# Intertidal Soft-Sediment Bivalves from Prince William Sound, Kachemak Bay, Katmai National Park and Preserve, and Kenai Fjords National Park

Metadata also available as - [[Questions & Answers](file:///C:\Users\lmcduffie\Documents\USGS\Data_Release\Author\15e-GulfWatch_softSediment\6-revised3\phpNkr3Y2.faq.html)] - [[Parseable text](file:///C:\Users\lmcduffie\Documents\USGS\Data_Release\Author\15e-GulfWatch_softSediment\6-revised3\phpNkr3Y2-new.txt)] - [[XML](file:///C:\Users\lmcduffie\Documents\USGS\Data_Release\Author\15e-GulfWatch_softSediment\6-revised3\phpNkr3Y2-new.xml)]

### Metadata:

* [Identification\_Information](#1)
* [Data\_Quality\_Information](#2)
* [Spatial\_Data\_Organization\_Information](#3)
* [Entity\_and\_Attribute\_Information](#4)
* [Distribution\_Information](#5)
* [Metadata\_Reference\_Information](#6)

Identification\_Information:

Citation:

Citation\_Information:

Originator: U.S. Geological Survey - Alaska Science Center  
Originator:

National Park Service - Southwest Alaska Inventory and Monitoring Network

Originator: University of Alaska Fairbanks  
Publication\_Date: 20181115  
Title:

Intertidal Soft-Sediment Bivalves from Prince William Sound, Kachemak Bay, Katmai National Park and Preserve, and Kenai Fjords National Park

Geospatial\_Data\_Presentation\_Form: tabular digital data  
Series\_Information:

Series\_Name:

Intertidal Soft-Sediment Bivalves from Prince William Sound, Kachemak Bay, Katmai National Park and Preserve, and Kenai Fjords National Park

Issue\_Identification: ver 2.0, September 2022

Publication\_Information:

Publication\_Place: Anchorage, Alaska  
Publisher: U.S. Geological Survey, Alaska Science Center

Other\_Citation\_Details:

Suggested Citation: U.S. Geological Survey - Alaska Science Center, National Park Service - Southwest Alaska Inventory and Monitoring Network, and University of Alaska Fairbanks, 2018, Intertidal soft-sediment bivalves from Prince William Sound, Kachemak Bay, Katmai National Park and Preserve, and Kenai Fjords National Park (ver 2.0, September 2022): U.S. Geological Survey data release, <https://doi.org/10.5066/F71834N0>

Online\_Linkage: <https://doi.org/10.5066/F71834N0>  
Larger\_Work\_Citation:

Citation\_Information:

Originator: U.S. Geological Survey, Alaska Science Center  
Publication\_Date: 2005  
Title: Nearshore Marine Ecosystem Research Program  
Geospatial\_Data\_Presentation\_Form: website  
Series\_Information:

Series\_Name: Alaska Science Portal  
Issue\_Identification: 99

Publication\_Information:

Publication\_Place: Anchorage, Alaska  
Publisher: U.S. Geological Survey, Alaska Science Center

Other\_Citation\_Details:

This is a link to the broader USGS Alaska Science Center research project supported by these data. Users will find a description of the research project and links to associated reports, publications, and data products.

Online\_Linkage: <https://alaska.usgs.gov/portal/project.php?project_id=99>

Description:

Abstract:

These data are part of the Gulf Watch Alaska (GWA) long-term monitoring program and describe bivalve count and size sampling and observations conducted at intertidal soft-sediment sampling sites in the northern Gulf of Alaska. This dataset consists of five comma separated files (.csv): 1) bivalve taxonomy table, 2) bivalve sampling site table, 3) bivalve count table, 4) bivalve size table, and 5) list of Gulf Watch Alaska principal investigators and collaborators.

Purpose:

The purpose of this long-term project is to assess change in intertidal bivalve communities on mixed sediment beaches. These data are also used to assess changes in abundance, size distribution, and growth rate of larger bivalve species.

Sampling was conducted within regions of Alaska including: Kenai Peninsula (KEP; Kenai Fjords National Park), Kachemak Bay (KBAY), Alaska Peninsula (AKP; Katmai National Park and Preserve), and Prince William Sound (PWS; northern, western, and eastern Prince William Sound). Study site locations are described in the "Monitoring Site Locations" data release: <https://doi.org/10.5066/F78S4N3R> (Coletti et al. 2017).

Supplemental\_Information:

This versioned data release supersedes one previous nearshore soft-sediment bivalve USGS data release (<https://doi.org/10.5066/F71834N0)>. The data provided in this release includes all data from the past release, as well as new data collected after 2015. This data release will continue to be updated as new data are collected each sampling year.

Time\_Period\_of\_Content:

Time\_Period\_Information:

Range\_of\_Dates/Times:

Beginning\_Date: 2007  
Ending\_Date: 2021

Currentness\_Reference: observed

Status:

Progress: In work  
Maintenance\_and\_Update\_Frequency: Biennial

Spatial\_Domain:

Description\_of\_Geographic\_Extent:

Prince William Sound (east, north, and west), Kachemak Bay, Kenai Fjords National Park, and Katmai National Park and Preserve.

Bounding\_Coordinates:

West\_Bounding\_Coordinate: -156.643  
East\_Bounding\_Coordinate: -145.415  
North\_Bounding\_Coordinate: 61.122  
South\_Bounding\_Coordinate: 57.938

Keywords:

Theme:

Theme\_Keyword\_Thesaurus: USGS Metadata Identifier  
Theme\_Keyword: USGS:ASC198

Theme:

Theme\_Keyword\_Thesaurus: ISO 19115 Topic Category  
Theme\_Keyword: Biota  
Theme\_Keyword: Environment

Theme:

Theme\_Keyword\_Thesaurus: NASA GCMD Earth Science Keyword Thesaurus  
Theme\_Keyword: Animals/Invertebrates  
Theme\_Keyword: Mollusks  
Theme\_Keyword: Aquatic ecosystems  
Theme\_Keyword: Benthic habitat  
Theme\_Keyword: Coastal habitat  
Theme\_Keyword: Marine environment monitoring

Theme:

Theme\_Keyword\_Thesaurus: USGS CSA Biocomplexity Thesaurus  
Theme\_Keyword: Spatial distribution  
Theme\_Keyword: Size distribution  
Theme\_Keyword: Aquatic ecosystems  
Theme\_Keyword: Marine environments  
Theme\_Keyword: Ecology

Theme:

Theme\_Keyword\_Thesaurus: USGS Thesaurus  
Theme\_Keyword: Wildlife  
Theme\_Keyword: Macroinvertebrates  
Theme\_Keyword: Benthic ecosystems  
Theme\_Keyword: Coastal ecosystems  
Theme\_Keyword: Marine ecosystems  
Theme\_Keyword: Field inventory and monitoring  
Theme\_Keyword: Field sampling  
Theme\_Keyword: Aquatic biology

Theme:

Theme\_Keyword\_Thesaurus: None  
Theme\_Keyword: Bivalve

Place:

Place\_Keyword\_Thesaurus: USGS Geographic Names Information System (GNIS)  
Place\_Keyword: Gulf of Alaska  
Place\_Keyword: Prince William Sound  
Place\_Keyword: Kenai Fjords National Park  
Place\_Keyword: Katmai National Park and Preserve  
Place\_Keyword: Alaska Peninsula  
Place\_Keyword: Kachemak Bay

