PROGRAM & ABSTRACTS

47th ANNUAL MEETING OF THE

Alaska Anthropological Association

FAIRBANKS, ALASKA

FEBRUARY 26 -29, 2020

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ACKNOWLEDGEMENTS

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Local Organizing Committee

- National Park Service

Alaska Anthropological Association Officers

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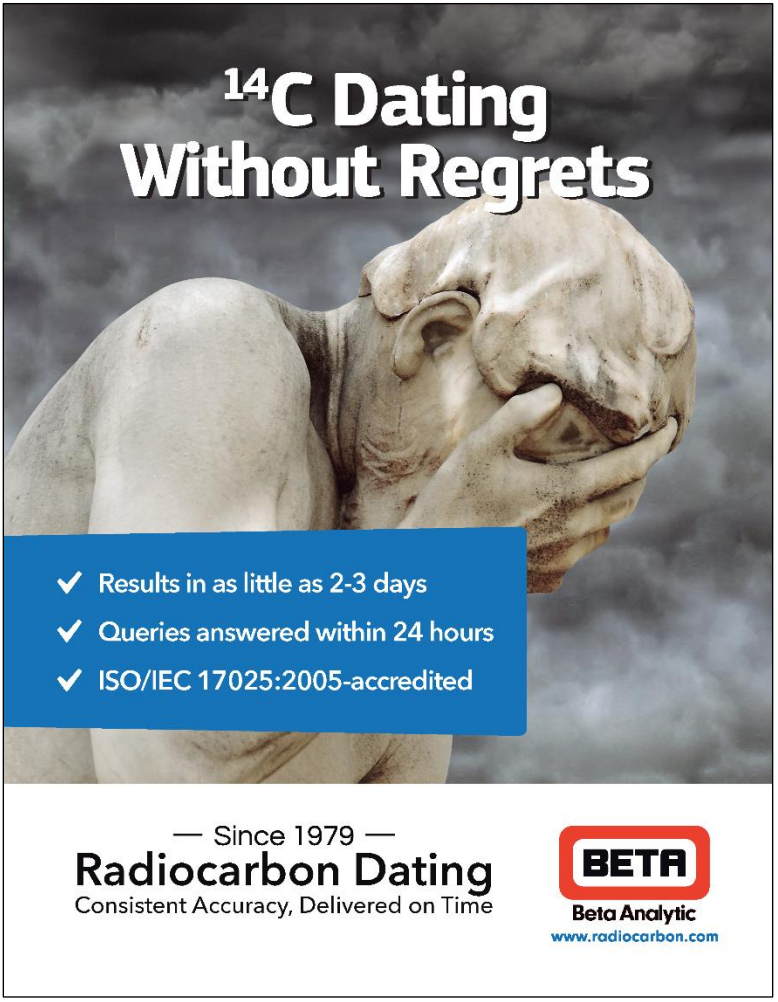
On the Cover: Image courtesy of De-ka-xeen Mehner.

TABLE OF CONTENTS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WELCOME

On behalf of the organizing committee I want to welcome you to Fairbanks and the 47th annual meeting of the Alaska Anthropological Association. Thanks for making time to be part of this meeting, for traveling from faraway places, and for contributing so many thoughtful papers, posters, and panels. It's an impressively wide span of topics that are encompassed at this conference from Native language studies, community health topics, and World War II history, to geosciences and stable isotope analyses in archaeology. I can't imagine another discipline that would cover so much under one roof. Rather than a mixed bag, the eclectic proceedings are ingredients for a holistic, creative, multidisciplinary approach to addressing the many practical challenges facing people in Alaska and across the circumpolar North, and for preserving cultural values and important places. It's gratifying to see so many presentations lead by community representatives and the increasingly collaborative approach between residents, researchers, and non-profit and government professionals that these presentations reflect. It's also gratifying to see so much involvement from students and early career professionals, including the organization of several interesting sessions. Please go out of your way to pat one of these budding leaders on the back during the meeting. A few encouraging words at this stage can have a profoundly positive influence on someone's career. Thanks go to the group of volunteers who stepped forward to run the daily operations of the meeting from registration to technology support. Finally, enjoy your time in downtown Fairbanks. I'd encourage you to venture out to find the interesting new places for food and drink that have opened since our last meeting here. One is in a hidden location within an old fire station; another serves 36 microbrews. If you have kids with you the Fairbanks Children's Museum is a great place to explore. Stay warm and have fun.

- Jeff Rasic

Alaska Stable Isotope Facility

http://ine.uaf.edu/werc/asif/

Services

We provide isotopic analyses of a wide variety of modern and ancient samples, including: muscle, feathers, otoliths, blood, bone collagen, algae & zooplankton, soil & sediment, whiskers & claws, water, vegetation - practically anything!

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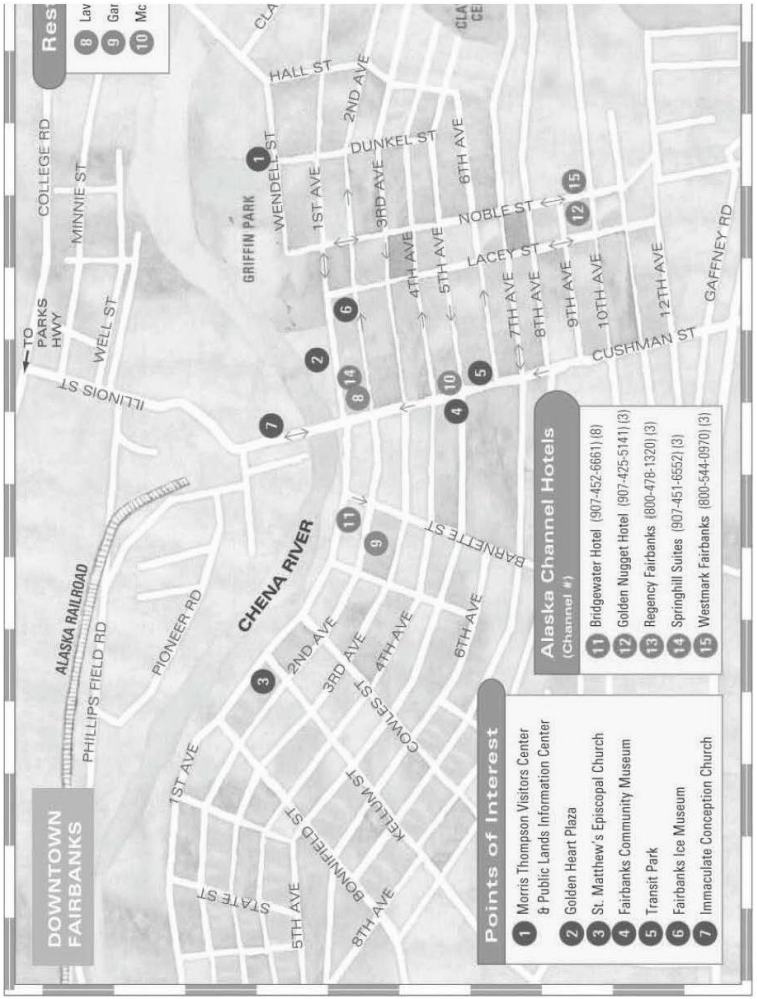
Contact us:
Tim Howe
Phone: 907-474-7826
E-mail: tshowe@alaska.edu

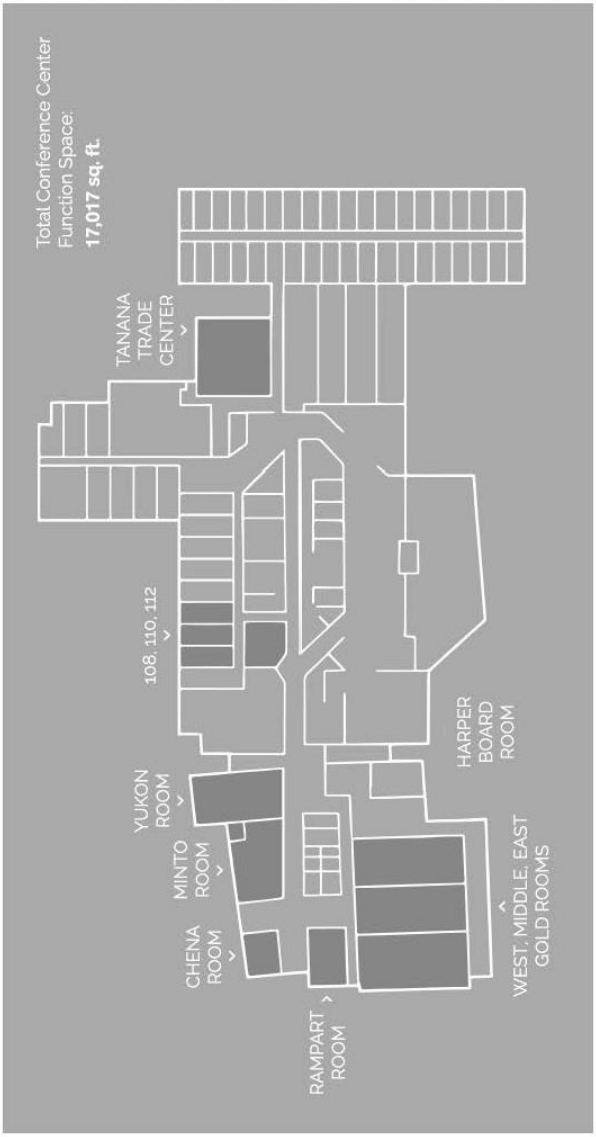
UNIVERSITY OF ALASKA FAIRBANKS

MAPS AND MEETING INFORMATION

Downtown Fairbanks



westmark conference center



Meeting Information

The meeting **registration and information desk** is located in front of the **Minto Room** at the Westmark Conference Center. It will be open Wednesday, February 26 from 1:00 pm- 5:00 pm and during the opening reception at Venue; Thursday, February 27 from 8:00 am- 5:00 pm; Friday, February 28 from 8:00 am- 5:00 pm; and Saturday, February 29 from 8:00 am- 1:00 pm. On-site registration payments will be by check, credit card, or exact cash only.

Meeting and Event Rooms

All meeting and event rooms are located in the following spaces in the Westmark conference center unless otherwise noted: **Gold West, Gold Middle, Gold East, and Yukon.** Please refer to the meeting schedule and floor plan to find your sessions. Coffee and snacks will be available in the **Rampart Room**, and the **Chena Room** is available as a quiet/private room to accommodate nursing mothers and babies**.** The Wednesday opening reception will occur at **Venue,** located at 514 2nd Avenue in downtown Fairbanks**.**

Vendor Table and Poster Set-Up

Vendors and exhibitors may set up tables in the **Minto Room** beginning at 8:00 am on Thursday, February 27.

Posters may be hung in the **Minto Room** beginning at 8:00 am on Thursday, February 27. Push-pins and tape will be available for attaching to boards. Posters should not exceed 4 x 3 feet in size. Posters have been assigned a number to coordinate with a poster-board. Please hang your poster on the appropriate board. Poster presenters are encouraged to attend the **Poster Happy Hour on Friday, February 28 from 5:00 pm- 6:00 pm**. Posters should be removed by Saturday, February 29 by 12:00 noon.

