936
USA	AK				fetus	MCZ	56937

	Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA	AK	AK-8 Pribilof Is.: St. Paul I.					MCZ	129
USA	AK	AK-8 Pribilof Is.: St. Paul I.					MCZ	1737
USA	AK	AK-8 Pribilof Is.: St. Paul I.					MCZ	56776
USA	AK	AK-8 Pribilof Is.: St. Paul I.					MCZ	56920
USA	AK	AK-8 Pribilof Is.: St. Paul I.					MCZ	56934
USA	AK	AK-8 Pribilof Is.: St. Paul I.					NMNH	A07140
USA	AK	AK-8 Pribilof Is.: St. Paul I.					NMNH	A07141
USA	AK	AK-8 Pribilof Is.: St. Paul I.			M		NMNH	A12053
USA	AK	AK-8 Pribilof Is.: St. Paul I.			M		NMNH	A49448
USA	AK	AK-8 Pribilof Is.: St. Paul I.					NMNH	A49450
USA	AK	AK-8 Pribilof Is.: St. Paul I.					NMNH	A49451
USA	AK	AK-8 Pribilof Is.: St. Paul I.					NMNH	A49452
USA	AK	AK-8 Pribilof Is.: St. Paul I.					NMNH	A49453
USA	AK			March	M		NMML	ADF&G
USA	AK	Aleutian Is.		winter			NMNH	A15861
USA	AK	Aleutian Is.			M		NMNH	A15359
USA	AK				M	adult	UAM	4508
USA	AK				M	adult	UAM	5216
USA	AK				M	adult	UAM	5217
USA	AK					juvenile	NMNH	86064
USA	AK						UAM	67097
USA	AK						UAM	73074
USA	AK				M		BELL	
USA	CA		1843				ZIN	870
USA	CA	San Francisco Co.: San Francisco Bay	1854	July	M		NMNH	A04702
USA	CA	San Francisco Co.: San Francisco	1854				NMNH	A04703
USA	CA	San Francisco Co.: Farallon Is.	1856	July	M	adult	NMNH	A04701
USA	CA	Monterey Co.:Monterey	1859	July	M		NMNH	A03631
USA	CA	Monterey Co.:Monterey	1859		M		NHM	1859.11.5.1
USA	CA	San Francisco Co.: Farallon Is.	1870			young	YPM	1029
USA	CA	San Francisco Co.: Farallon Is.	1870		F		YPM	1030
USA	CA	San Francisco Co.: Farallon Is.	1870		M		YPM	1031
USA	CA	San Francisco Co.: Farallon Is.	1875			juvenile	NMNH	A15660
USA	CA		1877				NHM	1877.12.10.1
USA	CA	Humboldt Co.: Cape Mendocino	1883	December			NMNH	14005

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.		
USA	CA	CA	Humboldt Co.: Cape Mendocino	1883	December			NMNH	14006
USA	CA	CA	Mendocino Co.: Cape Mendocino	1883	December			NMNH	A21076
USA	CA	CA		1884	August	adult		NMNH	14613
USA	CA	CA		1884	August			NMNH	14617
USA	CA	CA	San Francisco Co.: San Francisco	1884	May			CAS	9370
USA	CA	CA	San Francisco Co.: Farallon Is.	1884	September			NMNH	A21523
USA	CA	CA	San Francisco Co.: Farallon Is.	1884	September			NMNH	A21537
USA	CA	CA	Monterey Co.:Monterey	1892	January	juvenile		NMNH	19981
USA	CA	CA	Monterey Co.:Monterey	1892	January	juvenile		NMNH	19982
USA	CA	CA	Monterey Co.:Monterey	1892	January	juvenile		NMNH	19983
USA	CA	CA	Monterey Co.:Monterey	1892	January			NMNH	19979
USA	CA	CA	Monterey Co.:Monterey	1892	January			NMNH	19980
USA	CA	CA		1893				ANSP	3260
USA	CA	CA		1893				ANSP	3261
USA	CA	CA	Monterey Co.: Pacific Grove	1897				KU	2874
USA	CA	CA	Monterey Co.: Monterey Bay: nr. Pt. Pinos	1899	June			KU	2762
USA	CA	CA	Monterey Co.: Monterey Bay: nr. Pt. Pinos	1899	June			KU	2763
USA	CA	CA	Monterey Co.: Monterey Bay: nr. Pt. Pinos	1899	June			KU	2761
USA	CA	CA	Monterey Co.: Monterey Bay	1899	summer			KU	2732
USA	CA	CA	Monterey Co.: Monterey Bay	1899				KU	2886
USA	CA	CA	Monterey Co.: Monterey Bay	1899				KU	121594
USA	CA	CA	Monterey Co.: Monterey Bay	1899				KU	121595
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1901	August	pup		CAS	20700
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1901				CAS	20699
USA	CA	CA		1903	August			KU	2757
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1903				NHM	1903.10.11.7
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1903				NHM	1903.10.11.8
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1906	July			CMNH	1484
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1906	July			CMNH	1485
USA	CA	CA	San Mateo Co.: Ano Nuevo Island	1906	July			AMNH	27408
USA	CA	CA	Monterey Co.	1906	September			AMNH	27407
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1907	July	adult		MVZ	4112
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1907	July	adult		MVZ	4117
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1907	July	pup		MVZ	4121
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1907	July			MVZ	4120



Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.	
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1907	July	M	MVZ	4964
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1907	July	F	MVZ	4967
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1907	June	F	MVZ	4113
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1907	June	M	MVZ	8821
USA	CA	CA	Santa Barbara Co.: Pt. Conception	1908	February	M	NMNH	151534
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1908	June	M	MVZ	4116
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1908	June	M	CAS	3
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1908	June	M	MVZ	4115
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1908	June	M	MVZ	5871
USA	CA	CA	Monterey Co.: Carmel Pt.	1908	September	F	MVZ	4114
USA	CA	CA	San Francisco Co.: San Francisco Bay	1908		M	MVZ	4892
USA	CA	CA	San Francisco Co.: San Francisco Bay	1908		M	MVZ	4893
USA	CA	CA	San Francisco Co.: San Francisco Bay	1908		F	MVZ	4897
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1908		F	NHM	1908.3.11.4
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1909	July	F	CAS	9
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1909	July	M	CAS	16
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1909	July	F	CAS	15
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1909	July	M	CAS	17
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1909	July	M	CAS	18
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1909	July	M	CAS	19
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1909	July	F	CAS	10
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1909	July	F	CAS	11
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1909	July	F	CAS	12
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1909	July	F	CAS	13
USA	CA	CA	Monterey Co.: Pt. Pinos	1909	June	F	NMNH	159964
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1909	June	M	CAS	6
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1909	June	M	CAS	7
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1909	June	M	CAS	8
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1909	June	M	CAS	4
USA	CA	CA	Santa Barbara Co.: Santa Cruz I.	1911	June	M	CAS	431
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1915	June	M	CAS	1118
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1915	June	M	CAS	1119
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1915	June	F	CAS	1120
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1915	June	M	AM	1134
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1915	June	F	CAS	1332

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.		
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1915	June	M	juvenile	CAS	1122
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1915	June	M	pup	CAS	1121
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1915	June	F		LACM	52311
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1915	June	M		LACM	52312
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1915	June	F		LACM	52313
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1921	July	M		LACM	616
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1921	July	M		LACM	620
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1921	June	M		CAS	3764
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1924	June		immature	DMNS	2772
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1924	June		immature	DMNS	2773
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1924	June	F	juvenile	CAS	4940
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1924	June	M		DMNS	2744
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1924	June	M		DMNS	2769
USA	CA	CA	Santa Barbara Co.: San Miguel I.	1928	July	M	adult	UCLA	15312
USA	CA	CA	Santa Barbara Co.: San Miguel I.	1928	June	F	adult	UCLA	14394
USA	CA	CA	Santa Barbara Co.: San Miguel I.	1928	June	M	immature	UCLA	14393
USA	CA	CA	Marin Co.: Bolivar Bay	1929	February	F		KU	48100
USA	CA	CA	Santa Cruz Co.: mouth of Waddell Creek	1933	July			CAS	7659
USA	CA	CA	Marin Co.: Dillon Beach	1935	July			MVZ	69602
USA	CA	CA		1936	May		neonate	MNHU	48434
USA	CA	CA	San Mateo Co.: Moss Beach	1938	August			LACM	21443
USA	CA	CA	Alameda Co.: Berkeley Yacht Harbor	1940	June	M		MVZ	91069
USA	CA	CA	Marin Co.: nr. Pt. Reyes Lighthouse	1941	August	M		MVZ	96388
USA	CA	CA	Alameda Co.: Albany: nr. El Cerrito Hill	1944	September	M		MVZ	101430
USA	CA	CA	Monterey Co.: Hopkins Marine Station	1946	June	F		KU	18440
USA	CA	CA		1946		M	adult	UWBM	51177
USA	CA	CA		1946		M		UWBM	51178
USA	CA	CA	Santa Barbara Co.: Santa Barbara	1949				SBM	253
USA	CA	CA	Santa Barbara Co.: Santa Barbara	1950				SBM	254
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1950		M		NHM	1950.7.21.3
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1950		M		NHM	1950.7.21.4
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1950		F		NHM	1950.7.21.5
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1950		F		NHM	1950.7.21.6
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1950				NHM	1950.7.21.7
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1950				NHM	1950.7.21.8