Place:

Place\_Keyword\_Thesaurus: None  
Place\_Keyword: Katmai National Park and Preserve  
Place\_Keyword: Kenai Fjords National Park

Taxonomy:

Keywords/Taxon:

Taxonomic\_Keyword\_Thesaurus: None  
Taxonomic\_Keywords: Myoida  
Taxonomic\_Keywords: Mytiloida  
Taxonomic\_Keywords: Nuculoida  
Taxonomic\_Keywords: Ostreoida  
Taxonomic\_Keywords: Pholadomyoida  
Taxonomic\_Keywords: Veneroida

Taxonomic\_System:

Classification\_System/Authority:

Classification\_System\_Citation:

Citation\_Information:

Originator: ITIS Integrated Taxonomic Information System  
Publication\_Date: Unknown  
Title: ITIS Integrated Taxonomic Information System  
Geospatial\_Data\_Presentation\_Form: online database  
Publication\_Information:

Publication\_Place: online  
Publisher: ITIS-North America

Other\_Citation\_Details:

Taxonomic details retrieved August 17, 2022, from the Integrated Taxonomic Information System online database <https://www.itis.gov>

Online\_Linkage: <https://doi.org/10.5066/F7KH0KBK>

Classification\_System/Authority:

Classification\_System\_Citation:

Citation\_Information:

Originator: World Register of Marine Species (WoRMS)  
Publication\_Date: Unknown  
Title: World Register of Marine Species (WoRMS)  
Geospatial\_Data\_Presentation\_Form: online database  
Publication\_Information:

Publication\_Place: online  
Publisher: WoRMS Editorial Board

Other\_Citation\_Details:

Taxonomic details retrieved August 17, 2022, from the World Register of Marine Species online database <https://www.marinespecies.org>

Online\_Linkage: <https://doi.org/10.14284/170>

Taxonomic\_Procedures:

Bivalve species were identified by trained observers in the field using physical characteristics.

Taxonomic\_Completeness:

Provided here is the classification of bivalves to the taxonomic rank of Order. Further details of taxonomy are provided in the table "KBAYKATMKEFJWPWS\_2007-2021\_Soft\_Sediment\_Bivalve\_Taxonomy" included with this data package.

Taxonomic\_Classification:

Taxon\_Rank\_Name: Kingdom  
Taxon\_Rank\_Value: Animalia  
Taxonomic\_Classification:

Taxon\_Rank\_Name: Subkingdom  
Taxon\_Rank\_Value: Bilateria  
Taxonomic\_Classification:

Taxon\_Rank\_Name: Infrakingdom  
Taxon\_Rank\_Value: Protostomia  
Taxonomic\_Classification:

Taxon\_Rank\_Name: Superphylum  
Taxon\_Rank\_Value: Lophozoa  
Taxonomic\_Classification:

Taxon\_Rank\_Name: Phylum  
Taxon\_Rank\_Value: Mollusca  
Taxonomic\_Classification:

Taxon\_Rank\_Name: Class  
Taxon\_Rank\_Value: Bivalvia  
Taxonomic\_Classification:

Taxon\_Rank\_Name: Subclass  
Taxon\_Rank\_Value: Heterodonta  
Taxonomic\_Classification:

Taxon\_Rank\_Name: Order  
Taxon\_Rank\_Value: Myoida

Taxonomic\_Classification:

Taxon\_Rank\_Name: Order  
Taxon\_Rank\_Value: Veneroida

Taxonomic\_Classification:

Taxon\_Rank\_Name: Subclass  
Taxon\_Rank\_Value: Pteriomorphia  
Taxonomic\_Classification:

Taxon\_Rank\_Name: Order  
Taxon\_Rank\_Value: Mytiloida

Taxonomic\_Classification:

Taxon\_Rank\_Name: Order  
Taxon\_Rank\_Value: Ostreoida

Taxonomic\_Classification:

Taxon\_Rank\_Name: Subclass  
Taxon\_Rank\_Value: Protobranchia  
Taxonomic\_Classification:

Taxon\_Rank\_Name: Order  
Taxon\_Rank\_Value: Nuculoida

Taxonomic\_Classification:

Taxon\_Rank\_Name: Order  
Taxon\_Rank\_Value: Pholadomyoida

Access\_Constraints: None  
Use\_Constraints:

It is requested that the authors be cited for any subsequent publications that reference this dataset.

Point\_of\_Contact:

Contact\_Information:

Contact\_Organization\_Primary:

Contact\_Organization: U.S. Geological Survey, Alaska Science Center

Contact\_Address:

Address\_Type: Mailing and Physical  
Address: 4210 University Drive  
City: Anchorage  
State\_or\_Province: Alaska  
Postal\_Code: 99508  
Country: USA

Contact\_Voice\_Telephone: 907-786-7000  
Contact\_Electronic\_Mail\_Address: ascweb@usgs.gov

Data\_Set\_Credit:

Many people (USGS staff, contractors, and volunteers, NPS staff and volunteers, University of Alaska Fairbanks staff and students, and NOAA staff) contributed to collection of the bivalve observations contained in this data set. The Nearshore Component Principal Investigators involved in this effort include: Heather Coletti, Dan Esler, Brenda Ballachey, James Bodkin, Thomas Dean, George Esslinger, Katrin Iken, Kim Kloecker, Brenda Konar, Mandy Lindeberg, Daniel Monson, Brian Robinson, Sarah Traiger, Ben Weitzman, and Dominic Hondolero.

Native\_Data\_Set\_Environment:

The original data are stored as a Microsoft Excel spreadsheet in a Windows operating environment. Data are exported as comma separated text files (.csv) for dissemination.

Data\_Quality\_Information:

Attribute\_Accuracy:

Attribute\_Accuracy\_Report:

Quality Assurance and Quality Control (QAQC) protocols for these data included: 1) entering site, identification, and size data into the spreadsheet while in the field on the day of sample collection, 2) bivalve names were verified and standardized by using drop-down lists on electronic data entry forms, 3) data were proofed and edited immediately after each site was sampled and before beginning a new site, 4) all records were checked for missing values, duplicates, outliers, and inconsistencies, and 5) field notes and other data sheets associated with soft-sediment sampling were checked against the database.

Logical\_Consistency\_Report:

All attribute values fall within expected ranges. Count and size data were entered electronically in the field, rather than being recorded on datasheets to prevent transcription errors. After a site has been sampled, the data were proofed and edited in the field before beginning a new site. Field notes and other data sheets associated with soft-sediment sampling are checked against the database.

Completeness\_Report:

(1) Western Prince William Sound (WPWS) sites were not sampled in 2009. (2) Katmai National Park and Preserve (KATM) sites were not sampled in 2011. (3) Nuka Bay, Kenai Fjords National Park was not sampled in 2021. (4) Zero tide time and survey start time were not recorded before 2017. In 2017 these times were only recorded at Jakalof Bay (KBAY) and Aialik Bay (KEFJ). These times were recorded at all sites in 2019. These times were recorded at all sites except the KBAY sites in 2021. (5) Foraging pits were only counted in 2017 at the KBAY sites. Foraging pits were counted at all sites in 2019. Foraging pits were not counted at the KBAY sites in 2021. (6) Mytilus trossulus was not sampled at Katmai National Park and Preserve (KATM), Kenai Fjords National Park (KEFJ), and Western Prince William Sound (WPWS) before 2015.