Paper Presentations

All presentations are limited to 20 minutes; please keep to that time so that others will not be short-changed. Provide your session organizer with your presentation file (Mac or PC version) or other media on a jump drive, CD or DVD as far in advance as possible so that it can be loaded onto the podium computer. Please do not plan to use your own computer for your presentation. Meeting rooms are equipped with a presentation laptop (provided by the session organizer), podium with

microphone, LCD projector, screen, house sound, and wireless internet. Video and audio files will be played only through the presentation laptop. Please check with your session organizer about software and pre-test your files.

Wifi

Wifi access for the conference is free but with limited speed. A code will be available upon check-in at the registration desk. If you were planning on using videos, audio, or online mapping tools in your workshops or presentations, please be aware of these limitations in the internet speed and prepare for adjustments as needed.

Parking

Conference attendees should park in the conference center parking lot to the north side of the conference center entrance.

Lunch on Your Own

Downtown Fairbanks is home to many eateries within walking distance of the Westmark Fairbanks Hotel and Conference center (see map on next page). Right in the hotel is the Red Lantern Steak & Spirits. For additional places to eat, ask one of our volunteers at the Information Desk or the Hotel Front Desk Staff.


Chena River
Front St
Clay St
Old Steese Hwy
1st Ave
2nd Ave
3rd Ave
4th Ave
5th Ave
6th Ave
7th Ave
8th Ave
9th Ave
10th Ave
11th Ave
12th Ave
Hall St
Dunkel St
Noble St
Lacey St
Cushman St
N Cushman St
Barnette St
W Barnette St
Wickersham St
Cowles St
Kellum St
Perry St
Turner St
N Turner St
Gaffney Rd
Log Cabin Ct
Shoreway Dr
Wendell Ave
W Clay St
Golden heart plaza
Morris Thompson Cultural & Visitors Center
Diving Duck @ Lunch Cafe & Eatery
FNSB Assessing Department
Big Daddy's BBQ & Banquet Hall
Noodle House
Gambardella's Pasta Bella
Homey option for classic Italian food
Lavelle's Bistro
American cuisine & a lengthy wine list
Eastern Treats
Bobbys Downtown
Greek eatery with live jazz on weekends
Bahn Thai
Thai favorites in subdued surrounds
Thai House Restaurant
Family-run option for pad Thai & curries
US Post Office
UAF Community and Technical College
Fairbanks City Hall
Westmark Fairbanks Hotel &...
Regency Fairbanks
Tubbys BBQ
Arctic National Wildlife Refuge
Co-op Market Grocery & Deli
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CONFERENCE EVENTS

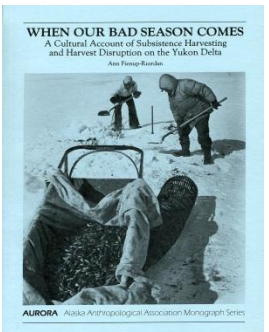
MEETINGS

AHRS User Group Meeting
Wednesday, February 26, 1:00 pm-3:00 pm, Yukon Room

Alaska Anthropological Association Business Meeting
Saturday, February 29, 9:00 am-10:20 am, Gold Room

· JOIN OR RENEW YOUR MEMBERSHIP NOW!
www.alaskaanthropology.org/membership

All members receive an annual subscription to the *Alaska Journal of Anthropology* and the Association's quarterly electronic newsletter. Additional benefits include discounted registration for the Annual Meeting, discounted prices on previous print editions of the *Aurora Monograph Series* and the *Alaska Journal of Anthropology,* access to members-only content on the website, and voting privileges.



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EXTRA-CURRICULAR ACTVITIES

Archaeology of Nordic Skiing Talk

Thursday, February 27, 7:00 pm- 8:00 pm

Black Spruce Brewing Company

Archaeologist Monty Rogers will give a presentation on The Archaeology of Skiing on Thursday, February 27, at 7:00 pm, Black Spruce Brewing Company. This is a free public event sponsored by the Alaska Anthropological Association and the Nordic Ski Club of Fairbanks. Under 21s are welcome if accompanied by their parent/guardian. Seating is first come/first served.
Contact Julie Esdale for more information.

Army Corps of Engineers Permafrost Tunnel Tour

Saturday, February 29, 1:00 pm- 3:00pm

Depart from Westmark Hotel

Come for a tour of the US Army Cold Regions Research and Engineering Laboratory (CRREL) Permafrost Research Tunnel. Visit this engineering marvel and natural laboratory located in Goldstream Creek just outside of Fox. Go back in time to the late Pleistocene and learn about ancient animals, alluvial deposits, frozen ground engineering challenges, and ground-ice features. The tunnel was expanded in 2019 and expansion is continuing right now. This 30-minute tour will be led by CRREL staff Gary Larsen.

Birch Hill Cross Country Ski Excursion

Saturday, February 29, 1:00 pm- 4:00 pm

Depart from Westmark Hotel

Ski the Nordic trails at the Birch Hill Recreation Area! The city of Fairbanks, Fort Wainwright, and Nordic Ski Club of Fairbanks maintain 30 km of beautiful world class racing and recreational ski trails in the hills north of Fairbanks. This tour will stop at TRAX to get geared up in professional cross country skis and then head up the hill to tour the trails for 1-1.5 hrs. Beginner instruction provided upon request. Your choice of classic or skate Nordic skiing. Tour will be led by local archaeologist and Junior Nordic ski instructor Julie Esdale.

BOOK ROOM / EXHIBIT HALL

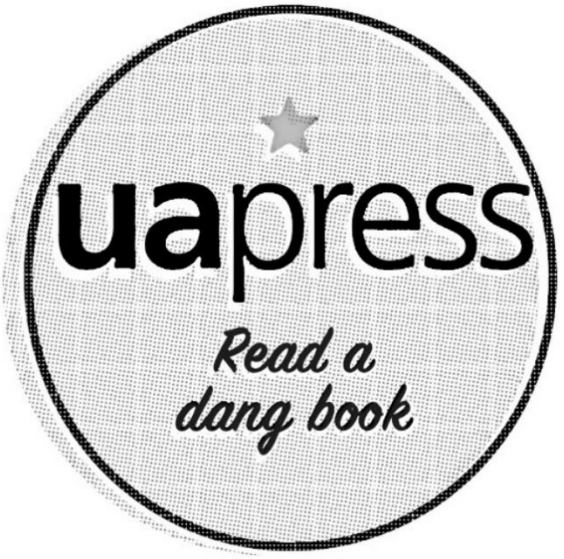
Thursday-Saturday, Minto Room

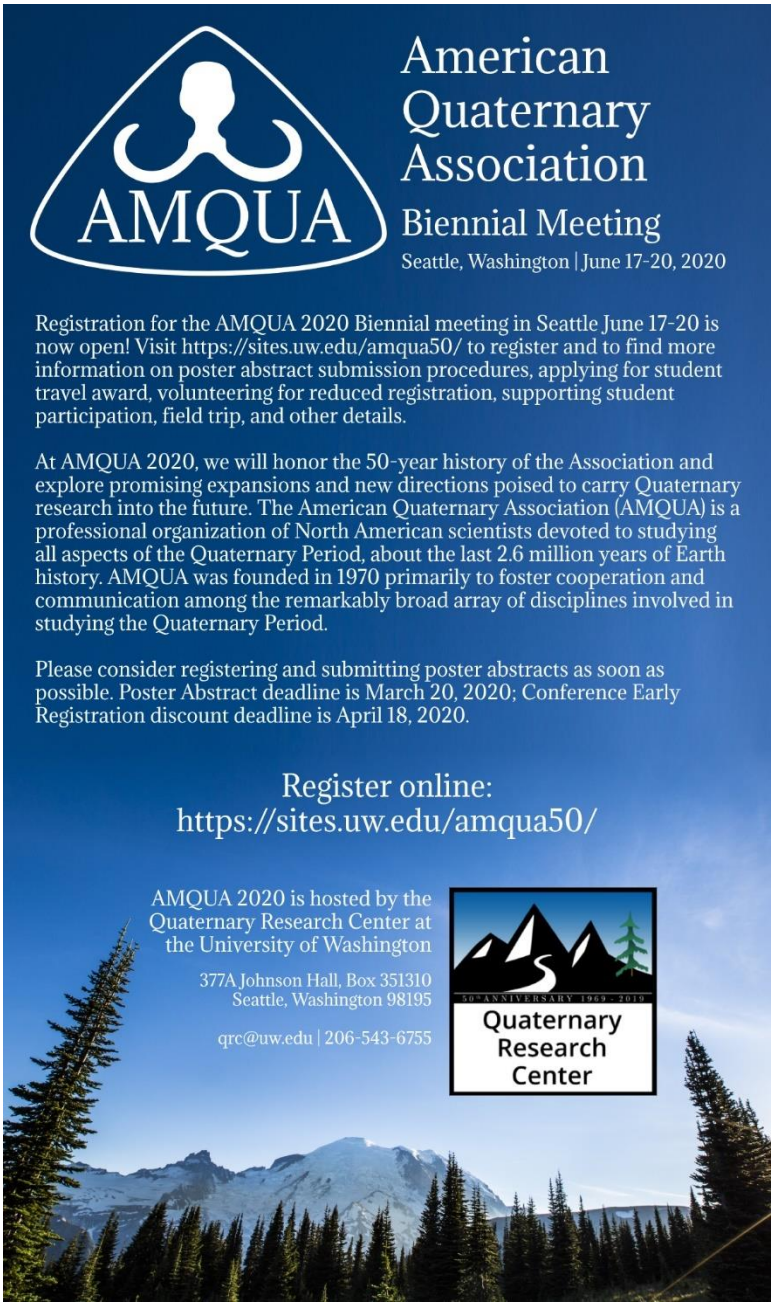
MORNING and AFTERNOON BREAKS

Thursday, 10:00 am-10:20 am, Rampart Room
Thursday, 3:00 pm-3:20 pm, Rampart Room

Friday, 10:00 am-10:20 am, Rampart Room
Friday, 3:00 pm-3:20 pm, Rampart Room

Enjoy complimentary coffee and tea service supplied by the Westmark Hotel Fairbanks.




AMQUA
American Quaternary Association
Biennial Meeting
Seattle, Washington | June 17-20, 2020
Registration for the AMQUA 2020 Biennial meeting in Seattle June 17-20 is now open! Visit https://sites.uw.edu/amqua50/ to register and to find more information on poster abstract submission procedures, applying for student travel award, volunteering for reduced registration, supporting student participation, field trip, and other details.
At AMQUA 2020, we will honor the 50-year history of the Association and explore promising expansions and new directions poised to carry Quaternary research into the future. The American Quaternary Association (AMQUA) is a professional organization of North American scientists devoted to studying all aspects of the Quaternary Period, about the last 2.6 million years of Earth history. AMQUA was founded in 1970 primarily to foster cooperation and communication among the remarkably broad array of disciplines involved in studying the Quaternary Period.
Please consider registering and submitting poster abstracts as soon as possible. Poster Abstract deadline is March 20, 2020; Conference Early Registration discount deadline is April 18, 2020.
Register online:
https://sites.uw.edu/amqua50/
AMQUA 2020 is hosted by the Quaternary Research Center at the University of Washington
377A Johnson Hall, Box 351310
Seattle, Washington 98195
qrc@uw.edu | 206-543-6755
50th ANNIVERSARY 1969 - 2019
Quaternary Research Center

OPENING RECEPTION

Wednesday, February 26, 6:00 pm-9:00 pm, Venue – 514 2nd Ave.