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.	
USA	CA	CA	San Luis Obispo Co.: Morrow Strand Park	1952	February			51183
USA	CA	CA	Monterey Co.: Elkhorn Slough	1952	July	LACM	118620	
USA	CA	CA	Santa Barbara Co.: Hollister Ranch	1954		MVZ	252	
USA	CA	CA	Marin Co.: nr. Pt. Reyes Lighthouse	1955	April	SBM	119669	
USA	CA	CA	San Francisco: Ocean Beach: N end	1956		MVZ	56	
USA	CA	CA	Marin Co.: nr. Pt. Reyes Lighthouse	1958	April	BAND	122524	
USA	CA	CA	San Mateo Co.: Pigeon Pt.: 18 mi WSW	1958	March	MVZ	366	
USA	CA	CA	Santa Cruz Co.: 37 09 N, 122 47 W	1958	March	NMML	367	
USA	CA	CA	Santa Cruz Co.: Waddell Beach	1959	June	NMML	13497	
USA	CA	CA	Ventura Co.: San Nicolas I.	1960	April	CAS	51232	
USA	CA	CA	Ventura Co.: San Nicolas I.	1960	April	LACM	51398	
USA	CA	CA	Humboldt Co.: Clam Beach	1960	June	LACM	1762	
USA	CA	CA	Humboldt Co.: Clam Beach	1960	June	HSU		
USA	CA	CA	Humboldt Co.: Clam Beach	1960	June	CSLB		
USA	CA	CA	Santa Cruz Co.: Waddell Beach	1961	April	BAND	71	
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt.	1961	July	BAND	75	
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1962	July	CAS	12864	
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1962	July	BAND	267	
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1962	July	BAND	261	
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1962	June	BAND	13496	
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt.	1962	June	CAS	235	
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1962	May	BAND	234	
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1962	May	BAND	12873	
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1963	August	CAS	12872	
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1963	August	CAS		
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1963	July	SOU		
USA	CA	CA	Monterey Co.: Monterey Bay	1963	July	CAS	12870	
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1963	July	CAS	12866	
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1963	June	CAS	12875	
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1963	October	CAS	12874	
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1963	October	CAS	408	
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1963	summer	BAND	2729	
USA	CA	CA	Santa Cruz Co.: Waddell Beach	1963		HSU	372	
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1963		BAND	579	
USA	CA	CA	San Mateo Co.	1963		BAND	577	
USA	CA	CA	Marin Co.: Wildcat Beach: S end	1964	July	BAND	13134	
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt.	1964	June	BAND	12888	
USA	CA	CA	San Mateo Co.: Bean Hollow Beach	1964	June	BAND		
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1964	March	CAS		
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1964	March	CAS		

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.	
USA	CA	CA	San Francisco Co.: Farallon Is.	1965	June			
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt.	1965	November	immature	CAS	24359
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1965	October	adult	BAND	746
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1965	October		BAND	723
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1965	October		BAND	724
USA	CA	CA	San Mateo Co.: Pacifica: Sharp Park	1966	February		CAS	13818
USA	CA	CA	San Mateo Co.: Pacifica: Salada Beach	1966	July		CAS	13819
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt.: 1/2mile N	1967	July		BAND	1028
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1967	June		WSU	67-40
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1967	November	immature	DMNS	8656
USA	CA	CA	Marin Co.: Wildcat Beach: S end	1967			BAND	1144
USA	CA	CA	Humboldt Co.: McNutt Gulch: 1 mi S	1968	April		HSU	774
USA	CA	CA	San Mateo Co.: Gazos Creek	1968	August		BAND	1314
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1968	July		BAND	1291
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1968	July	pup	BAND	1290
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1968	July		BAND	1292
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1968	July		UAMZ	5465
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1968	July		LACM	39650
USA	CA	CA	San Mateo Co.: Thornton Beach State Park	1968	July		HSU	1761
USA	CA	CA	Monterey Co.: Moss Landing	1968	June		BAND	1270
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt.	1968	June		HSU	1767
USA	CA	CA	Humboldt Co.: Cape Mendocino: 1/4 mi S	1968	May		HSU	13885
USA	CA	CA	San Mateo Co.	1968	October	5 months	UF	13885
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1968	October	adult	BAND	1321
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt.	1968	October		BAND	1347
USA	CA	CA	San Mateo Co.: just N of Gazos Creek	1968	September	adult	BAND	1313
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1968		juvenile	DMNS	8243
USA	CA	CA	Sonoma Co.: Fort Ross	1968			LACM	39649
USA	CA	CA	Sonoma Co.: Fort Ross	1968			LACM	39650
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1968			NHM	1968.8.9.1
USA	CA	CA	San Mateo Co.	1969	April	fetus	UF	13886
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1969	December		BAND	1603
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt.	1969	December		BAND	1604
USA	CA	CA	Humboldt Co.: Big Lagoon: 1 mi S	1969	February		HSU	1754
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt.	1969	July	~1	BAND	1427
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt.	1969	July	~1	BAND	1428
USA	CA	CA	Humboldt Co.: Big Lagoon: 1 mi S	1969	October		HSU	1185