Positional\_Accuracy:

Horizontal\_Positional\_Accuracy:

Horizontal\_Positional\_Accuracy\_Report:

Transects for soft-sediment bivalve sampling are marked with start and end coordinates in a hand-held GPS.

Lineage:

Methodology:

Methodology\_Type: Field  
Methodology\_Description:

Sampling was conducted in sheltered soft-sediment habitats within regions of Alaska including: Kenai Peninsula (KEP; Kenai Fjords National Park), Alaska Peninsula (AKP; Katmai National Park and Preserve), Prince William Sound (PWS; northern, western, and eastern Prince William Sound), and Kachemak Bay (KBAY). Site locations are included with this data package "KBAYKATMKEFJWPWS\_2007-2021\_Soft\_Sediment\_Bivalve\_Site\_Info.csv" and site location details are in the data release: <https://doi.org/10.5066/F78S4N3R> (Coletti et al. 2017).

At each site a 50 or 100 meter transect was positioned horizontally along the beach at the 0 Mean Lower Low Water level (MLLW) or plus 0.5-meter tide level. A random starting point was chosen and twelve 0.25 meter-square quadrats were placed systematically along the transect and were excavated to a depth of 25 centimeters. All sediments were sieved through a 10-millimeter mesh screen and all bivalves were identified to the lowest possible taxa and counted. We used dial or electronic calipers to measure bivalves to the nearest millimeter along the longest point of the shell.

Sediments were returned to the quadrat after the sieving process was complete.

Source\_Information:

Source\_Citation:

Citation\_Information:

Originator: Light, S.F.  
Originator: Smith, R.I.  
Originator: Carlton, J.T.  
Publication\_Date: 1975  
Title:

Light's Manual: Intertidal Invertebrates from the Central California Coast, 3rd ed

Geospatial\_Data\_Presentation\_Form: book  
Publication\_Information:

Publication\_Place: Berkeley, California  
Publisher: University of California Press

Other\_Citation\_Details:

Light, S.F., Smith, R.I., Carlton, J.T. 1975. Light's manual: intertidal invertebrates from the central California coast, 3rd ed. University of California Press, Berkeley, California. 716 pp.

Type\_of\_Source\_Media: Digital and/or Hardcopy  
Source\_Time\_Period\_of\_Content:

Time\_Period\_Information:

Single\_Date/Time:

Calendar\_Date: 1975

Source\_Currentness\_Reference: publication date

Source\_Citation\_Abbreviation: Light et al. 1975  
Source\_Contribution:

A reference guide for identifying bivalves occurring along the Central California coastline.

Source\_Information:

Source\_Citation:

Citation\_Information:

Originator: Morris, R.H.  
Originator: Abbott, D.P.  
Originator: Haderlie, E.C.  
Publication\_Date: 1980  
Title: Intertidal Invertebrates of California  
Geospatial\_Data\_Presentation\_Form: book  
Publication\_Information:

Publication\_Place: Palo Alto, California  
Publisher: Stanford University Press

Other\_Citation\_Details:

Morris, R.H., Abbott, D.P., Haderlie, E.C. 1980. Intertidal invertebrates of California. Stanford University Press, Palo Alto, California. 690 pp.

Type\_of\_Source\_Media: Digital and/or Hardcopy  
Source\_Time\_Period\_of\_Content:

Time\_Period\_Information:

Single\_Date/Time:

Calendar\_Date: 1980

Source\_Currentness\_Reference: publication date

Source\_Citation\_Abbreviation: Morris et al. 1980  
Source\_Contribution:

A reference guide for identifying intertidal bivalves occuring along the California coastline.

Source\_Information:

Source\_Citation:

Citation\_Information:

Originator: Kozloff, E.N.  
Publication\_Date: 1983  
Title:

Seashore Life of the Northern Pacific Coast: An Illustrated Guide to Northern California, Oregon, Washington, and British Columbia

Geospatial\_Data\_Presentation\_Form: book  
Publication\_Information:

Publication\_Place: Seattle, Washington  
Publisher: University of Washington Press

Other\_Citation\_Details:

Kozloff, E.N. 1983. Seashore life of the northern Pacific coast: an illustrated guide to northern California, Oregon, Washington, and British Columbia. University of Washington Press, Seattle, Washington. 424 pp.

Type\_of\_Source\_Media: Digital and/or Hardcopy  
Source\_Time\_Period\_of\_Content:

Time\_Period\_Information:

Single\_Date/Time:

Calendar\_Date: 1983

Source\_Currentness\_Reference: publication date

Source\_Citation\_Abbreviation: Kozloff 1983  
Source\_Contribution:

A reference guide for identifying bivalves occuring along the North Pacific coastline.

Source\_Information:

Source\_Citation:

Citation\_Information:

Originator: Foster, N.R.  
Publication\_Date: 1991  
Title:

Intertidal Bivalves: A Guide to the Common Marine Bivalves of Alaska

Geospatial\_Data\_Presentation\_Form: book  
Publication\_Information:

Publication\_Place: Fairbanks, Alaska  
Publisher: University of Alaska Press

Other\_Citation\_Details:

Foster, N.R. 1991. Intertidal bivalves: a guide to the common marine bivalves of Alaska. University of Alaska Press, Fairbanks, Alaska. 152 pp.

Type\_of\_Source\_Media: Digital and/or Hardcopy  
Source\_Time\_Period\_of\_Content:

Time\_Period\_Information:

Single\_Date/Time:

Calendar\_Date: 1991

Source\_Currentness\_Reference: publication date

Source\_Citation\_Abbreviation: Foster 1991  
Source\_Contribution:

A reference guide for identifying bivalves that occur in Alaska.

Source\_Information:

Source\_Citation:

Citation\_Information:

Originator: Harbo, R.M.  
Publication\_Date: 1997  
Title: Shells and Shellfish of the Pacific Northwest: A Field Guide  
Geospatial\_Data\_Presentation\_Form: book  
Publication\_Information:

Publication\_Place: Madiera Park, British Columbia  
Publisher: Harbour Publishing

Other\_Citation\_Details:

Harbo, R.M. 1997. Shells and shellfish of the Pacific Northwest: a field guide. Harbour Publishing, Madiera Park, British Columbia. 270 pp.

Type\_of\_Source\_Media: Digital and/or Hardcopy  
Source\_Time\_Period\_of\_Content:

Time\_Period\_Information:

Single\_Date/Time:

Calendar\_Date: 1997

Source\_Currentness\_Reference: publication date

Source\_Citation\_Abbreviation: Harbo 1997  
Source\_Contribution: A reference guide for identifying bivalves.

Source\_Information:

Source\_Citation:

Citation\_Information:

Originator: O'Clair, R.M.  
Originator: O'Clair, C.E.  
Publication\_Date: 1998  
Title: Southeast Alaska's Rocky Shores: Animals  
Geospatial\_Data\_Presentation\_Form: book  
Publication\_Information:

Publication\_Place: Auke Bay, Alaska  
Publisher: Plant Press

Other\_Citation\_Details:

O'Clair, R.M., O'Clair, C.E. 1998. Southeast Alaska's rocky shores: animals. Plant Press, Auke Bay, Alaska. 564 pp.