Join us to celebrate the opening of the conference with Two Minute at a Time presentations, snacks, and refreshments. All conference attendees welcome!

ANTI-HARASSMENT SESSION

Thursday, February 27, 8:20 am – 10:00 am, Gold Room

This interactive session will provide members with an overview of the Alaska Anthropological Association Anti-Harassment Policy and be followed by Green Dot training held in partnership with STAR (Standing Together Against Rape). The Green Dot training will focus on how attendees can advocate for a safer community through bystander intervention on acts of power-based personal violence. Attendees will come away from the training with a variety of strategies to safely intervene if they see something high risk or harmful as well as concrete ideas of things they can do every single day to make their community safer in both their personal and professional lives. All members are encouraged to attend and participate in this important dialogue!

LUNCHEON

Keynote Speaker
Princess Johnson, Neets'aii Gwich'in and creative producer for PBS Kids' Molly of Denali

Thursday, February 27, 12:00 pm-2:00 pm, Westmark Hotel Fairbanks

The Need for Indigenous Narrative Sovereignty

For so long, the 'colonial gaze' has obscured, romanticized, manufactured, and extracted Indigenous stories resulting in stereotypes that haunt the American psyche to this day. The power of negative stereotypes have far-reaching implications in our society, including the shaping of policy, the perpetuation of racism in education, healthcare, etc. We will discuss the need for Indigenous Narrative Sovereignty and the role it plays in shifting the dominant narrative and providing space for an Indigenous worldview.

AWARDS BANQUET

Keynote Speaker
Walkie Charles and Billy Charles

Friday, February 28, 6:00 pm-9:00 pm, Westmark Hotel Fairbanks

Defining Ethical Research from a Local Perspective

Walkie Charles, originally of Emmonak, is an associate professor at the University of Alaska Fairbanks and heads the Yup'ik-degree program.

Billy Charles has worked for many years with the Center for Alaska Native Health Research as co-PI of the Qungasvik Project, among others, that aims at wellness for the Yup'ik communities – strength-based project that helps reducing Alaska Native suicide and alcohol misuse.

BELZONI SOCIETY

Saturday, February 29, 7:00 pm-10:00 pm, The Marlin

Come join us for the unofficial finale of the annual Alaska Anthropological Association meeting on Saturday, February 29, at The Marlin. For over 30 years, the Belzoni Society has met every Saturday at the end of the conference to celebrate, bond, and let off some steam! As always, there will be sacred reading from the Tome of Belzoni, followed by the best awards ceremony of the year!

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SCHEDULE AT A GLANCE

Wednesday, February 26, 2020		
9:00am-4:00pm	ACZ Workshop ***GOLD EAST***	Snack ***RAMPART***
10:00am-12:00pm	Place Names Meeting ***YUKON***	Snack ***RAMPART***
1:00pm-3:00pm	AHRS User Group Meeting ***YUKON***	Snack ***RAMPART***
6:00pm-9:00pm	**Registration and Opening Reception – Venue (514 2nd Ave)**	
7:00pm-8:00pm	Anthropology of Alaska, Two Minutes at a Time	

Thursday, February 27, 2020							
8:00am-5:00pm	Registration & Info Desk ***Westmark Hotel***						
8:20am-10:00am	Alaska Anthropological Association Anti-Harassment Policy, Training, and Discussion						
BREAK	**BREAK**						
10:20am-12:00pm	Early Days ***GOLD WEST***	General Yukon ***GOLD MIDDLE***	Medical Anth ***GOLD EAST***	Place Names ***YUKON***	Book/Poster ***MINTO***	Nursing/Quiet ***CHENA***	Snack ***RAMPART***
12:00pm-2:00pm	**Luncheon Keynote – Princess Johnson – Westmark Hotel** (Ticket Required)						
2:00pm-3:00pm	Early Days ***GOLD WEST***	General Yukon ***GOLD MIDDLE***	Medical Anth ***GOLD EAST***	Place Names ***YUKON***	Book/Poster ***MINTO***	Nursing/Quiet ***CHENA***	Snack ***RAMPART***
BREAK	**BREAK**						
3:20pm-5:00pm	Early Days ***GOLD WEST***	Undergraduate ***GOLD MIDDLE***	General Anth ***GOLD EAST***	Museums Panel ***YUKON***	Book/Poster ***MINTO***	Nursing/Quiet ***CHENA***	Snack ***RAMPART***
7:00pm-8:00pm	**Archaeology of Skiing - Monty Rogers – Black Spruce Brewing Co.**						

Friday, Feb 28, 2020							
8:00am-5:00pm	Registration & Info Desk ***Westmark Hotel***						
8:20am-10:00am	CBPR ***GOLD WEST***	General Arch ***GOLD MIDDLE***	AK Pen & Kodiak ***GOLD EAST***	Digital ***YUKON***	Book/Poster ***MINTO***	Nursing/Quiet ***CHENA***	Snack ***RAMPART***
BREAK	**BREAK**						
10:20am-12:00pm	CBPR ***GOLD WEST***	General Arch ***GOLD MIDDLE***	AK Pen & Kodiak ***GOLD EAST***	General Aleutian ***YUKON***	Book/Poster ***MINTO***	Nursing/Quiet ***CHENA***	Snack ***RAMPART***
12:00pm-2:00pm	**Lunch**						
2:00pm-3:00pm	Learning ***GOLD WEST***	General Arch ***GOLD MIDDLE***	Military WWII ***GOLD EAST***	***YUKON***	Book/Poster ***MINTO***	Nursing/Quiet ***CHENA***	Snack ***RAMPART***
BREAK	**BREAK**						
3:20pm-5:00pm	Learning ***GOLD WEST***	General Arch ***GOLD MIDDLE***	Military WWII ***GOLD EAST***	Early Peopling ***YUKON***	Book/Poster ***MINTO***	Nursing/Quiet ***CHENA***	Snack ***RAMPART***
5:00pm-6:00pm	Poster Session and Happy Hour - ***MINTO***						
7:00pm-8:00pm	**Dinner and Awards Ceremony – Walkie Charles and Billy Charles – Northern Latitudes at Westmark Hotel** (Ticket Required)						

Saturday, February 29, 2020	
8:30am-10:30am	Tour of Army Corps of Engineers Permafrost Tunnel ***Meet in Lobby of Westmark - Ticket Required***
9:00am-11:00am	Alaska Anthropological Association Business Meeting ***GOLD WEST***
1:00pm-4:00am	Birch Hill Cross Country Ski Excursion ***Meet in Lobby of Westmark - Ticket Required***
7:00pm-10:00pm	**Belzoni Society Meeting - The Marlin**

Alaska Quaternary Center

The Alaska Quaternary Center (AQC) congratulates the Alaska Anthropological Association on it's 47th annual meeting.

The AQC promotes Quaternary research and instruction at the University of Alaska Fairbanks.

We support student research and travel.
We host leading Quaternary scientists.
We receive no public funds.

Please donate!
•https://engage.alaska.edu/uaf/cnsm
or contact Nancy Bigelow (nhbigelow@alaska.edu)

AQC news and announcements
•https://www.uaf.edu/aqc/

Want updates on Quaternary events and funding opportunities? Join our email list. Contact Nancy Bigelow (nhbigelow@alaska.edu).

AQC

UAF UNIVERSITY OF ALASKA FAIRBANKS

UAF COLLEGE OF NATURAL SCIENCE & MATHEMATICS
University of Alaska Fairbanks

THURSDAY SESSIONS

POLICY MEETING

Alaska Anthropological Association Anti-Harassment Policy, Training, and Group Discussion

Organizers: Alaska Anthropological Association

Thursday, 8:20 am–10:00 am, GOLD

This interactive session will provide members with an overview of the Alaska Anthropological Association Anti-Harassment Policy and be followed by Green Dot training held in partnership with STAR (Standing Together Against Rape). The Green Dot training will focus on how attendees can advocate for a safer community through bystander intervention on acts of power-based personal violence.

SESSION 1

Early Days in Large Project Archaeology in North Alaska

Organizers: Ken Pratt, Matt Ganley, and Julie Esdale

Thursday, 10:20 am–5:00 pm, GOLD WEST

Large field projects in Alaska during the 1970s and early 1980s spawned a breed of archaeologists whose diverse accomplishments and sometimes bizarre behaviors are the stuff of legend in Alaska's anthropological community. To help preserve that rich history, selected members of the breed were invited to this session to share scholarly anecdotes, accounts of archaeological discoveries, favored stories and memories with a broader spectrum of colleagues. Designed to be informal and amusing, the session features open commentaries from not only the panelists but also a knowledgeable and mysterious discussant (or possibly two).

10:20-10:30 Ken Pratt and Matt Ganley / Introduction

10:30-10:50 Georgeie Reynolds / Memoirs

10:50-11:00	Julie Esdale / Slogging, Humping, and Mucking through Northern Alaska: The More Things Change, the More they Stay the Same
11:00-11:10	Caitlin R. Holloway / Fifty Years in Retrospect: Archaeology of the Trans-Alaska Pipeline System
11:10-11:25	Richard O. Stern / What I Did on a Summer Break from Grad School One Year Way Back When, and How It Led to A Lifetime in Alaska
11:25-11:40	Dale C. Slaughter / Why Wolves Howl and Other Stories from North Alaska Archaeological Projects
11:40-12:00	Michael Kunz / Low Tech Cultural Resource Fieldwork: How we did it in the "Early Days"
12:00-2:00	LUNCH
2:00-2:20	Bob Gal / Salvage, Rescue, Conserve
2:20-2:40	E. James Dixon / Retrospective on Large Project Archaeology in North Alaska: The Formative Years
2:40-3:00	Charles Holmes / The Fifth Thule Expedition's Siberian Legacy - A Comparative Dream
3:00-3:20	BREAK
3:20-3:40	Richard Reanier / The Use and Abuse of Data from Early North Slope Projects
3:40-4:00	Discussant: Georgeie Reynolds
4:00-4:20	Discussant: Howard Smith
4:20-4:40	Questions to the Panel: Matt Ganley
4:40-5:00	Open Discussion/Questions

SESSION 2

General Session on Archaeology of Yukon and Northern Interior Alaska

Organizer: National Park Service/Alaska Anthropological Association

Thursday, 10:20 am–3:00 pm, GOLD MIDDLE

This session is a group of papers that focus on archaeological research within the Yukon and Northern Interior of Alaska.