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.		
USA	CA	CA	Marin Co.: Bolinas: Agate Beach: 2 mi N	1969	September	M	immature	CAS	16245
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1969				DMNS	8242
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt.	1970	January	M		BAND	1605
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1970	June	F		BAND	1732
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1970	June	M		DMNS	8657
USA	CA	CA	Solano Co.: Clam Beach Co.	1970	May	M		HSU	1334
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt.: 1.5 mi N	1970	November	F		BAND	1777
USA	CA	CA	Humboldt Co.: Mattole R.: 3 mi S mouth	1970	October			HSU	1252
USA	CA	CA	San Mateo Co.: Daly City: Thornton Beach	1970	September	M	juvenile	CAS	15653
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1970		M	6	CAS	15980
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt.	1971	November	M		BAND	1908
USA	CA	CA	San Mateo Co.: Pacific Beach	1971	October	F		BAND	1907
USA	CA	CA	Santa Barbara Co.: San Miguel I.	1972	August	F		NMML	1292
USA	CA	CA	Marin Co.: Bolinas: Agate Beach: 1 mi N	1972	July	M		CAS	21396
USA	CA	CA	Marin Co.: Bolinas: Agate Beach	1972	September	F		CAS	21397
USA	CA	CA	Marin Co.: Pt. Reyes National Seashore	1973	August	F		CAS	21394
USA	CA	CA	San Mateo Co.: Moss Beach	1973	August	F		CAS	21398
USA	CA	CA	Sonoma Co.: Cormet Beach	1973	August	F		CAS	21393
USA	CA	CA	Humboldt Co.: mouth of Mad R.	1973	July	M		CAS	21390
USA	CA	CA	Marin Co.: Bolinas: Duxbury Reef	1973	June	F		CAS	21395
USA	CA	CA	Humboldt Co.: Mattole Rock Beach	1973	September	F	pup	CAS	21391
USA	CA	CA	Santa Cruz Co.: Waddell Beach: 1/2 mi S	1974	August	F		BAND	2254
USA	CA	CA	San Diego Co.: La Jolla	1974	January	F		NMNH	500840
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1974	June	F		BAND	2227
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt.: 1 mi N	1974	June	F	~4	BAND	2228
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1974	March	M		BAND	2385
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1974	November	F		BAND	2265
USA	CA	CA	Humboldt Co.: Mad R.: 4 mi. S mouth	1975	April	M		HSU	2127
USA	CA	CA	Del Norte Co.: Pt. st. George	1975	May	M		HSU	1825
USA	CA	CA	San Mateo Co.: S Pescadero Beach	1975	September	F	~1	BAND	2351
USA	CA	CA	Del Norte Co.: Pebble Beach: N end	1976	June	F		BAND	2401
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1976	June	M		BAND	2386
USA	CA	CA	Del Norte Co.: Pequa Beach	1976	May	F		BAND	2407
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt. area	1977	August	F		BAND	2558
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1977	December	F		BAND	2600