Type\_of\_Source\_Media: Digital and/or Hardcopy  
Source\_Time\_Period\_of\_Content:

Time\_Period\_Information:

Single\_Date/Time:

Calendar\_Date: 1998

Source\_Currentness\_Reference: publication date

Source\_Citation\_Abbreviation: O'Clair and O'Clair 1998  
Source\_Contribution:

A reference guide for identifying biota that commonly occur along the rocky coastline of Southeast Alaska.

Source\_Information:

Source\_Citation:

Citation\_Information:

Originator: Bodkin, J.L.  
Originator: Kloecker, K.A.  
Originator: Esslinger, G.G.  
Originator: Monson, D.H.  
Originator: DeGroot, J.D.  
Publication\_Date: 2001  
Title:

Sea Otter Studies in Glacier Bay National Park and Preserve: Aerial Surveys, Foraging Observations, and Intertidal Clam Sampling

Geospatial\_Data\_Presentation\_Form: document  
Publication\_Information:

Publication\_Place: Anchorage, Alaska  
Publisher: U.S. Geological Survey, Alaska Science Center

Other\_Citation\_Details:

Bodkin, J.L., Kloecker, K.A., Esslinger, G.G., Monson, D.H., DeGroot, J.D. 2001. Sea otter studies in Glacier Bay National Park and Preserve: aerial surveys, foraging observations, and intertidal clam sampling <https://pubs.er.usgs.gov/publication/2002786>

Unpublished report archived by the Alaska Resources Library and Information Services (ARLIS) <https://www.arlis.org> [reference code: ILS: 1374290]

Online\_Linkage:

<https://www.arlis.org/docs/vol1/USGS/722530877/722530877-2001.pdf>

Type\_of\_Source\_Media: report  
Source\_Time\_Period\_of\_Content:

Time\_Period\_Information:

Single\_Date/Time:

Calendar\_Date: 2001

Source\_Currentness\_Reference: publication date

Source\_Citation\_Abbreviation: Bodkin et al. 2001  
Source\_Contribution:

Report describing clam sampling methods and clam species composition, density, biomass, and size.

Source\_Information:

Source\_Citation:

Citation\_Information:

Originator: Lees, D.C.  
Publication\_Date: 2006  
Title: Guide to Intertidal Bivalves in Southwest Alaska National Parks  
Geospatial\_Data\_Presentation\_Form: book  
Series\_Information:

Series\_Name: NPS/AKRSWAN/NRTR  
Issue\_Identification: 2006/02

Publication\_Information:

Publication\_Place: Anchorage, Alaska  
Publisher:

National Park Service, Southwest Alaska Network, Inventory and Monitoring Program

Other\_Citation\_Details:

Lees, D.C. 2006. Guide to Intertidal Bivalves in Southwest Alaska National Parks. National Park Service, Southwest Alaska Network, Inventory and Monitoring Program, NPS/AKRSWAN/NRTR: 2006/02.

Published book archived by the Alaska Resources Library and Information Services (ARLIS) <https://www.arlis.org> [reference code: ILS: 1146011]

Online\_Linkage: <https://www.arlis.org/docs/vol1/174043645.pdf>

Type\_of\_Source\_Media: Digital and/or Hardcopy  
Source\_Time\_Period\_of\_Content:

Time\_Period\_Information:

Single\_Date/Time:

Calendar\_Date: 2006

Source\_Currentness\_Reference: publication date

Source\_Citation\_Abbreviation: Lees 2006  
Source\_Contribution:

A reference guide for identifying intertidal bivalves occurring along the coastlines of Katmai National Park and Preserve, Kenai Fjords National Park, and Lake Clark National Park and Preserve.

Source\_Information:

Source\_Citation:

Citation\_Information:

Originator: Weitzman, B.P.  
Originator: Bodkin, J.L.  
Originator: Kloecker, K.A.  
Originator: Coletti, H.A.  
Publication\_Date: 2017  
Title:

SOP for Monitoring Intertidal Bivalves on Mixed-Sediment Beaches - Version 2.0

Geospatial\_Data\_Presentation\_Form: report  
Series\_Information:

Series\_Name: Natural Resource Report NPS/SWAN/NRR  
Issue\_Identification: 2017/1443

Publication\_Information:

Publication\_Place: Fort Collins, Colorado  
Publisher: National Park Service

Other\_Citation\_Details:

Weitzman, B. P., Bodkin, J.L., Kloecker, K.A., Coletti, H.A. 2017. SOP for Monitoring Intertidal Bivalves on Mixed-Sediment Beaches - Version 2.0: Southwest Alaska Inventory and Monitoring Network. Natural Resource Report NPS/SWAN/NRR - 2017/1443. National Park Service, Fort Collins, Colorado.

Published report archived by U.S. National Park Service Catalog (IRMA Data Store) <https://irma.nps.gov/DataStore> [reference code: 2240316]

Online\_Linkage: <https://irma.nps.gov/DataStore/Reference/Profile/2240316>

Type\_of\_Source\_Media: Digital Report  
Source\_Time\_Period\_of\_Content:

Time\_Period\_Information:

Single\_Date/Time:

Calendar\_Date: 2017

Source\_Currentness\_Reference: publication date

Source\_Citation\_Abbreviation: Weitzman et al. 2017  
Source\_Contribution:

Sampling protocol used for sampling soft-sediment bivalves at each study site.

Source\_Information:

Source\_Citation:

Citation\_Information:

Originator: Keller, K.  
Originator: Brown, K.  
Originator: Atkinson, S.  
Publication\_Date: 2017  
Title:

Guide for Identifying Select Bivalve Species Common to Southeast Alaska

Geospatial\_Data\_Presentation\_Form: ebook  
Series\_Information:

Series\_Name: NOAA Technical Memorandum  
Issue\_Identification: NMFS-AFSC: 341

Publication\_Information:

Publication\_Place: Seattle, Washington  
Publisher: National Oceanic and Atmospheric Administration

Other\_Citation\_Details:

Keller, K., Brown, K., Atkinson, S. 2017. Guide for identifying select bivalve species common to southeast Alaska. NOAA Technical Memorandum, NMFS-AFSC: 341. <https://doi.org/10.7289/V5/TM-AFSC-341>

Online\_Linkage: <https://doi.org/10.7289/V5/TM-AFSC-341>

Type\_of\_Source\_Media: Digital and/or Hardcopy  
Source\_Time\_Period\_of\_Content:

Time\_Period\_Information:

Single\_Date/Time:

Calendar\_Date: 2017

Source\_Currentness\_Reference: publication date

Source\_Citation\_Abbreviation: Keller et al. 2017  
Source\_Contribution:

A reference guide for identifying bivalves that commonly occur in Southeast Alaska.