10:20-10:40	Adam Freeburg, Jillian Richie, and Hilary Hilmer / Results of Recent Fieldwork in Yukon-Charley Rivers National Preserve
10:40-11:00	Sam Coffman and Robin O. Mills / Continued Archaeological Investigation in the Fortymile River Drainage
11:00-11:20	Paddy Eileen Colligan / Big Data Provide the Big Archaeological Picture -- And May Contradict a Small Scale View
11:20-11:40	Norman Alexander Easton, Michael Grooms, and Jordan Handley / 2019 Update on Analysis of the Borderlands Culture History Project
11:40-12:00	Jodie MacMillan / An Archaeological Investigation of Subalpine and Alpine Use in the Southeast Yukon
12:00-2:00	LUNCH
2:00-2:20	Christian Thomas, Jenifer Poulin, Kate Helwig, Valerie Monahan, Carly Cran, P. Gregory Hare, and Jenifer Herkes / Identifying and Dating Ancient Residues from Yukon Ice Patch Collections
2:20-2:40	Holly Smith, Christian Thomas, Valerie Monahan, Claire Alix, Jennifer Poulin, Kate Helwig, Jen Herkes, Carcross/Tagish First Nation, and Kwanlin Dun First Nation / The Alligator Lake Throwing Dart: New Insights

into Ancient Hunting Technology from Yukon Ice Patches

2:40-3:00 Discussion

SESSION 3

Current Directions in Alaska Medical Anthropology

Organizer: Sally Carraher

Thursday, 10:40 pm–3:00 pm, GOLD EAST

Medical anthropology is a growing field within Alaska, as evidenced by the past decade of medical anthropological conference sessions at the aaa; an increasing number of medical anthropology faculty and students in Alaskan universities; and the different agencies that employ medical anthropologists. However, we are spread out across communities where we work and live, different types of employment, and across a wide array of research interests. To learn from and support each other, we invite paper submissions that will speak to the diverse current directions of research, pedagogy, and applied practice in this growing anthropological subfield in Alaska.

10:40-11:00 Lisa Schwarzburg / Exploring Implications of Indigenous Local Birth on Alaska Native Community Health

11:00-11:20 Britteny M. Howell / How to Get Undergrads to Care About Old People

11:20-11:40 Elaine Drew, Kevin Huo, Dillon McIntire, and Delaney Reece / Learning by Doing: Medical Anthropology Research at a Campus Recreation Center

11:40-12:00 Sally Carraher / What do You Mean by "Household" and Other Thorny Issues in Kinship Research with Indigenous Communities

12:00-2:00 LUNCH

2:00-2:20 Elizabeth Kell / The ALCAN - A History of Destruction, Health, Hardships, and Re-Indigenization

2:20-2:40 Meghan Ussing / Genetics and Indigenous Identity In Alaska and Canada

2:40-3:00 Discussion

SESSION 4

Place Name and Language Research in Alaska

Organizer: Hannah Atkinson, Nicole Braem, Justin Junge, Marcy Okada, and Jillian Richie

Thursday, 10:20 am–3:00 pm, YUKON

This session presents examples of recent place name and language research in Alaska with an emphasis on community driven or requested research. Presenters include local knowledge holders to northwest and northern Alaska as well as throughout the state. The session will also include a period of discussion of current needs, available assistance, and future direction of place name and language research to assist Alaskan Native communities and tribes.

10:20-10:40 James Kari and Anna Berge / Identifying Substrata in the Dena'ina and Alutiiq Language Areas

10:40-11:00 Norman Alexander Easton / Map Making, Anthropology, and the Construction of Geophysical Cultural Boundaries in the Western Subarctic of North America

11:00-11:20 Will D. Norton / "Studying My Own Language In Writing": Peter Kalifornsky and the Construction of Dena'ina Literacy

11:20-11:40 Leslie McCartney / Our Whole Gwich'in Way of Life Has Changed. Gwich'in K'yuu Gwiidandài' Tthak Ejuk Gòonlih. Stories from the People of the Land

11:40-12:00	Hilda Booth / Personal Experiences of Place names Work
12:00-2:00	LUNCH
2:00-2:20	Hannah Atkinson, Nicole Braem, Justin Junge, Marcy Okada, and Jillian Richie / Summary of the Inupiaq Place Names Workshop
2:20-3:00	Panel and Discussion

SESSION 5

Innovations and Experiences in Undergraduate Anthropological

Organizers: Elaine Drew

Thursday, 3:20 pm–5:00 pm, GOLD MIDDLE

Undergraduate students play an important role in the production of anthropological knowledge. These students bring new energy and new ideas to enduring anthropological questions. While some students gain research skills and experience through course-related assignments, others embark on independent or collaborative projects with fellow students, faculty, and community members. This session presents innovations and experiences in current undergraduate anthropological research and creative activities, followed by a roundtable panel discussion on the transformative power of experiential learning.

3:20-3:40	Kendrick Nelson McCabe / Conducting Research as A Non-Traditional Undergraduate Student
3:40-4:00	Dillon McIntire / Screw It, Let's Do a Research Project: Student Reflections on Undergraduate Research
4:00-4:20	Kellie Patricia Lynch / Participatory Action Methods in Community Engaged Music

4:20-4:40 Sveta Yamin-Pasternak / Engaging Alaskan Undergraduates, an Experientially Anthropological Reflection on Being a Mentor in the Great Land

4:40-5:00 Discussion

SESSION 6

General Session on Alaskan Anthropology and Ethnography

Organizer: National Park Service/Alaska Anthropological Association

Thursday, 3:20 am–5:00 pm, GOLD EAST

This general session is a group of papers that focus on anthropological and ethnographic research within Alaska.

3:20-3:40 Chris Cannon / Northern Dene Constellations as Worldview Projections: A Comparative Anthropological Study

3:40-4:00 David Koester / The Itelmen Khodila as Musical Genre -- Consciousness, Time and Nature

4:00-4:20 Hannah Bradley / Frontier Aesthetics on Kachemak Trails: Entitlement, Secrecy, and Access

4:20-4:40 Leslie McCartney / Observing Change in Alaska's National Parks Project Jukebox

4:40-5:00 Olga Lauter / Preservation of Alaska Native Traditions in the Anchorage Urban Environment

SESSION 7

Museums and Meaningful Consultation Panel

Organizer: Judith Ramos, Gail Dabaluz and Scott Shirar

Thursday, 3:20 pm–5:00 pm, YUKON

Our panel presentation focuses upon how to foster meaningful tribal and museum consultation to implement the Native American Graves

Protection Repatriation Act (NAGPRA) Through our repatriation experience, we observe that effective repatriation programs have hallmarks including:

- A shared commitment to foster greater collaboration between museum personnel and Indigenous people regarding the management of scientific research and public programs related to Indigenous cultural heritage.
- Advocating for organizational practices that act in ways that go beyond the minimum requirements of the NAGPRA legislation.
- Establishing a long-term professional relationship that go beyond the successful repatriation claim.
- Each panelist will discuss their experience working on repatriation

3:20-5:00 Panel Discussion

FRIDAY SESSIONS

SESSION 8

Community-Based Participatory Research in Alaska

Organizers: Dougless Skinner

Friday, 8:20 am–12:00 pm, GOLD WEST

Community-based participatory research (CBPR) is a methodological approach that includes community members in all aspects of the research—from inception to dissemination. CBPR is also purpose-driven, designed to address a social injustice, development effort, or research question of relevance and interest to the community. In the circumpolar North, CBPR has been focused on small, rural communities, usually with mostly or fully Indigenous populations, and research for whatever purpose relies on the local Indigenous knowledge to inform the research. But more than community-based research (CBR), CBPR includes more than only the knowledge of the people, also taking into consideration their worldviews, values, and local beliefs in helping to shape the project and understand its implications in local terms. A wide variety of topics are studied within CBPR efforts, including environment and climate change, economy, education, health, local cultural traditions, history (including local and ethno-history), and archaeology, among others. The session presents place-based participatory and community-driven methods for recent projects in the circumpolar North, followed by a roundtable panel discussion on CBPR and related topics.

8:20-8:40	Dougless Skinner / Towards a Knew Knowledge--Archaeology and Alaskan Native Communities; An Outsiders Reflection on Working with Indigenous Alaskans
8:40-9:00	Elaine Drew / CBPR and Ethics Review
9:00-9:20	Eduard Zdor / Collaborative Relations between Indigenous Scholars, Traditional Knowledge Holders, and Scientists

9:20-9:40 Kathryn E. Kransinski and Angela Wade / Community Collaboration in the Matanuska Watershed

9:40-10:00 Monty Rogers / Developing a Local Landmark Register in Alaska

10:00-10:20 BREAK

10:20-10:40 Stacey Fritz / Pay Alaska Natives to Attend Public Meetings

10:40-11:00 Faye Ewan and Odin Miller / Ahtna Fisheries and Food Sovereignty

11:00-11:20 Odin Miller and Shirley "Tursey" Smelcer / Fisheries, Research and Management on the Copper River

11:20-11:40 Adeline Raboff / Gwich'in Shamanic and Sexual Vocabulary

11:40-12:00 Marine Vanlandeghem / Fire among the Inupiat

SESSION 9

General Session on Archaeological Research

Organizer: National Park Service/Alaska Anthropological Association

Friday, 8:20 am–5:00 pm, GOLD MIDDLE

This general session is a group of papers that focus on archaeological research.

8:20-8:40 Matt Ganley / New Insights: An Inuit Pictograph on Alaska's Seward Peninsula

8:40-9:00 Anne M. Jensen / Vanishing Sites, Degrading Permafrost: How Archaeologists, Anthropologists, and Permafrost Researchers Can Help Each Other Do Relevant Research

9:00-9:20	Brooks A. Lawler / Testing Models for the Distribution of Primary Source Material in the Tangle Lakes
9:20-9:40	Claire Alix, Juliette Taïeb, Owen K. Mason, and Glenn P. Juday / Tree Ring Research at Cape Espenberg - New Insights on Time and Architecture
9:40-10:00	Jake Anders, Pat Hall, Justin Hays, Randy Tedor, and Crystal Glassburn / Compliance for Science: Two Years of Archaeological Survey at Toolik Lake Research Natural Area
10:00-10:20	BREAK
10:20-10:40	Kaitlyn Fuqua / A Study of Variation Among Side-Notched Bifaces from Northern Archaic Sites in Alaska
10:40-11:00	Nathan Harmston and Diego Fernandez / Searching for Archaeological Caribou Herd Identity: The Relationship Between the Neonatal Line and Stable Strontium Isotopes via Laser Ablation Multi-Collector Inductive Coupled Plasma Mass Spectrometry (LA-MC-ICP-MS)
11:00-11:20	Kaitlyn Hosken, Robyn Miller, and Sean Teeter / 40 Years of Archaeological Research for the Sterling Highway Realignment Project
11:20-11:40	Richard L. Martin / 2019 Field Season update, Knik Tribe
11:40-12:00	Scott Shirar, Molly Proue, and Josh Reuther/ The Legacy Collections of Edwin S. Hall Jr. and Continuing Research at the Sikoruk Site
12:00-2:00	LUNCH
2:00-2:20	Robert E. King / Implementing NAGPRA: A Look at BLM's Experiences in Alaska, 1990-2020