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.		
USA	CA	CA	San Mateo Co.: Thornton Beach State Park	1977	February	F	pup	BAND	2507
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1977	July	F		BAND	2535
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt. area	1977	July	F	~1	BAND	2548
USA	CA	CA	San Mateo Co.: nr. Fort Funston Beach	1977	July	F		BAND	2537
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt. area	1977	November	M		BAND	2577
USA	CA	CA	San Mateo Co.: Franklin Pt.: 1/2 mi S	1977	October	F		BAND	2575
USA	CA	CA	Del Norte Co.: Klamath R.: mouth	1978	April	F		HSU	2741
USA	CA	CA	Santa Cruz Co.: Waddell Beach	1978	August	F	~1	BAND	2648
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt. area	1978	July	F	~3	BAND	2641
USA	CA	CA	San Mateo Co.: Pescadero Beach	1978	June	F	10	BAND	2622
USA	CA	CA	Humboldt Co.: Gold Bluff Beach	1978	May	M		HSU	2743
USA	CA	CA	San Mateo Co.: Pacifica	1978	November	F		CAS	21144
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1979	August	F	pup	BAND	2730
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1979	December	F		BAND	2757
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt.: 1 mi N	1979	January	F		BAND	2698
USA	CA	CA	Humboldt Co.: Cape Mendocino	1979	July	F	pup	BAND	2723
USA	CA	CA	Humboldt Co.: Cape Mendocino	1979	July	M	young	BAND	2724
USA	CA	CA	Humboldt Co.: Cape Mendocino	1979	July	F		BAND	2725
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1979	July	F	young	BAND	2755
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1979	July			BAND	2756
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt. area	1979	July	F		BAND	2731
USA	CA	CA	Humboldt Co.: Clam Beach	1979	June	M		BAND	2721
USA	CA	CA	Santa Cruz Co.: Greyhound Rock area	1979	June	F		BAND	2708
USA	CA	CA	Humboldt Co.: nr. Patricks Pt. State Park	1979	March	F		HSU	3225
USA	CA	CA	Del Norte Co.: Pelican Beach	1979	May	F		BAND	2722
USA	CA	CA	Humboldt Co.: Shelter Cove Beach	1979	May	F	yearling	BAND	2726
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1979	November	F	young	BAND	2752
USA	CA	CA	San Mateo Co.: Ano Nuevo I.	1979	October	M		BAND	2753
USA	CA	CA	San Mateo Co.: Franklin Pt. area	1980	August	M	young	BAND	2868
USA	CA	CA	Humboldt Co.: ~1 mi S McNutt Gulch	1980	July	M		BAND	2854
USA	CA	CA	Humboldt Co.: Cape Mendocino	1980	July	F		BAND	2850
USA	CA	CA	San Mateo Co.: 100 yds N of Franklin Pt.	1980	July-August	F		BAND	2855
USA	CA	CA	Del Norte Co.: Gilbert Creek area	1980	June	F		BAND	2852
USA	CA	CA	Del Norte Co.: Pelican Beach	1980	June-July	M		BAND	2853
USA	CA	CA	Humboldt Co.: Cape Mendocino	1980	mid August	F	pup	BAND	2851

	Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA	CA	CA	1980	October-November	F		BAND	2898
USA	CA	San Mateo Co.: Ano Nuevo I.	1981	July	M		HSU	4103
USA	CA	Humboldt Co.: Clam Beach	1981	July-August	F		BAND	2931
USA	CA	San Mateo Co.: Tunitas Creek Beach	1981	June		juvenile	CAS	22285
USA	CA	Santa Cruz Co.: Bonnie Doon Beach	1981	November	F		HSU	4044
USA	CA	Humboldt Co.: Moonstone Beach	1981	October	F		BAND	2960
USA	CA	San Mateo Co.: Ano Nuevo I.	1982	September	F		BAND	3042
USA	CA	San Mateo Co.: Half Moon Bay	1983	August	F		BAND	3129
USA	CA	San Mateo Co.: Pompenio State Beach	1983	July	M		BAND	3116
USA	CA	Marin Co.: Pt. Reyes National Seashore	1983	June	M	pup	BAND	3115
USA	CA	San Mateo Co.: Ano Nuevo I.	1983	March	F		CAS	22199
USA	CA	Humboldt Co.: nr. Trinidad Head	1983	July		neonate	CAS	22573
USA	CA	San Mateo Co.: Ano Nuevo I.	1984	September	F		HSU	4236
USA	CA	Humboldt Co.: Trinidad Beach	1984	August	F		BAND	3281
USA	CA	San Mateo Co.: nr. Thornton State Beach	1985	July	F		BAND	3265
USA	CA	San Mateo Co.: Ano Nuevo Pt.	1985	July	M		BAND	3337
USA	CA	Marin Co.: Pt. Reyes National Seashore	1986	September	F		BAND	3368
USA	CA	San Mateo Co.: Ano Nuevo I.	1986	August	F	young	BAND	3429
USA	CA	San Mateo Co.: Ano Nuevo I.	1987	December	F	>15	CAS	23005
USA	CA	San Mateo Co.: Ano Nuevo I.	1987	August			CAS	23013
USA	CA	Mendocino Co.: S MacKerricher State Park	1988	July	M		BAND	3451
USA	CA	San Francisco Co.: Ocean Beach	1988	April	F	>13	CAS	23092
USA	CA	San Mateo Co.: S Pescadero State Beach	1989	July	F		BAND	3490
USA	CA	Sonoma Co.: Sea Ranch: 4 mi N	1989	October	F	juvenile	CAS	23187
USA	CA	San Mateo Co.: Ano Nuevo I.	1989	September	F		CAS	23167
USA	CA	Marin Co.: Golden Gate Nat. Rec. Area	1990	August	F		CAS	23163
USA	CA	San Francisco Co.: Ocean Beach	1990	August	F		BAND	3552
USA	CA	San Mateo Co.: Ano Nuevo I.	1991	July	M		CAS	23213
USA	CA	Marin Co.: Pt. Reyes National Seashore	1991	July	F		BAND	3649
USA	CA	San Mateo Co.: Ano Nuevo I.	1991	June	M		BAND	3630
USA	CA	San Mateo Co.: Ano Nuevo I.	1991	May	F	fetus	BAND	3606
USA	CA	Marin Co.: Bolinas: Agate Beach	1991	May	M		BAND	3607
USA	CA	Marin Co.: Bolinas: Agate Beach	1991	May	M		BAND	3613
USA	CA	San Francisco Co.: Fort Funston	1991	November	M		BAND	3653
USA	CA	San Mateo Co.: Ano Nuevo Pt.	1991	October	M		BAND	3648
USA	CA	Marin Co.: Stinson Beach (S end)	1991		F		BAND	