Source\_Information:

Source\_Citation:

Citation\_Information:

Originator: Coletti, H.A.  
Originator: Kloecker, K.A.  
Originator: Bodkin, J.L.  
Originator: Dean, T.A.  
Publication\_Date: 2017  
Title:

Gulf Watch Alaska Nearshore Component: Monitoring Site Locations from Prince William Sound, Katmai National Park and Preserve, and Kenai Fjords National Park

Geospatial\_Data\_Presentation\_Form: tabular digital data  
Series\_Information:

Series\_Name: USGS Data Release  
Issue\_Identification: doi:10.5066/F78S4N3R

Publication\_Information:

Publication\_Place: online  
Publisher: U.S. Geological Survey, Alaska Science Center

Other\_Citation\_Details:

Coletti, H.A., Kloecker, K.A., Bodkin, J.L., Dean, T.A., 2017. Gulf Watch Alaska nearshore component: monitoring site locations from Prince William Sound, Katmai National Park and Preserve, and Kenai Fjords National Park: U.S. Geological Survey data release, <https://doi.org/10.5066/F78S4N3R>

Online\_Linkage: <https://doi.org/10.5066/F78S4N3R>

Type\_of\_Source\_Media: tabular digital data  
Source\_Time\_Period\_of\_Content:

Time\_Period\_Information:

Single\_Date/Time:

Calendar\_Date: 2017

Source\_Currentness\_Reference: publication date

Source\_Citation\_Abbreviation: Coletti et al. 2017  
Source\_Contribution:

A U.S. Geological Survey data release containing site location information for intertidal studies.

Process\_Step:

Process\_Description:

Field data recorded on paper field data sheets and then entered into a Microsoft Excel spreadsheet. This was usually completed while still in the field or back at the support vessel, but not actually on the bivalve sampling site. Data are .csv outputs from the database.

Process\_Date: Unknown

Process\_Step:

Process\_Description:

Field data sheet QAQC: the field crew and then a field data manager review the data sheets for missing, illegible, or confusing entries and correct any issues.

Process\_Date: Unknown

Process\_Step:

Process\_Description:

Spreadsheet QAQC: bivalve sampling site information, counts and sizes are checked against the field data sheets and also checked row by row and cell by cell for accuracy and completeness.

Process\_Date: Unknown

Process\_Step:

Process\_Description:

Spreadsheet QAQC: site, count and measurement data are checked against the field data sheets for completeness and logical consistency and data are checked for outliers.

Process\_Date: Unknown

Spatial\_Data\_Organization\_Information:

Indirect\_Spatial\_Reference:

The only spatial information in these data are the named locations for the sampling sites and the site ID code. Sites are documented with start and end coordinates and are also referred to by name (e.g., Herring Bay sampling site) and code (e.g., PWS\_B08\_SI\_05). Please refer to Coletti et al. 2017, a USGS data release that provides geographic coordinates of all sites: <https://doi.org/10.5066/F78S4N3R>

Direct\_Spatial\_Reference\_Method: Point

Entity\_and\_Attribute\_Information:

Detailed\_Description:

Entity\_Type:

Entity\_Type\_Label: KBAYKATMKEFJWPWS\_2007-2021\_Soft\_Sediment\_Bivalve\_Taxonomy.csv  
Entity\_Type\_Definition:

Table containing the taxonomic classification of bivalves sampled along transects and in quadrats. Presented in a Comma Separated Value (CSV) formatted table.

Entity\_Type\_Definition\_Source: Author defined

Attribute:

Attribute\_Label: Kingdom  
Attribute\_Definition: Taxonomic hierarchical level; kingdom  
Attribute\_Definition\_Source:

ITIS Integrated Taxonomic Information System or World Register of Marine Species (WoRMS)

Attribute\_Domain\_Values:

Unrepresentable\_Domain: Taxonomic hierarchical level; kingdom

Attribute:

Attribute\_Label: Phylum  
Attribute\_Definition: Taxonomic hierarchical level; phylum  
Attribute\_Definition\_Source:

ITIS Integrated Taxonomic Information System or World Register of Marine Species (WoRMS)

Attribute\_Domain\_Values:

Unrepresentable\_Domain: Taxonomic hierarchical level; phylum

Attribute:

Attribute\_Label: Class  
Attribute\_Definition: Taxonomic hierarchical level; class  
Attribute\_Definition\_Source:

ITIS Integrated Taxonomic Information System or World Register of Marine Species (WoRMS)

Attribute\_Domain\_Values:

Unrepresentable\_Domain: Taxonomic hierarchical level; class

Attribute:

Attribute\_Label: Order  
Attribute\_Definition: Taxonomic hierarchical level; order.  
Attribute\_Definition\_Source:

ITIS Integrated Taxonomic Information System or World Register of Marine Species (WoRMS)

Attribute\_Domain\_Values:

Unrepresentable\_Domain: Taxonomic hierarchical level; order

Attribute:

Attribute\_Label: Family  
Attribute\_Definition: Taxonomic hierarchical level; family.  
Attribute\_Definition\_Source:

ITIS Integrated Taxonomic Information System or World Register of Marine Species (WoRMS)

Attribute\_Domain\_Values:

Unrepresentable\_Domain: Taxonomic hierarchical level; family

Attribute:

Attribute\_Label: Genus  
Attribute\_Definition:

Taxonomic hierarchical level; genus. The null values "." indicate that the bivalve could not be identified to genus.

Attribute\_Definition\_Source:

ITIS Integrated Taxonomic Information System or World Register of Marine Species (WoRMS)

Attribute\_Domain\_Values:

Unrepresentable\_Domain: Taxonomic hierarchical level; genus

Attribute:

Attribute\_Label: Species  
Attribute\_Definition:

Taxonomic hierarchical level; species. The species name refered to throughout this data release. The null values "." indicate that the bivalve could not be identified to species.

Attribute\_Definition\_Source:

ITIS Integrated Taxonomic Information System or World Register of Marine Species (WoRMS)

Attribute\_Domain\_Values:

Unrepresentable\_Domain: Taxonomic hierarchical level; species

Attribute:

Attribute\_Label: Valid\_Name  
Attribute\_Definition:

The species current (valid) scientific name at the time of this data release. The null values "." indicate that the species scientific name has not changed over time.

Attribute\_Definition\_Source:

ITIS Integrated Taxonomic Information System or World Register of Marine Species (WoRMS)

Attribute\_Domain\_Values:

Unrepresentable\_Domain: The species current (valid) scientific name.

Attribute:

Attribute\_Label: Current\_SpeciesCode  
Attribute\_Definition:

The three-letter species code given to the bivalve at the time of collection. The null values "." indicate that a species code has not been assigned.

Attribute\_Definition\_Source:

ITIS Integrated Taxonomic Information System or World Register of Marine Species (WoRMS)

Attribute\_Domain\_Values:

Unrepresentable\_Domain:

The three-letter species code given to the bivalve at the time of collection.

Attribute:

Attribute\_Label: Type  
Attribute\_Definition: Classification of the bivalve.  
Attribute\_Definition\_Source:

ITIS Integrated Taxonomic Information System or World Register of Marine Species (WoRMS)

Attribute\_Domain\_Values:

Unrepresentable\_Domain: Classification of the bivalve.

Attribute:

Attribute\_Label: Taxon\_Authority  
Attribute\_Definition:

Taxonomic classification authority used in the classification of the species.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: ITIS  
Enumerated\_Domain\_Value\_Definition:

Integrated Taxonomic Information System; authoritative taxonomic information on plants, animals, fungi, and microbes of North America and the world.

Enumerated\_Domain\_Value\_Definition\_Source: Integrated Taxonomic Information System (August 17, 2022)

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: WoRMS  
Enumerated\_Domain\_Value\_Definition:

World register of Marine Species; authoritative taxonomic information on marine species.

Enumerated\_Domain\_Value\_Definition\_Source: World register of Marine Species (August 17, 2022)

Attribute:

Attribute\_Label: Taxon\_AuthorityID  
Attribute\_Definition: Unique identification number for each species.  
Attribute\_Definition\_Source:

ITIS Integrated Taxonomic Information System or World Register of Marine Species (WoRMS)

Attribute\_Domain\_Values:

Unrepresentable\_Domain: Unique identification number for each species.