2:20-2:40	Owen K. Mason, Jeffrey T. Rasic / Walrusing, Whaling and the Origins of the Old Bering Sea culture
2:40-3:00	Nicholas Schmuck, Josh Reuther, and Jim Baichtal / The Marine Reservoir Effect in Southeast Alaska, and the Importance of Compounding Uncertainty
3:00-3:20	BREAK
3:20-3:40	Martin Callanan / 'Thinking Like an Icepatch' at Kringsollfonna, Oppdal
3:40-4:00	Allyson Pease / Exploring the Possibility of 12,000 Years of Subsistence Fish Use at Archaeological Site NAB-00533, Copper Basin, Alaska
4:00-4:20	Emily Corley / Bodies in boxes: The Overlooked Skeletal Remains of Children and What They Can Tell Us.
4:20-4:40	Hollis A. Reddington / Reevaluating Bone Grease Rendering Efficiency and Evidence of Resource Stress
4:40-5:00	Open Discussion

SESSION 10

Recent Archaeological Research of the Alaska Peninsula and Kodiak Archipelago

Organizers: Sam Coffman and Linda Chisholm

Friday, 8:20 am–12:00 pm, GOLD EAST

The Alaska Peninsula and Kodiak Archipelago combine for over 35,000 sq mi (~91500 sq km) of land that extends southwest from mainland Alaska. The Peninsula serves as a natural boundary, separating the Pacific Ocean from Bristol Bay and Bering Sea. Archaeological and cultural records of the area are complex and largely unknown, with much of our understanding of the Native Alaskan populations based on historical accounts. Large scale archaeological survey and excavations in the twentieth century have led to clarity in some areas helping

understand the complexity and interconnectedness of the natural and cultural histories in some parts of the region, whereas other regions remain understudied. More recent studies have begun increasing our knowledge of human lifeways, trade networks, and resource planning. This session is meant to grow our increasing knowledge and understanding of the cultural record of the Alaska Peninsula and Kodiak Archipelago.

8:20-8:40	Jake Anders, Justin M. Hays, Patrick T. Hall, and Randy M. Tedor / 2019 Archaeological Investigations in the Lake Iliamna Region: Methods and Results
8:40-9:00	Laura Stelson / Katmai Before and After Novarupta: A Geospatial Model for Precontact Regional Interaction
9:00-9:20	Sam Coffman and Linda Chisholm / Recent Archaeological Survey Along the Savonoski River and Hallo Bay, Katmai National Park and Preserve, Alaska
9:20-9:40	Hollis K. Miller / Uncovering Native-Lived Colonialism at Ing'yug, a Sugpiaq Village in the Kodiak Archipelago
9:40-10:00	Patrick G. Saltonstall, Amy F. Steffian, and Molly E. Odell / Intertidal Fish Traps of the Kodiak Archipelago
10:00-10:20	BREAK
10:20-10:40	Bevyn Cover and Nicole Misarti / Constructing Historic Food Webs Using Archaeological Fish Bone from the Hot Springs Village Site
10:40-11:00	Nicole Misarti, Josh Reuther, Garrett Knudson, Scott Shirar, Bruce Finney, and Mark Shapley / Is Variability in Sockeye Salmon Abundance Connected to Site Location on the Alaska Peninsula?
11:00-11:20	Scott Shirar, Nicole Misarti, Josh Reuther, and Holly McKinney / The Zooarchaeology of Recent Excavations at Hot Springs Village, Lower Alaska Peninsula

11:20-11:40 Sam Coffman and Scott Shirar / New Insights into the Kaflia Artifact Assemblage

11:40-12:00 Discussion

SESSION 11

Assessment of Digital Technology in Alaska Field Archaeology

Organizer: Ted H. Parsons and Diane K. Hanson

Friday, 8:20 am–10:00 am, YUKON

Digital technology promises to reduce documentation time, improve accuracy, and provide data not otherwise available to archaeologists. Most technology is developed in temperate or controlled environments. Alaska provides variables that might not be considered during the development of some of the techniques. These might include traveling to remote locations necessitating gear weight or space limit considerations, frozen ground, extreme weather, and the lack of electricity to charge batteries or generate the power required for some equipment. Participants in this session will present their assessment of some of the many digital aids designed for field archaeology, but under Alaska or Arctic/Sub-Arctic conditions.

8:20-8:40 Kristin Reynolds / Munsell Soil Color Identification Using Digital Cell Phone Camera Apps

8:40-9:00 Robert C. Bowman and Robert A. Sattler / Ground-Penetrating Radar in the Periphery: Common Complications Conducting GPR in Alaska and Overcoming Them

9:00-9:20 Sean Mack / Ride of the Archaeological Valkyries

9:20-9:40 Ted Parsons / Low-Cost 3D Modeling of Archaeological Sites and Artifacts

9:40-10:00 Discussion

SESSION 12

General Session on Aleutian Archaeology

Organizer: National Park Service/Alaska Anthropological Association

Friday, 10:20 am–12:00 pm, YUKON

This session is a group of papers that focus on archaeological research within the Aleutian and southern Bering Sea region.

10:20-10:40	Michael Livingston / Benny Benson's Ethnic Heritage
10:40-11:00	Ariel Taivalkoski / Duck Tales: Modelling Sea Bird Use in the Rat Islands
11:00-11:20	Kevin M. Sippel / Project Unangam Ulaa: A Preliminary Report
11:20-11:40	Michael Livingston and Martha G. Murray / Zooarchaeological Analysis at 49-RAT-32: Historical Ecology and Maritime Subsistence in the Late Aleutian Period
11:40-12:00	Roberta Gordaoff / Chernofski Bay Land Use from Historic and Archaeological Data

SESSION 13

Learning to Replicate Past Practices, Replicating Past Practices to Learn: Experimental Approaches and New Techniques in Alaskan Archaeology

Organizer: Marine Vanlandeghem and Caitlin Holloway

Friday, 2:00 pm–5:00 pm, GOLD WEST

This session seeks to bring together researchers working with experimental approaches to understand past lifeways and site formation processes. Topics can range from short to long term experiments, tests of new equipment, or application of new techniques or analyses within the field of archaeology. We encourage participation from multidisciplinary researchers focused on replication of past tool

and weapon systems, food processing and butchery techniques, paleoenvironmental reconstruction, site formation and taphonomic processes, and incorporation of traditional knowledge systems in analyses and interpretation of the archaeological record.

2:00-2:20	Caitlin R. Holloway / Experimental Carbonization of Botanical Remains: A Case Study from Denali National Park and Preserve
2:20-2:40	Briana Doering / Stinkhead through the Centuries: Evaluating Isotopic Traces of Salmon Fermentation in Soils
2:40-3:00	Joshua J. Lynch / Investigating Beringian Toolkits from an Experimental Perspective
3:00-3:20	BREAK
3:20-3:40	Gerad M. Smith and Evelynn Combs / Experimental Approaches to Understanding Traditional Dene Copper Production
3:40-4:00	Robert A. Sattler / Community-based collaboration on the Tochak Discovery McGrath in the village of McGrath, upper Kuskokwim River
4:00-4:20	Darlene Olanna and Marine Vanlandeghem / The Use of Oral Traditions in Archaeology: Elders' Insights on Fire-Related Cultural Practices in NW Alaska
4:20-4:40	Marine Vanlandeghem / Ancient Arctic Pyro-Technologies: Experimental Fires to Document the Impact of Animal Origin Fuels on Wood Combustion
4:40-5:00	Discussion: Conclusion

SESSION 14

The Military in Alaska: World War II and Cold War Cultural Resources

Organizer: Kelly Eldridge, Forrest Kranda, and Joseph Sparaga

Friday, 2:00 pm–5:00 pm, GOLD EAST

Alaska has been shaped by military activities since the Treaty of Cession, and continues to be a significant national defense asset. Some of the most impactful events in recent history involve military expansion and operations during World War II and the Cold War. Military construction in Alaska modified landscapes, reshaped communities, and influenced modern military tactics, techniques, and procedures. Recent archaeological investigations of World War II and Cold War era sites can inform us about the experience of military personnel during deployment, as well as how local communities adapted to and continue to deal with the repercussions of military activity.

2:00-2:20	Andrew Higgs / RHEEM goes to War
2:20-2:40	Michael Yarborough and James Meyers / 3D Mapping of the Chernoski Harbor Supply and Storage Site on Unalaska Island, Alaska
2:40-3:00	Forrest Kranda / Military Fueling Practices in Alaska during World War II
3:00-3:20	BREAK
3:20-3:40	Kirsten Freeman / Hiding in Plain Sight: Identifying and Investigating the Off-Installation World War II and Cold War sites of the Fairbanks North Star Borough
3:40-4:00	Joseph Sparaga / Airfields, Radars and Quonset Huts: Military Debris and the Community of Bethel
4:00-4:20	Edmund Gaines / Flying the Beam: CAA Radio Range Navigation Stations and the World War II Air War in Alaska

4:20-4:40 Kelly A. Eldridge / World War II U.S. Coastal Defense Guns in Alaska

4:40-5:00 Discussion: Lack of WWII Sites on the AHRS

SESSION 15

The Early Peopling of Alaska in Connection with the Earliest Americans National Historic Landmark Theme Study

Organizer: Richard VanderHoek and Rhea Hood

Friday, 3:20 pm–5:00 pm, YUKON

The National Park Service, Alaska Regional Office, in partnership with the Alaska State Office of History and Archaeology, has commissioned a new National Historic Landmark (NHL) theme study as part of its Earliest Americans in Alaska project. This study will identify elements of past and present research about the Late Pleistocene and Early Holocene in Alaska as they relate to specific sites vital to the nation's cultural heritage. Themes will include the place of Alaskan sites in research about human migrations into the New World, and subsequent adaptation of early Alaskans to changing paleoenvironments. The study will incorporate emerging research on paleogeography and paleogenetics, and scholarly debate surrounding the routes and timing of population movements. This project will include an NHL nomination for the Upward Sun River site, an early archaeological site of great national importance. Comments by discussants and attendees will help guide formulation of this project.

3:20-5:00 Panelist / Discussion on the Topic of Early Peopling of Alaska

SESSION 16

Poster Session and Happy Hour

Organizer: National Park Service/Alaska Anthropological Association

Friday, 5:00 pm–6:00 pm, MINTO

The National Park Service and Alaska Anthropological Association are hosting the poster session on Alaskan Anthropological and Archaeological Research. This poster session will coincide with a happy hour prior to the Banquet Dinner and Awards Ceremony.