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.		
USA	CA	CA	San Francisco Co.: nr. Fort Funston	1991	October	F		BAND	3651
USA	CA	CA	Mendocino Co.: Pt. Arena: 10 mi S	1992	July	M	>7	CAS	23735
USA	CA	CA	San Mateo Co.: Thornton Beach area	1992	July	F		BAND	3703
USA	CA	CA	San Mateo Co.: Pacifica	1993	July	F		BAND	3782
USA	CA	CA	Marin Co.: Pt. Reyes National Seashore	1993	October	M		BAND	3805
USA	CA	CA	San Francisco Co.: Farallon Is.	1994	December	M	juvenile	CAS	23895
USA	CA	CA	Del Norte Co.: Oregon border: 1 mi S	1994	March	F		HSU	7169
USA	CA	CA	Humboldt Co.: Samoa: 2 mi S	1994	May	M		HSU	7150
USA	CA	CA	Del Norte Co.: Crescent City	1994	September	M		HSU	7151
USA	CA	CA	San Mateo Co.: Pacifica: Sharp Park Beach	1994	September	M		CAS	23862
USA	CA	CA	Humboldt Co.: Samoa Beach	1995	August	M		HSU	7227
USA	CA	CA	Del Norte Co.: Crescent City	1996	August	M		HSU	7368
USA	CA	CA	San Mateo Co.: S Ano Nuevo Island)	1996	July	F	adult	CAS	23964
USA	CA	CA	Del Norte Co.: Crescent City	1997	July	M		HSU	7506
USA	CA	CA	San Mateo Co.: N end Rockaway Beach	1999	July	M	adult	CAS	24451
USA	CA	CA	Humboldt Co.: Clam Beach	1999	September	M		HSU	7562
USA	CA	CA	Marin Co.: Pt. Reyes National Seashore	2000	July	F	adult	CAS	25030
USA	CA	CA	San Mateo Co.: Daly City: Thornton Beach	2000	July	M	adult	CAS	25039
USA	CA	CA	San Mateo Co.: Pomponio State Beach	2000	July	M	adult	CAS	25036
USA	CA	CA	Sonoma Co.: Dillon Beach	2000	July	F	adult	CAS	25244
USA	CA	CA	San Mateo Co.: Pacifica	2000	September	F	adult	CAS	25071
USA	CA	CA	San Mateo Co.: Pescadero State Beach	2001	August	F	adult	CAS	25358
USA	CA	CA	San Mateo Co.: Ano Nuevo Pt.	2001	March	F	adult	CAS	25211
USA	CA	CA	San Francisco Co.: San Francisco	2001	May	F	adult	CAS	25280
USA	CA	CA	Humboldt Co.					HSU	1763
USA	CA	CA	Humboldt Co.					HSU	1764
USA	CA	CA	Humboldt Co.: Big Lagoon: 1 mi S			M		HSU	1755
USA	CA	CA	Humboldt Co.: Big Lagoon: 1 mi S			M		HSU	1756
USA	CA	CA	Humboldt Co.: Big Lagoon: 1 mi S			M		HSU	1758
USA	CA	CA	Humboldt Co.: Big Lagoon: 1 mi S			F		HSU	1759
USA	CA	CA	Humboldt Co.: Big Lagoon: 1 mi S			M		HSU	1760
USA	CA	CA	Humboldt Co.: Big Lagoon: 1 mi S			M		HSU	2578
USA	CA	CA	Los Angeles Co.: Los Angeles					LACM	54178
USA	CA	CA	Marin Co.: Pt. Reyes					AMNH	144
USA	CA	CA	Marin Co.: Pt. Reyes					AMNH	150



Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA	CA	CA	Marin Co.: Pt. Reyes			YPM	1028
USA	CA	CA	Marin Co.: Pt. Reyes	M		YPM	1039
USA	CA	CA	Monterey Co.: Monterey			NMNH	59153
USA	CA	CA	Monterey Co.: Monterey	M		NMNH	A06906
USA	CA	CA	San Francisco Co.: Farallon Is.			AMNH	145
USA	CA	CA	San Francisco Co.: Farallon Is.			MCZ	1767
USA	CA	CA	San Francisco Co.: Farallon Is.			YPM	3143
USA	CA	CA	San Francisco Co.: Farallon Is.	M		NMNH	A13217
USA	CA	CA	San Francisco Co.: Farallon Is.	F		NMNH	A23457
USA	CA	CA	San Francisco Co.: Farallon Is.	M		UMMZ	77657
USA	CA	CA	San Francisco Co.: San Francisco Bay	F		UMMZ	77658
USA	CA	CA	San Francisco Co.: San Francisco Bay	F		MCZ	11059
USA	CA	CA	Santa Barbara Co.: San Miguel I.			LACM	51186
USA	CA	CA	Santa Barbara Co.: Santa Barbara I.	F		NMNH	131895
USA	CA	CA	Santa Barbara Co.: Santa Cruz I.	M		NMNH	131894
USA	CA	CA	Santa Barbara Co.: Santa Barbara I.			LACM	51400
USA	CA	CA	Ventura Co.: San Nicolas I.	M	adult	ROM	3306200031
USA	CA	CA				YPM	1592
USA	CA	CA				FM	15549
USA	CA	CA				NMNH	246323
USA	OR	OR	Oregon: Newport			FM	33770
USA	OR	OR	Oregon: Curry Co.: Port Orford	M		MVZ	88876
USA	OR	OR	Oregon: Clatsop Co.: Warrenton: 2 mi W			UPS	5315
USA	OR	OR	Oregon: Tillamook Co.: Netarts Spit			UWBM	20226
USA	OR	OR	Oregon: Clatsop Co. Columbia R.: 0.2 mi S	F	adult	UWBM	33211
USA	OR	OR	Oregon: Clatsop Co.: Short Beach	F	adult	UWBM	20223
USA	OR	OR	Oregon: Clatsop Co. Columbia R.: 0.2 mi N	F	adult	NMML	379
USA	OR	OR	Oregon: Yaquina Head: 26 mi W	M	adult	UWBM	20152
USA	OR	OR	Oregon: Clatsop Co. Columbia R.: 0.2 mi S	M	adult	UWBM	20227
USA	OR	OR	Oregon: Clatsop Co. Columbia R.: 0.2 mi S	M	adult	UWBM	19603
USA	OR	OR	Oregon: off Oregon coast	F		SDM	1029
USA	OR	OR	Oregon: Cape Blanco lighthouse	M		BAND	16708
USA	OR	OR	Oregon: Coos Co.: Cape Arago (Coos Bay)	M		UPS	21600
USA	OR	OR	Oregon: Lane Co.: Heceta Beach	M		UPS	21599
USA	OR	OR	Oregon: Tillamook Co.: Cannon Beach	F		UPS	21601
USA	OR	OR	Oregon: Lincoln Co.: Agate Beach	M		UPS	



Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA	WA	1938	May			UWBM	12017
USA	WA	1940	April	M	yearling	NMNH	276035
USA	WA	1940	April		fetus	NMNH	276041
USA	WA	1940	May		young	NMNH	276042
USA	WA	1941	June	F		UPS	832
USA	WA	1942	June	M		NMNH	276033
USA	WA	1942	June	M		NMNH	276032
USA	WA	1944	April	M		NMNH	276034
USA	WA	1951	April	M		UPS	2720
USA	WA	1963	July	M		UPS	10376
USA	WA	1963		M		UBC	8712
USA	WA	1976	July	M		NMNH	504525
USA	WA	1978	August	M		UPS	26351
USA	WA	1978	March	M	adult	UWBM	31602
USA	WA	1978	May	F		UPS	27393
USA	WA	1980	June	F		WSU	82-665
USA	WA	1980	October	F		WSU	82-695
USA	WA	1981	June	F		NMML	1329
USA	WA	1982	September	M	immature	UWBM	51176
USA	WA	1983	May	F		NMML	1331
USA	WA	1989	April	M		NMML	1640
USA	WA	1991	April	F		NMML	1642
USA	WA	1991	December	M	10-15	NMML	1641
USA	WA	1992	August	M		NMML	1652
USA	WA	1992	July	F		NMML	1651
USA	WA	1992	July	F		NMML	1664
USA	WA	1992	November	M		NMML	1654
USA	WA	1992	October	F		NMML	1653
USA	WA	1993	August			NMML	1660
USA	WA	1993	March	M		NMML	1657
USA	WA	1993	March	F		NMML	1656
USA	WA	1993	March	F		NMML	1658
USA	WA	1993	May	F		NMML	1659
USA	WA	1996	May	F		NMML	96-1-PJG