Detailed\_Description:

Entity\_Type:

Entity\_Type\_Label: KBAYKATMKEFJWPWS\_2007-2021\_Soft\_Sediment\_Bivalve\_Site\_Info.csv  
Entity\_Type\_Definition:

Table with year-specific site information for soft-sediment bivalve sampling locations in Prince William Sound, Katmai National Park and Preserve, Kachemak Bay, and Kenai Fjords National Park. Presented in a Comma Separated Value (CSV) formatted table.

Entity\_Type\_Definition\_Source: Author defined

Attribute:

Attribute\_Label: Region  
Attribute\_Definition:

Largest spatial unit of the Gulf Watch Alaska Nearshore Monitoring component, as defined in Coletti et al. 2017, <https://doi.org/10.5066/F78S4N3R>

Attribute\_Definition\_Source: Coletti et al. 2017  
Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: AKP  
Enumerated\_Domain\_Value\_Definition: Alaska Peninsula  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: KEP  
Enumerated\_Domain\_Value\_Definition: Kenai Peninsula  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: PWS  
Enumerated\_Domain\_Value\_Definition: Prince William Sound  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute:

Attribute\_Label: BlockNumber  
Attribute\_Definition:

Two-digit unit number for each block within each sampling region, as defined in Coletti et al. 2017, <https://doi.org/10.5066/F78S4N3R>

Attribute\_Definition\_Source: Coletti et al. 2017  
Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: 04  
Enumerated\_Domain\_Value\_Definition: Kachemak Bay  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: 05  
Enumerated\_Domain\_Value\_Definition: Kenai Fjords National Park  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: 07  
Enumerated\_Domain\_Value\_Definition: Northern Prince William Sound  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: 08  
Enumerated\_Domain\_Value\_Definition: Western Prince William Sound  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: 09  
Enumerated\_Domain\_Value\_Definition: Eastern Prince William Sound  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: 10  
Enumerated\_Domain\_Value\_Definition: Katmai National Park and Preserve  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute:

Attribute\_Label: BlockName  
Attribute\_Definition:

Name of sampling block within each sampling region, as defined in Coletti et al. 2017, <https://doi.org/10.5066/F78S4N3R>

Attribute\_Definition\_Source: Coletti et al. 2017  
Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: KATM  
Enumerated\_Domain\_Value\_Definition:

Katmai National Park and Preserve (Block 10, Region = Alaska Peninsula)

Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: KBAY  
Enumerated\_Domain\_Value\_Definition: Kachemak Bay (Block 04, Region = Kenai Peninsula)  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: KEFJ  
Enumerated\_Domain\_Value\_Definition: Kenai Fjords National Park (Block 05, Region = Kenai Peninsula)  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: NPWS  
Enumerated\_Domain\_Value\_Definition:

Northern Prince William Sound (Block 07, Region = Prince William Sound)

Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: WPWS  
Enumerated\_Domain\_Value\_Definition:

Western Prince William Sound (Block 08, Region = Prince William Sound)

Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: EPWS  
Enumerated\_Domain\_Value\_Definition:

Eastern Prince William Sound (Block 09, Region = Prince William Sound)

Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute:

Attribute\_Label: SiteID  
Attribute\_Definition:

Identification code of sampling site within each sampling block, as defined in Coletti et al. 2017, <https://doi.org/10.5066/F78S4N3R>. The SiteID is comprised of 4 parts, 1) the region (AKP, KEP, PWS), 2) the block number (4, 5, 7, 8, 9, or 10), 3) the sampling type (described below), and 4) the sample type number (01-05).

Attribute\_Definition\_Source: Coletti et al. 2017  
Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: SI  
Enumerated\_Domain\_Value\_Definition: Sampling type = Soft Intensive Block  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: SS  
Enumerated\_Domain\_Value\_Definition: Sampling type = Soft Sediment Block  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: SE  
Enumerated\_Domain\_Value\_Definition: Sampling type = Soft Extensive Block  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute:

Attribute\_Label: SiteName  
Attribute\_Definition:

Name of sampling site within each sampling block, as defined in Coletti et al. 2017, <https://doi.org/10.5066/F78S4N3R>

Attribute\_Definition\_Source: Coletti et al. 2017  
Attribute\_Domain\_Values:

Unrepresentable\_Domain: Name of sampling sites within each sampling block.

Attribute:

Attribute\_Label: YearSample  
Attribute\_Definition: Year the soft-sediment site was sampled.  
Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain: Year the soft-sediment site was sampled (YYYY).

Attribute:

Attribute\_Label: SampleDate  
Attribute\_Definition:

Date the soft-sediment site was sampled. The null values "." indicate that the date the site was sampled was not recorded.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain: Date the soft-sediment site was sampled (YYYY-MM-DD).

Attribute:

Attribute\_Label: SurveyQualifier  
Attribute\_Definition:

A qualifier for if a site was sampled or not due to poor weather.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: Site Sampled  
Enumerated\_Domain\_Value\_Definition: The soft-sediment site was sampled.  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: No - Inclement Weather  
Enumerated\_Domain\_Value\_Definition:

The soft-sediment site was not sampled due to inclement weather.

Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute:

Attribute\_Label: ZeroTideTime  
Attribute\_Definition:

The estimated local time (24-hr) when the falling tide would reach 0.0 m based on NOAA tide predictions. The null values "." indicate that the soft-sediment site was not sampled or the start time was not recorded.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain:

The estimated local time (24-hr) when the falling tide would reach 0.0 m based on NOAA tide predictions.

Attribute:

Attribute\_Label: SurveyStartTime  
Attribute\_Definition:

The local time (24-hr) the soft-sediment sampling began. The null values "." indicate that the soft-sediment site was not sampled or the start time was not recorded.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain: The local time (24-hr) the soft-sediment sampling began.

Attribute:

Attribute\_Label: PitCount  
Attribute\_Definition:

The number of foraging pits from sea otters or sea stars that were observed. The null values "." indicate that the number of pits was not recorded.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Range\_Domain:

Range\_Domain\_Minimum: 0  
Range\_Domain\_Maximum: 122  
Attribute\_Units\_of\_Measure: Count

Attribute:

Attribute\_Label: Comments  
Attribute\_Definition:

Observational notes and information about substrate types, if applicable.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain:

Observational notes and information about substrate types, if applicable.

Detailed\_Description:

Entity\_Type:

Entity\_Type\_Label: KBAYKATMKEFJWPWS\_2007-2021\_Soft\_Sediment\_Bivalve\_Size.csv  
Entity\_Type\_Definition:

Table with the size of bivalves sampled in soft-sediment habitats of Prince William Sound, Katmai National Park and Preserve, Kachemak Bay, and Kenai Fjords National Park. Each record (row) represents one individual bivalve. Presented in a Comma Separated Value (CSV) formatted table.

Entity\_Type\_Definition\_Source: Author defined

Attribute:

Attribute\_Label: SiteID  
Attribute\_Definition:

Identification code of sampling site within each sampling block, as defined in Coletti et al. 2017, <https://doi.org/10.5066/F78S4N3R>. The SiteID is comprised of 4 parts, 1) the region (AKP, KEP, PWS), 2) the block number (4, 5, 7, 8, 9, or 10), 3) the sampling type (described below), and 4) the sample type number (01-05).