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[1] Adam Brinkman (National Park Service) and Laura Stelson (Pennsylvania State University)

Exploring the Impact of Climate-Induced "Greening" on Archaeological Resources at Denali National Park

SESSION 16: Poster Session and Happy Hour

The shifting composition of vegetation communities recently seen in arctic regions is just one of the many ways that anthropogenic climate change continues to threaten archaeological sites in Alaska. Using landcover survey data produced by the NPS, USFS, and UAF from 1980-2019, this project attempts to track and quantify this little-explored threat at 29 archaeological sites in Denali National Park. Our results are validated through comparisons with on-the-ground observations made by the Denali National Park and Preserve Cultural Resources division during a series of systematic site condition assessments carried out in the summer of 2019. A comparison of their photos with original site records reveals a trend of scrub birch, alder and willow encroaching upon archaeological sites boundaries in areas that had previously been open tundra and denuded soils. These changes are believed to be a direct consequence of the recent rise in mean annual temperatures throughout this region.

[2] Adam Freeburg (National Park Service), Jillian Richie (National Park Service), and Hilary Hilmer (National Park Service)

Results of Recent Fieldwork in Yukon-Charley Rivers National Preserve

SESSION 2: General Session on Archaeology of Yukon and Northern Interior

Since 2015, National Park Service archaeologists at Yukon-Charley Rivers National Preserve have focused on intensive survey of known site aggregations, with the intent of gaining understanding of broad chronology and land use patterns in the Yukon-Tanana uplands. Archaeological survey within the Preserve has yielded twenty-three

newly discovered archaeological sites. Sixty-eight previously known sites have also been relocated and documented with current methods. Preliminary synthetic results of these survey efforts presented here add to recent research of the mid- to late Holocene occupation of Alaska's eastern interior.

[3] Adeline Raboff (Neets'aii Gwich'in)

Gwich'in Shamanic and Sexual Vocabulary

SESSION 9: General Session on Archaeological Research

The theory of shamanic and sexual vocabulary of the Gwich'in and how these words were used or not used in contemporary discourse. In this presentation I want to posit the idea that the shamanic vocabulary of former days among the Gwich'in was lifted and slightly altered to express and represent Christian ideas and theology. Furthermore, I posit that the sexual, reproductive, and midwife vocabulary was suppressed to the point where only English vernacular phraseology is in usage by the young (those under 50) and that only the elders still have some of that sexual and reproductive vocabulary from former times. The theory, in my opinion, can also be extended to other Alaska Native communities (i.e. Iñupiat, and other Athabaskan languages).

[4] Allyson Pease (University of Alaska Anchorage)

Exploring the possibility of 12,000 years of subsistence fish use at archaeological site NAB-00533, Copper Basin, Alaska

SESSION 9: General Session on Archaeological Research

While still preliminary, this study explores the long-term subsistence use of fish in the Copper River Basin, Alaska. Salmon is currently a dominant subsistence resource in the region, however, the oldest documented evidence of fish use in the Copper Basin is from approximately 700 cal years BP. Archaeological site NAB-00533, situated adjacent to Tanada Creek, a sockeye fishery that has been used extensively by Athabascan populations, shows evidence of occupations dating to the late Pleistocene and mid Holocene. Significant environmental changes have affected the Copper Basin

since the late Pleistocene; notably the presence and draining of Lake Atna, which persisted until the early Holocene. A stable isotope analysis of sediments from the site and vicinity will use δ13C and δ15N values to determine if primary subsistence resources were terrestrial or aquatic.

[5] Andrew Higgs (Higgs Research & Consulting LLC)

RHEEM goes to War

SESSION 14: The Military in Alaska: World War II and Cold War Cultural Resources

Robert Patterson, the US Secretary of War during WWII, once summarized that the three vital components of military supply are food, ammunition, and fuel: "Of the three, fuel is the most important because without it the other two can neither be distributed nor protected." In remote field operations such as Alaska, 55-gallon drums were the primary means of conveying fuel to the forces. Many of the drums found during cultural resource survey projects sport a 'RHEEM' manufacturer's mark embossed on the bottom of the drum. Who is Rheem and why are their drums so prevalent in Alaska? In an effort to provide a national context for this ubiquitous Alaskan artifact, this presentation introduces information about the Rheem Manufacturing Co.'s WWII-period mobilization effort that profoundly changed the Rheem company and ultimately shaped Alaska's military and vernacular landscapes.

[6] Anne M. Jensen (University of Alaska Fairbanks)

Vanishing Sites, Degrading Permafrost: How Archaeologists, Anthropologists, and Permafrost Researchers Can Help Each Other Do Relevant Research

SESSION 9: General Session on Archaeological Research

Archaeological sites, especially in areas with permafrost, are facing an almost existential threat from accelerating environmental change. Many rural communities in Alaska depend on infrastructure that is reliant on permafrost for its integrity and functionality, which has major social and cultural ramifications. Alaska is home to many preeminent

permafrost researchers. However, there has been little interaction between disciplines. However, that is beginning to change. We are starting to understand the profound effects permafrost loss will have on our discipline, and on the communities we work with and for. Permafrost researchers are becoming more interesting in doing work that is immediate relevance. They are trying to network with related groups. This paper will introduce one such effort, the PerCS-NET (PERmafrost Coastal Studies NETwork). This project is actively seeking participation from scholars from other disciplines.

[7] Ariel Taivalkoski (University of Buffalo)

Duck Tales: Modelling Sea Bird Use in the Rat Islands

SESSION 12: General Session on Aleutian Archaeology

This paper examines skeletal part representation at four Rat Island archaeological sites located on Kiska, Rat, and Amchitka islands. This analysis examines the skeletal part representation for four major seabird families in contexts of cultural and environmental change, in order to identify which factors influence variation in bird use practices. I examined avifaunal remains from a 4000 year span of Unangan prehistory in order to investigate how Unangan relationships with birds changed over time, space, climates and cultures. In particular, there is increasing evidence for island-specific patterns of bird usage in the Rat Islands; using the avifaunal assemblages found on three of the islands, I identify and compare patterns of bird use via qualitative and quantitative statistical analysis.

[8] Bevyn Cover (University of Alaska Fairbanks) and Nicole Misarti (University of Alaska Fairbanks

Constructing Historic Food Webs Using Archaeological Fish Bone from the Hot Springs Village Site

SESSION 10: Recent Archaeological Research of the Alaska Peninsula and Kodiak Archipelago

This study describes carbon and nitrogen isotopes (δ13C and δ15N) of collagen extracted from archaeological specimens of Starry Flounder

(Platichthys stellatus), Pacific cod (Gadus macrocephalus), Halibut (Hippoglossus stenolepis), Eulachon (Thaleichthys pacificus), and Irish lord (Hemilepidotus hemilepidotus) from the Hot Springs Village site near Port Moller, Alaska. This site has been intermittently inhabited for 3000 years, preserving information about the Peninsula's ecological past. Data show that there is a significant difference between species that feed in different habitats, e.g. cod versus flounder (δ13C $p < 0.001$; δ15N $p < 0.001$), and the basic food web has not changed over thousands of years. We measured the premaxilla of cod and determined the fork length using mathematical regressions (Orchard 2001). There is a significant difference in δ15N values ($p < 0.001$) between cod >60 cm and those <60 cm in length. These results are useful for management and conservation in the area.

[9] Bobbi Hornbeck (SUNY - University at Buffalo)

Rat Islands Earth Mounds Project: Perspective and Data

SESSION 16: Poster Session and Happy Hour

The Rat Islands Earth Mounds Project is a doctoral research project investigating the conspicuous earth mounds of the Rat Islands group in the western Aleutian Islands. A team of three researchers completed subsurface testing of eighteen earth mounds and captured high resolution drone imagery on Kiska and Amchitka during the summer of 2019. More than 250 mounds were documented, and three charcoal samples and two soil columns were collected for radiometric and soil chemistry analyses. This project adds to the limited datasets for the western Aleutian Islands and presents a new perspective. The significance of the earth mounds is examined using the theoretical framework of materiality, identity, and cultural memory. An understanding of the Rat Islands culture-history must be inclusive of the earth mounds as they are embodied with dynamic meaning and exist in the complex spiritual landscape of the Qax̂un.

[10] Brian T. Wygal (Adelphi University), Kathryn E. Krasinski (Adelphi University), Charles E. Holmes (University of Alaska Fairbanks), Barbara A. Crass (University of Alaska Museum of the North), Dominic Tullo (University of Nevada, Reno), Evan Holt (University of Wyoming), David McMahan (McMahan Consulting), Jessica Metcalfe (Lakehead University), Kathlyn M. Smith (Georgia Southern University), Sabrina Shirazi (University of California Santa Cruz), Beth Shapiro (University of California Santa Cruz & Howard Hughes Medical Institute), Julio RuizDiaz (Adelphi University), Ariel Barrera (Adelphi University), Alyssa Booth (Adelphi University), and Brianna Bernard (Adelphi University)

The Holzman Site: Late Pleistocene Archaeology of Shaw Creek, Alaska

SESSION 16: Poster Session and Happy Hour

The Holzman archaeological site lies along the west bank of Shaw Creek, a northern tributary of the middle Tanana River in Interior Alaska. Recent excavations have yielded an expedient stone technology alongside well-preserved hearths, avifauna and large mammal remains including abundant mammoth ivory in deeply buried deposits. Evidence of food preparation and ivory tool manufacture has been dated to at least to 13,700 cal BP. A smaller component at the site dates to 14,000 years ago making Holzman one of the earliest sites in the Americas. A multidisciplinary team conducting wide-ranging analyses has contributed to our understanding of the human activities and local environmental change in this region--rich in Paleolithic archaeology.

[11] Briana Doering (University of Michigan)

Stinkhead through the Centuries: Evaluating Isotopic Traces of Salmon Fermentation in Soils

SESSION 13: Learning to Replicate Past Practices, Replicating Past Practices to Learn: Experimental Approaches and New Techniques in Alaskan Archaeology

Fermentation is a traditional food processing technique practiced throughout the Arctic that isotopic researchers have associated with a measurable isotopic effect in C and N. Typical dietary reconstruction

techniques rely on mixing models applied to the isotopic composition of human remains. However, such analyses are rare in the Arctic due to ethical concerns and the paucity of archaeological human remains recovered in the region. In this research, I propose to identify fermentation via residue analysis using the bulk isotopic composition of C and N in soils associated with fermentation. I present the results of an experimental analysis that offer a comparison of the isotopic composition of soils before and after fermentation to explore the possibility of applying this less invasive technique to track the history of fermentation in the Arctic and explore the use of storage in the past without relying on human remains.

[12] Brit Myers (Arctic Research Consortium of the U.S.) and Helen Wiggins (Arctic Research Consortium of the U.S.)

Improving Arctic Research with the ARCUS Community: An Invitation to Collaborate

SESSION 16: Poster Session and Happy Hour

The Arctic Research Consortium of the U.S. (ARCUS) is a nonprofit membership organization committed to broadening Arctic research participation through: 1) Networking activities to create a more inclusive community; 2) Communication and outreach initiatives, with an emphasis on inclusion of Indigenous Knowledge holders; and 3) Arctic education programming for K-16 students and educators. Additionally, ARCUS staff work to support and facilitate the interactions of collaborative Arctic research programs. The goal of this poster is to share recent and ongoing efforts by ARCUS to identify key challenges and opportunities motivating Arctic research collaboration; outline how ARCUS community concerns are shaping the direction of community initiatives; serve as a platform to consult with Arctic-focused anthropologists on the improved design and implementation of interdisciplinary Arctic research projects; and to invite AkAA conference participants to take part in future ARCUS programs and events designed to benefit Arctic researchers and our community partners.