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
USA	WA	1993				UAM	90191
USA	WA					DMNS	8248
USA	Pacific coast			M		KU	7584
USA					fetus	MCZ	7068
USA						MCZ	1129
USA						NMML	1578
USA				M		NMML	DOC 5341
USA						OSU	
USA						OSU	
USA						OSU	
USA						OSU	
USA		1842				ZIN	742
		1849				ZIN	1094
	Pacific Ocean (North)	1880		M		NHM	1880.10.11.11
		1882		M		ZIN	11462
		1884		M	adult	ZIN	11463
		1884				ZIN	727
		1884				ZIN	3265
		1885				ZIN	3262
		1885				ZIN	3263
		1887				NAT	13439
	Pacific Ocean	1890		F		ZIN	6638
		1897		M		NHM	1897.1.18.6
	Pacific Ocean (North)	1899		M		CMN	CMNMA 19590
		1900	October	M		CMNH	958
		1900	October	F		CMNH	959
		1900	October	M		CMNH	960
		1900	October	F		CMNH	21004
		1903	December			AMNH	21536
		1905	April			AMNH	22774
		1905				ANSP	12145
		1909	June	F	adult	ZIN	11457
		1918				ANSP	12929
		1928	June	M		CAS	6114
		1928	June	M		CAS	6116

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
		1931	May			ZIN	29527
		1942	July	M		ZMMU	45053
		1949		M		NHM	1949.2.3.18
		1954				LACM	51399
	Pacific Ocean (North)	1957	November			FM	88262
		1958	August	M	adult	ROM	28280
		<b>1959</b>				ZIN	27452
	Pacific Ocean (North)	1960	September	M		FM	92242
		1962	July	M		ZMMU	65684
		1963		F	6	NSMT	45
		1964		M	4	NSMT	3
		1964		M	5	NSMT	51
		1964				ZIN	29125
		1964				ZIN	29126
		1964				ZIN	29127
		1964				ZIN	29128
		1965		F		NSMT	6
		1969	October			ZIN	31509
		1977	April	F	adult	UAM	16015
		1990				UAM	31706
	Bering Strait	1992		M		NHM	1992.272
						MNHU	72816
				M	3	NSMT	137
				M	4	NSMT	111
					adult	UAM	4972
				M	adult	UAM	5211
				M	adult	UAM	5213
				M	adult	UAM	5214
					adult	RBCM	9722
				F	adult	ZIN	11468
				M	adult	ROM	20356
				F	adult	ROM	25315
					adult	SOU	
				F	neonate	CAS	20777
				F	old adult	UAM	5210

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
				F	old adult	UAM	5215
				M		NSMT	1
				F		NSMT	11
						NSMT	15
				F		NSMT	16
				M		NSMT	21
				M		NSMT	40
				M		NSMT	47
				F		NSMT	55
				F		NSMT	58
				F		NSMT	62
				M		NSMT	68
				M		NSMT	107
				F		NSMT	125
				F		NSMT	128
				F		NSMT	131
						SBM	131.2
						SBM	131.2
						SBM	131.2
						SBM	131.2
				M		NSMT	132
				F		NSMT	134
				F		NSMT	135
				M		NSMT	136
				F		NSMT	154
				F		NSMT	159
				M		NSMT	160
						NSMT	165
						NSMT	167
						NSMT	168
						NSMT	169
						NSMT	173
						ZIN	726
						ZIN	729
						ZIN	743

Localities	Locality details	Year	Season	Sex	Age	Collection	Cat. no.
						ZIN	745
						ZIN	1093
						ANSP	2935
						ANSP	2936
						UAMZ	3209
				M		UBC	8670
				M		UBC	8671
				F		CAS	22282
						AMNH	27409
						AMNH	27410
						ZIN	29520
						AMNH	38400
						AMNH	38401
						LACM	51173
						LACM	51174
						LACM	52314
				M		LACM	52315
						LACM	52316
						LACM	52317
						AMNH	60797
				F		ZMMU	105146
						FM	140830
						CMN	CMNMA 19589
				M		CMN	CMNMA 21949
				M		UBC	