Attribute\_Definition\_Source: Coletti et al. 2017  
Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: SI  
Enumerated\_Domain\_Value\_Definition: Sampling type = Soft Intensive Block  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: SS  
Enumerated\_Domain\_Value\_Definition: Sampling type = Soft Sediment Block  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: SE  
Enumerated\_Domain\_Value\_Definition: Sampling type = Soft Extensive Block  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute:

Attribute\_Label: SiteName  
Attribute\_Definition:

Name of sampling site within each sampling block, as defined in Coletti et al. 2017, <https://doi.org/10.5066/F78S4N3R>

Attribute\_Definition\_Source: Coletti et al. 2017  
Attribute\_Domain\_Values:

Unrepresentable\_Domain: Name of sampling sites within each sampling block.

Attribute:

Attribute\_Label: YearSample  
Attribute\_Definition: Year the soft-sediment site was sampled.  
Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain: Year the soft-sediment site was sampled (YYYY).

Attribute:

Attribute\_Label: SampleDate  
Attribute\_Definition: Date the soft-sediment site was sampled.  
Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain:

Date the soft-sediment site was sampled or sampled (YYYY-MM-DD).

Attribute:

Attribute\_Label: Elevation  
Attribute\_Definition:

Tidal elevation (m) where the horizontal transect for sampling was placed. Most were conducted at mean lower low water (MLLW; 0 meters), with some in early years placed at 0.5 m.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Range\_Domain:

Range\_Domain\_Minimum: 0.0  
Range\_Domain\_Maximum: 0.5  
Attribute\_Units\_of\_Measure: Meters

Attribute:

Attribute\_Label: QuadratNumber  
Attribute\_Definition:

The sequential number of quadrat sampled. Twelve quadrats were commonly sampled; quadrat 1 is closest to the start of the transect while quadrat 12 is closest to the end of the transect.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Range\_Domain:

Range\_Domain\_Minimum: 1  
Range\_Domain\_Maximum: 12  
Attribute\_Units\_of\_Measure: Integer

Attribute:

Attribute\_Label: Current\_ScientificName  
Attribute\_Definition:

The currently accepted (valid) scientific name of the sampled species.

Attribute\_Definition\_Source:

ITIS Integrated Taxonomic Information System or World Register of Marine Species (WoRMS)

Attribute\_Domain\_Values:

Unrepresentable\_Domain: The currently accepted scientific name of the sampled species.

Attribute:

Attribute\_Label: Current\_SpeciesCode  
Attribute\_Definition:

The three-letter species code for the currently accepted scientific name. The null values "." indicate that the current species code has not been assigned.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain:

The three-letter species code for the currently accepted scientific name.

Attribute:

Attribute\_Label: Collected\_ScientificName  
Attribute\_Definition:

The scientific name of the sampled species at the time of collection

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain:

The scientific name of the sampled species at the time of collection

Attribute:

Attribute\_Label: Collected\_SpeciesCode  
Attribute\_Definition:

The three-letter species code for the scientific name of the species at the time of collection.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain:

The three-letter species code for the scientific name of the species at the time of collection.

Attribute:

Attribute\_Label: Size  
Attribute\_Definition:

Size (mm) of the sampled bivalve. The null values "." indicate that the size was not recorded.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Range\_Domain:

Range\_Domain\_Minimum: 1  
Range\_Domain\_Maximum: 105  
Attribute\_Units\_of\_Measure: Millimeters

Attribute:

Attribute\_Label: Broken  
Attribute\_Definition:

Was the bivalve shell broken or not? Broken shells cannot be measured.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: No  
Enumerated\_Domain\_Value\_Definition: The shell was not broken and size could be measured.  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: Yes  
Enumerated\_Domain\_Value\_Definition: The shell was broken and size could not be measured.  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute:

Attribute\_Label: Subsample  
Attribute\_Definition: Was a Mytilus trossulus core subsample collected?  
Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: No  
Enumerated\_Domain\_Value\_Definition: A core subsample was not collected.  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: Yes  
Enumerated\_Domain\_Value\_Definition: A core subsample was collected.  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: Unknown  
Enumerated\_Domain\_Value\_Definition: It is unknown if a core subsample was collected or not.  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute:

Attribute\_Label: Comments  
Attribute\_Definition:

Observational notes and information about broken bivalves, if applicable.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain:

Observational notes and information about broken bivalves, if applicable.

Detailed\_Description:

Entity\_Type:

Entity\_Type\_Label: KBAYKATMKEFJWPWS\_2007-2021\_Soft\_Sediment\_Bivalve\_Count.csv  
Entity\_Type\_Definition:

Table with the count of bivalves within 0.25 square meter quadrats sampled in Prince William Sound, Katmai National Park and Preserve, Kachemak Bay, and Kenai Fjords National Park. Each record (row) represents one site and quadrat for a given year. Presented in a Comma Separated Value (CSV) formatted table.

Entity\_Type\_Definition\_Source: Author defined

Attribute:

Attribute\_Label: SiteID  
Attribute\_Definition:

Identification code of sampling site within each sampling block, as defined in Coletti et al. 2017, <https://doi.org/10.5066/F78S4N3R>. The SiteID is comprised of 4 parts, 1) the region (AKP, KEP, PWS), 2) the block number (4, 5, 7, 8, 9, or 10), 3) the sampling type (described below), and 4) the sample type number (01-05).

Attribute\_Definition\_Source: Coletti et al. 2017  
Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: SI  
Enumerated\_Domain\_Value\_Definition: Sampling type = Soft Intensive Block  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: SS  
Enumerated\_Domain\_Value\_Definition: Sampling type = Soft Sediment Block  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: SE  
Enumerated\_Domain\_Value\_Definition: Sampling type = Soft Extensive Block  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute:

Attribute\_Label: SiteName  
Attribute\_Definition:

Name of sampling site within each sampling block, as defined in Coletti et al. 2017, <https://doi.org/10.5066/F78S4N3R>

Attribute\_Definition\_Source: Coletti et al. 2017  
Attribute\_Domain\_Values:

Unrepresentable\_Domain: Name of sampling sites within each sampling block.

Attribute:

Attribute\_Label: YearSample  
Attribute\_Definition: Year the soft-sediment site was sampled.  
Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain: Year the soft-sediment site was sampled (YYYY).