[13] Britteny M. Howell (University of Alaska Anchorage)

How to get Undergrads to Care About Old People

SESSION 3: Current Directions in Alaska Medical Anthropology

This paper discusses the development and implementation of a service-learning, interprofessional education health promotion program embedded within two undergraduate courses in the departments of Population Health Sciences and Health, Physical Education, and Recreation (HPER) at UAA. Students worked in interdisciplinary teams and acquired inter-professional educational learning outcomes while they engaged in their first experiences working with diverse older adults at a low-income, independent-living housing community. Twenty-five students each team-taught two sessions on nutrition, physical activity, and stress reduction techniques in a 10-week program. Qualitative and quantitative results showed significant learning outcomes from the students about the health needs of the aging population and increased comfort in working with older adults. Older participants in the program also reported positive health and psychological outcomes from their participation. Limitations, challenges, and next steps are also discussed.

[14] Britteny M. Howell (University of Alaska Anchorage) and Jennifer R. Peterson (University of Alaska Anchorage)

A Qualitative Review of Older Adult Perspectives on Healthy Aging in the Circumpolar North

SESSION 16: Poster Session and Happy Hour

The aim of this analysis was to synthesize qualitative research among older residents (aged 50+ years) of the Circumpolar North to identify a definition of healthy aging common in the region. The Circumpolar North is defined as the Arctic and subarctic regions of Canada, Finland, Denmark, Greenland & the Faroe Islands, Iceland, Norway, Russia, Sweden, and the United States. A thorough review was conducted across a variety of academic search databases for peer-reviewed, qualitative studies conducted among community-dwelling older adults. The search strategy initially identified 194 articles; 22 articles met the

inclusion criteria. Included studies were coded and analyzed using Grounded Theory to examine underlying themes of healthy aging in the Circumpolar North. This meta-analysis reveals the importance older adults place on incorporating climatic, social, environmental, and personal resilience factors into multidimensional models of healthy aging in cultural context.

[15] Brooks A. Lawler (University of Alaska Fairbanks)

Testing Models for the Distribution of Primary Source Material in the Tangle Lakes

SESSION 9: General Session on Archaeological Research

Toolstone sourcing allows for a spatial component of lithic analysis to be used as evidence for understanding how raw materials were procured, transported, and used to manufacture tools. Once materials can be assigned a geographic origin, models with explicit expectations for how the location and qualities of primary sources will affect the distribution of the materials can be tested. Lithic debitage from four site components spanning the Early and Mid-Holocene in the Tangle Lakes have been geochemically analyzed to identify their primary sources. Proportions of each sampled assemblage have been statistically assigned to two known quarries, providing evidence to identify material selection and procurement.

[16] Bryan Johnson (University of Alaska Museum of the North), Sam Coffman (University of Alaska Museum of the North), Joshua Reuther (University of Alaska Museum of the North), Patrick Plattet (University of Alaska Fairbanks), and Jason Rogers (National Park Service)

Results of the 2019 Archaeological Survey of Kontashibuna Lake

SESSION 16: Poster Session and Happy Hour

The University of Alaska Museum of the North in partnership with Lake Clark National Park and Preserve and Nondalton Tribal Council conducted the first of a three-year multi-faceted project consisting of archaeological survey of two lakes located in Lake Clark National Park and Preserve and documenting Alaska Native place names and stories

associated with these lakes. Year one focused on surveying Kontrashibuna Lake, a 13-mile long lake that is both glacially and fresh-water fed with a direct drainage into Lake Clark. Prior to our survey, only six archaeological sites (n=4 historic (one is a district); n=2 prehistoric) had been documented around Kontrashibuna Lake. Project personnel spent four weeks in the field, surveying and testing along the lakeshore. Eight new archaeological sites (n=3 historic; 5=prehistoric) were documented with multiple geological samples collected. This poster highlights significant findings of this survey and plans for the 2020 field season.

[17] Caitlin R. Holloway (National Park Service)

Experimental Carbonization of Botanical Remains: A Case Study from Denali National Park and Preserve

SESSION 13: Learning to Replicate Past Practices, Replicating Past Practices to Learn: Experimental Approaches and New Techniques in Alaskan Archaeology

Recent research in Alaska has incorporated the study of archaeobotanical remains from contexts such as hearth features into regular site analyses to address questions of paleoecology, seasonality, fuel selection, and plant resource use. However, the region still lacks a comprehensive and accessible reference collection for carbonized archaeobotanical remains, which often leaves researchers to draw from multiple comparative collections not tailored to the region or archaeological analyses. This research presents the results of experimental carbonization of macrobotanical remains that can occur in archaeological contexts and discusses possibilities for developing an archaeobotanical reference collection for researchers working in Alaska. Archaeobotanical results from the Riley Creek Lithic Site (HEA-00133) in Denali National Park and Preserve are presented as a test for comparing archaeological and experimentally carbonized botanical remains. The comparison will inform on the usefulness of the reference material and will help guide the format when developing the reference collection for research in Alaska.

[18] Caitlin R. Holloway (National Park Service)

Fifty Years in Retrospect: Archaeology of the Trans-Alaska Pipeline System

SESSION 1: Early Days in Large Project Archaeology in North Alaska

Between 1969 and 1977, archaeologists from the University of Alaska and Alaska Methodist University completed cultural resource inventory along the Trans-Alaska Pipeline System (TAPS) and haul road right-of-way. Nearly fifty years later, a plan was developed to inventory the 363 TAPS collections curated at the University of Alaska Museum of the North. The project updated the collections to meet modern curation standards and culminated in a series of individual site reports and a larger narrative based on primary documentation and oral history interviews with project archaeologists. The TAPS surveys and excavations constituted one of the earliest large-scale archaeological salvage projects completed in the United States, which contributed to the development of the cultural resource management industry. Furthermore, the pipeline project effectively transected Alaska and the results have shaped our understanding of prehistory in the state. The results of this project serve as a cultural resource management tool and increase the accessibility of TAPS collections for researchers and the public.

[19] Charles Holmes (University of Alaska Fairbanks)

From the Brooks Range to Somewhere South Along the Proposed Trans-Alaska Pipeline Corridor

SESSION 1: Early Days in Large Project Archaeology in North Alaska

Before the Trans-Alaska Pipeline became a huge major construction project, a small group of graduate students at UAF, under the direction of Dr. John P. Cook, were sent into the unmarked back country of Alaska to find archaeological evidence that would support future decisions about environmental concerns required by the National Environmental Policy Act (NEPA) in 1970.

[20] Chris Cannon (University of Alaska Fairbanks)

Northern Dene Constellations as Worldview Projections: A Comparative Anthropological Study

SESSION 6: General Session on Alaskan Anthropology and Ethnography

The sky is routinely overlooked in Northern Dene ethnology as a meaningful domain of linguistic and cultural knowledge. However, a decade of comparative ethnological research in Alaska and Canada has shown that Dene stellar knowledge is largely tied to covert knowledge systems primarily learned through heuristic processes. Drawing on work with traditional knowledge bearers across 12 ethnolinguistic groups, I show that the principal Dene constellation is the incarnated spirit of an ancient Traveler-Transformer figure who circled the world in Distant Time. Although this Traveler is widely known in mythology, his enigmatic transformation to the sky embodies a specialized domain of knowledge. This 'Traveler' constellation is not only a world custodian and archetype of an idealized shaman, but it is also a teacher, ally, game-keeper, and the embodiment and distributor of medicine power. I conclude by briefly identifying connections to Navajo and Algonquian astronomical knowledge systems.

[21] Christian Thomas (Government of Yukon), Jenifer Poulin (Canadian Conservation Institute), Kate Helwig (Canadian Conservation Institute), Valerie Monahan (Government of Yukon), Carly Cran (A.E. Lalonde AMS Laboratory, University of Ottawa), P. Gregory Hare (Government of Yukon), and Jenifer Herkes (Carcross/Tagish First Nation)

Identifying and Dating Ancient Residues from Yukon Ice Patch Collections

SESSION 2: General Session on Archaeology of Yukon and Northern Interior

Ancient First Nations hunting weapons recovered from melting ice patches in southern Yukon are valued for the remarkable preservation

of the materials commonly used in ancient craft. Through these artifacts researchers have been able to study, design, fabrication processes as well as material selection and use. We have also been able to observe and study the use of organic adhesives, paints and coatings. In this paper we will discuss the results of several studies completed on well preserved organic residues, where we have been able to successfully identify residues and, in some cases, successfully C14 date small samples of the residue. Though the application of the techniques may not be broadly applicable to many archaeological collections, it is possible that that an awareness of these techniques might lead their application for collections in other types of high-preservation site, such as permafrost rich contexts and arid alpine and arctic environments.

[22] Claire Alix (University Paris 1 Pantheon Sorbonne), Juliette Taïeb (University Paris 1 Pantheon Sorbonne), Owen K. Mason (University of Colorado), and Glenn P. Juday (University of Alaska Fairbanks)

Tree Ring Research at Cape Espenberg - New Insights on Time and Architecture"

SESSION 9: General Session on Archaeological Research

Excavation at Cape Espenberg between 2009 and 2017 uncovered the impressing preservation of architectural wood, confirming its known importance in Thule house building technology between 1100 and 1800 AD. Collected disk samples were prepared, measured and cross-dated using standard tree-ring procedures. Two to three floating chronologies are being built and further crossdated with the existing 1000-yr long Gidding's Kobuk River chronology. Cross-dating samples within house features provides a better understanding of the house building process. One floating chronology crossdates with Gidding's Kobuk sequence allowing to further refine the chronology of house occupation which is based on 14C dating. Our results also contribute to strengthening the early period of the only 1000-yr long Master chronology in Alaska with renewed perspectives for climate studies.

[23] Dale C. Slaughter (Bureau of Indian Affairs – Retired)

Why Wolves Howl and Other Stories from North Alaska Archaeological Projects

SESSION 1: Early Days in Large Project Archaeology in North Alaska

I participated in the TAPS/Alyeska Archaeological Project in 1971 and 1973-1975. The 1971 season (my first) included excavation at Aniganigaruk in the northern Brooks Range, the 1973-1975 seasons involved work in the two northernmost sections of the pipeline. Additionally, I worked on the NPR-A Project (Lisburne site) in 1978, and the Utqiagvik Archaeological Project (1981-1982). Reflections are presented on the trials and tribulations, as well as the pleasures, of working on these projects so many years. The presentation focuses on the non-archaeological aspects the work. The approach is largely, but not entirely, light-hearted and definitely nontechnical.