Attribute:

Attribute\_Label: Elevation  
Attribute\_Definition:

Tidal elevation (m) where the horizontal transect for sampling was placed. Most were conducted at mean lower low water (MLLW; 0 meters), with some early years placed at 0.5 m.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Range\_Domain:

Range\_Domain\_Minimum: 0  
Range\_Domain\_Maximum: 0.5  
Attribute\_Units\_of\_Measure: Meters

Attribute:

Attribute\_Label: QuadratNumber  
Attribute\_Definition:

The sequential number of quadrat sampled. Twelve quadrats were commonly sampled; quadrat 1 is closest to the start of the transect while quadrate 12 is closest to the end of the transect.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Range\_Domain:

Range\_Domain\_Minimum: 0  
Range\_Domain\_Maximum: 12  
Attribute\_Units\_of\_Measure: Integer

Attribute:

Attribute\_Label: MusselCore  
Attribute\_Definition:

Was a core subsample of mussels collected? Subsamples were collected at quadrats that had a thick covering of mussels.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: No  
Enumerated\_Domain\_Value\_Definition: A mussel core was not collected.  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: Yes  
Enumerated\_Domain\_Value\_Definition: A mussel core was collected.  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: Unknown  
Enumerated\_Domain\_Value\_Definition: It is unknown if a mussel core was collected.  
Enumerated\_Domain\_Value\_Definition\_Source: Author defined

Attribute:

Attribute\_Label: MusselCore\_Count  
Attribute\_Definition:

This attribute indicates the count of mussels within the core for those quadrats in which a mussel subsample was taken (as indicated by "Yes" in the attribute 'MusselCore') by using a core. The null values "." indicate that the mussel count was not recorded.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Range\_Domain:

Range\_Domain\_Minimum: 22  
Range\_Domain\_Maximum: 88  
Attribute\_Units\_of\_Measure: Count

Attribute:

Attribute\_Label: Mytilus\_trossulus  
Attribute\_Definition:

The number of Mytilus trossulus counted in the 0.25 sq m quadrat, or in the case of subsampled mussels, the estimated count within 0.25 sq m, calculated as the 'MusselCore\_Count' multiplied by 27.802491, which accounts for the difference in area of the core (0.008992 sq m) relative to the quadrat. The null values "." indicate that the species count was not recorded.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Range\_Domain:

Range\_Domain\_Minimum: 0  
Range\_Domain\_Maximum: 2247  
Attribute\_Units\_of\_Measure: Count

Attribute:

Attribute\_Label: Astarte\_montagui through Yoldia\_spp  
Attribute\_Definition:

The counts of 43 bivalve species in each 0.25 sq m quadrat. The column label for each of these 43 columns is the scientific name of the species. The null values "." indicate that the species count was not recorded. Values of zero "0" indicate that the species was actively counted and no bivalves of that species were counted.

Format: [Genus]\_[species]; "spp" indicates the sum of all bivales of the same genus that were not identified to the species level.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain:

The number of bivalves of each species counted in the 0.25 sq m quadrat.

Attribute:

Attribute\_Label: Any\_Scallop  
Attribute\_Definition:

The number of scallops present in the the quadrat sampled. The null value "." indicates that the number of scallops was not recorded.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain: The number of scallops counted in the 0.25 sq m quadrat.

Attribute:

Attribute\_Label: Unid\_Bivalve  
Attribute\_Definition:

The number of unidentified bivalves present in the the quadrat sampled. The null values "." indicate that the number of unidentified bivalves was not recorded.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain:

The number of unidentified bivalves counted in the 0.25 sq m quadrat.

Attribute:

Attribute\_Label: Unid\_Clam  
Attribute\_Definition:

The number of unidentified clams present in the the quadrat sampled. The null values "." indicate that the number of unidentified clams was not recorded.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain:

The number of unidentified clams counted in the 0.25 sq m quadrat.

Attribute:

Attribute\_Label: Unid\_Mussel  
Attribute\_Definition:

The number of unidentified mussels present in the the quadrat sampled. The null values "." indicate that the number of unidentified clams was not recorded.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain:

The number of unidentified mussels counted in the 0.25 sq m quadrat.

Detailed\_Description:

Entity\_Type:

Entity\_Type\_Label:

KBAYKATMKEFJWPWS\_2007-2021\_Soft\_Sediment\_Bivalve\_Contributors.csv

Entity\_Type\_Definition:

Table with a list of principle investigators and contributors to soft-sediment bivalve sampling within the Nearshore Component of Gulf Watch Alaska. Presented in a Comma Separated Value (CSV) formatted table.

Entity\_Type\_Definition\_Source: Author defined

Attribute:

Attribute\_Label: Last\_Name  
Attribute\_Definition: The last name of a Gulf Watch Alaska contributor.  
Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain: The last name of a Gulf Watch Alaska contributor.

Attribute:

Attribute\_Label: First\_Name  
Attribute\_Definition: The first name of a Gulf Watch Alaska contributor.  
Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain: The first name of a Gulf Watch Alaska contributor.

Attribute:

Attribute\_Label: ORCID  
Attribute\_Definition:

The ORCID (Open Researcher and Contributor ID) for each collaborator. The null values "." indicate that the contributor does not have an ORCID or the ID is unknown.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain:

The ORCID (Open Researcher and Contributor ID) for each collaborator.

Attribute:

Attribute\_Label: Position  
Attribute\_Definition: The position title of the Gulf Watch Alaska contributor.  
Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain: The position title of the Gulf Watch Alaska contributor.

Attribute:

Attribute\_Label: Agency  
Attribute\_Definition:

The agency who the Gulf Watch Alaska contributor is associated with.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain:

The agency who the Gulf Watch Alaska contributor is associated with.

Attribute:

Attribute\_Label: Program  
Attribute\_Definition:

The program within the agency who the Gulf Watch Alaska contributor is associated with. The null values "." indicate that the program of the collaborator is unknown.

Attribute\_Definition\_Source: Author defined  
Attribute\_Domain\_Values:

Unrepresentable\_Domain:

The program within the agency who the Gulf Watch Alaska contributor is associated with.

Distribution\_Information:

Distributor:

Contact\_Information:

Contact\_Organization\_Primary:

Contact\_Organization: U.S. Geological Survey, Alaska Science Center

Contact\_Address:

Address\_Type: Mailing and Physical  
Address: 4210 University Drive  
City: Anchorage  
State\_or\_Province: Alaska  
Postal\_Code: 99508  
Country: USA

Contact\_Voice\_Telephone: 907-786-7000  
Contact\_Electronic\_Mail\_Address: ascweb@usgs.gov

Resource\_Description:

The U.S. Geological Survey, Alaska Science Center is the authoritative source and distributor of these data.

Distribution\_Liability:

Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey, no warranty expressed or implied is made regarding the display or utility of the data for other purposes or on all computer systems, nor shall the act of distribution constitute any such warranty. Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Standard\_Order\_Process:

Digital\_Form:

Digital\_Transfer\_Information:

Format\_Name: CSV  
Format\_Information\_Content:

Data are distributed in a Zip package containing data in CSV format and FGDC metadata in XML and HTML formats.

File\_Decompression\_Technique:

Compression applied by the 7-Zip utility using the default compression level [5]. The Zip package can be decompressed and unpacked by open source or commercially available unzip tools.

Digital\_Transfer\_Option:

Online\_Option:

Computer\_Contact\_Information:

Network\_Address:

Network\_Resource\_Name: <https://doi.org/10.5066/F71834N0>

Fees: None

Metadata\_Reference\_Information:

Metadata\_Date: 20220929  
Metadata\_Contact:

Contact\_Information:

Contact\_Organization\_Primary:

Contact\_Organization: U.S. Geological Survey, Alaska Science Center

Contact\_Address:

Address\_Type: Mailing and Physical  
Address: 4210 University Drive  
City: Anchorage  
State\_or\_Province: Alaska  
Postal\_Code: 99508  
Country: USA

Contact\_Voice\_Telephone: 907-786-7000  
Contact\_Electronic\_Mail\_Address: ascweb@usgs.gov

Metadata\_Standard\_Name:

FGDC Biological Data Profile of the Content Standard for Digital Geospatial Metadata (CSDGM)

Metadata\_Standard\_Version: FGDC-STD-001.1-1999

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