[24] Darlene Olanna (Brevig Mission School) and Marine Vanlandeghem (University Paris 1 Pantheon Sorbonne)

The Use of Oral Traditions in Archaeology: Elders' Insights on Fire-Related Cultural Practices in NW Alaska

SESSION 13: Learning to Replicate Past Practices, Replicating Past Practices to Learn: Experimental Approaches and New Techniques in Alaskan Archaeology

Learning to reproduce past practices means first and foremost immersing oneself in oral traditions. Based on ethnographic sources from Alaska Native Inupiat people, such as elders' interviews from the Kawerak Eskimo Heritage Program archives, from Brevig Mission, and audio-recordings/transcripts from the UAF Project Jukebox, we will present the diversity of technical and cultural practices related to fire use in the northwestern region over the centuries. Our paper will introduce various notes and testimony on hearth's function among Inupiat groups, describing the wide range of local activities, the group's socio-economical organization, the fuel gathering/management, along with traditional environmental knowledge, and fire symbolism.

[25] David Koester (University of Alaska Fairbanks)

The Itelmen Khodila as Musical Genre -- Consciousness, Time and Nature

SESSION 6: General Session on Alaskan Anthropology and Ethnography

Can songs be distinguished by the form of consciousness that they reveal? What can songs tell us about continuity and change in human-environmental relations? Can the nearly three hundred year record of documenting Itelmen music contribute to understanding a unique song genre? This presentation presents various facets of the song tradition known in Kamchatka as the khodila. Khodilas are composed by individuals who typically express their immediate experience of their social and environmental surroundings. The practice, with continuity in melodic form, appears to be attested in the earliest notated songs by eighteenth-century Russian explorers.

[26] Dehrich Chya (Alutiiq Museum and Archaeological Repository), Molly Odell (Alutiiq Museum and Archaeological Repository), and April Counceller (Alutiiq Museum and Archaeological Repository)

Digitizing the Past

SESSION 16: Poster Session and Happy Hour

For at least 7,000 years, the only documentation of the Indigenous language(s) of Kodiak Island was oral. Beginning in the late 1700s, foreigners were writing down bits and pieces of the Alutiiq language. With funding from the National Science Foundation under Grant No. 1360839, the Alutiiq Museum has been recording, compiling, and documenting audio and video recordings of Alutiiq language. Now, with the goal of bringing more Alutiiq language materials back to Kodiak, the Alutiiq Museum is pursuing historic Alutiiq text materials to add to the corpus of Alutiiq language research and increase access to these materials for the Alutiiq community and beyond. These materials are located in archives worldwide in places like Berkeley, CA, Washington, D.C., St. Petersburg, Russia, and elsewhere. Since these materials have

resurfaced, Alutiiq language learners have had the opportunity to learn parts of the Alutiiq language that are not used by today's speakers.

[27] Dillon McIntire (University of Alaska Fairbanks)

Screw It, Let's Do a Research Project: Student Reflections on Undergraduate Research

SESSION 5: Innovations and Experiences in Undergraduate Anthropological

Undergraduate research can be an important tool for teaching anthropological research methods, as it allows for students to gain hands on experience and learn how to work with real world field sites and topics. Personal experience in an undergraduate research methods class at UAF that focused on both classroom learning and working with an on-campus field site, which then transitioned to a fully-fledged and funded undergraduate research project next semester, will be discussed. Learning outcomes of the class from the student perspective, as well as the goals, methods, and outcomes of the project will additionally be presented. Throughout, personal, first hand observations about the efficacy of hands on research as a method of instructing students will also be offered.

[28] Dougless Skinner (University of Alaska Fairbanks)

Towards a Knew Knowledge--Archaeology and Alaskan Native Communities; An Outsiders Reflection on Working with Indigenous Alaskans

SESSION 8: Community-Based Participatory Research in Alaska

Taught through generations of oral histories, practice, language, and ritual, Indigenous histories continue to be the key aspect of daily living. Compared to Indigenous knowledge, archaeological research is a new and radical concept to the American Arctic. Yet archaeologists typically control how others perceive precolonial history and they have the ultimate say as to what cultural remains are protected. After the increasing drive for Native autonomy in many sectors, Indigenous Alaskan's had a platform to voice concerns regarding their involvement

in archaeological research. These evolving relationships are leading to more Indigenous inclusion through community-based participatory research and to active involvement through Indigenous archaeological paradigms. The purpose of this presentation is to outline the goals of community-based research and indigenous archaeological paradigms, to recap evolving relations between archaeologists and Indigenous communities in Alaska, and to reflect on my research as an outsider working with Native Alaskan communities.

[29] E. James Dixon (University of New Mexico)

Retrospective on Large Project Archaeology in North Alaska: The Formative Years

SESSION 1: Early Days in Large Project Archaeology in North Alaska

Fundamental archeological research prior to the early 1970's established northern Alaska's relevance and potential significance to American archeology. Large project archeology in northern Alaska emerged in the late 1960's and early 70's during a time of National social change entwined with the Vietnam War and the Civil Rights and Environmental Movements. The passage of NEPA (1970) reflected the national mandate for environmental protection including the identification, documentation, and analysis of cultural resources. The challenges of transitioning from small focused research programs to large scale projects were formidable, exciting, and occasionally dangerous.

[30] Edmund Gaines (Brice Environmental Services)

Flying the Beam: CAA Radio Range Navigation Stations and the World War II Air War in Alaska

SESSION 14: The Military in Alaska: World War II and Cold War Cultural Resources

Beginning in 1940, in cooperation with the Army, the Civil Aeronautics Authority designed, built, and maintained Alaska's early air navigation system as part of national defense in World War II. CAA radio

navigation ranges played a crucial role in the Aleutian campaign and the land-lease program. Most of the navigation ranges were in remote locations and required on-site specialists to maintain and operate equipment including radios, beacons, and engine generators. This paper explores the history of CAA navigation stations in the World War II air war and their critical role in warplane navigation, with an emphasis on range construction and operations, and the lifeways and experiences of personnel stationed there.

[31] Eduard Zdor ((University of Alaska Fairbanks)

Collaborative Relations between Indigenous Scholars, Traditional Knowledge Holders, and Scientists

SESSION 8: Community-Based Participatory Research in Alaska

The Chukotka Community-based participatory research began primarily in the early 1990s. Partnership initiators and funders were mostly Alaskan research institutes and Native organizations. The first joint research was devoted to the marine mammals migration monitoring. There have been discussions about whether community involvement in research is reasonable. Over time, research topics expanded and study was carried out simultaneously in several areas. Native communities were involved in monitoring marine mammals harvesting and bio sampling. Traditional knowledge of wildlife, habitat, and local community interactions with them has become a priority in collaborative research. Long-term cooperation has led to the emergence of villagers who could conduct social sciences partnership research and became co-authors of scientific publications. The advantage of communities participating in scientific research is that they provide, along with routine scientific data collected year-round and from many inaccessible places, a different perspective on the phenomena studied.

[32] Elaine Drew ((University of Alaska Fairbanks)

CBPR and Ethics Review: Emerging Dilemmas and Call to Action

SESSION 8: Community-Based Participatory Research in Alaska

The intersection of Community-Based Participatory Research (CBPR) and research ethics review can create challenges. While CBPR provides an effective framework for creating more inclusive and democratic research processes, a growing number of CBPR researchers are calling attention to emerging ethical dilemmas. This presentation considers new and emerging ethical dilemmas in CBPR from the viewpoints of different stakeholders (community, academic, and regulatory). Together, these dilemmas warrant a call to action and collaboration across stakeholders to identify and formalize inclusive ethics review for the next generation of CBPR researchers.

[33] Elaine Drew (University of Alaska Fairbanks), Kevin Huo (University of Alaska Fairbanks), Dillon McIntire (University of Alaska Fairbanks), and Delaney Reece (University of Alaska Fairbanks)

Learning by Doing: Medical Anthropology Research at a Campus Recreation Center

SESSION 3: Current Directions in Alaska Medical Anthropology

In 2019, our study team conducted research on physical activity, space use, and health beliefs among adult members of our campus rec center. The team was comprised of a faculty mentor and three undergraduate students undertaking their first formalized medical anthropology research. In this presentation, we share the story of our project, methods, and findings, and conclude with reflections on the importance of learning by doing.

[34] Elizabeth Kell (University of Alaska)

The ALCAN - A History of Destruction, Health, Hardships, and Re-Indigenization

SESSION 3: Current Directions in Alaska Medical Anthropology

The Alaska Canadian Highway Project of 1942 is a modern feat of Engineering; Construction started at two ends and was completed in just eight months, all 1,390 miles. The road connected communities, further disrupted families affected by other colonial projects and contact, and not only changed the physical landscape but, permanently altered the already rapidly changing social landscape for the 9 to 11

Indigenous and First Nations groups who call the Yukon, Alaska, and British Columbia home. This paper is an exploration of the health and social well being of First Nations and Indigenous peoples before, during, and after the highway's construction. This exploration into attitudes and events has been done through examination of interviews, speeches, local newspapers, photographs, mainstream documentaries, books, other's anthropological field notes, Canadian and Alaskan public archives, travel guides, radio broadcasts, and some personal memories.

[35] Emily Corley (University of Alaska Anchorage)

Bodies in Boxes: The Overlooked Skeletal Remains of Children and What They Can Tell Us

SESSION 9: General Session on Archaeological Research

The bioarchaeology of children is a relatively young field of interest within the umbrella of anthropology, but it is an important aspect to consider. Non-adult remains average a third of the skeletal remains excavated at many sites and yet research rarely evaluates, let alone focuses on those remains. Presented is an overview of the history of the bioarchaeology of children, followed by an accounting of the noticeable rise in the number of publications considering non-adults, and addressing the pertinence of information that can be gained from the study of children and the relative pitfalls to that study.

[36] Evan A. Holt (University of Wyoming), Todd A. Surovell (University of Wyoming), Brian T. Wygal (Adelphi University), Kathryn E. Krasinski (Adelphi University), Charles E. Holmes (University of Alaska Fairbanks), and Barbara A. Crass (University of Alaska Museum of the North)

Site Formation Processes: A Refit Distribution Analysis from the Holzman South Site, Shaw Creek Flats, Alaska

SESSION 16: Poster Session and Happy Hour

Vertical mixing of archaeological deposits can cause errors in interpretations, particularly with respect to occupation history and the age of archaeological components. Vertical mixing, for example, can

cause artifacts to spuriously become associated with sediments and/or artifacts older or younger than themselves. To reconstruct the occupation history of a site, therefore, it is critical to have some understanding of the degree to which sites are vertically intact. Spatial distribution of artifacts horizontally is important to understanding site usage at the time of its occupation. Refitting of chipped stone artifacts is one means of gaining such insights for both vertical and horizontal distributions. Site usage and post-depositional activity are important archaeological investigations. In this study I will analyze the vertical and horizontal distribution of refits at the Holzman South site (XBD-422) in the Tanana River Valley of Interior Alaska to contribute to our understanding of these aspects of site formation.

[37] Fawn Carter (University of Alaska Museum of the North), Ricardo Lenti Saint Lawrence (University of Alaska Museum of the North), Larissa Chitty (University of Alaska Museum of the North), Scott Shirar (University of Alaska Museum of the North), and Joshua Reuther (University of Alaska Museum of the North)

Conserving the Arctic Woodland Collections: A Save America's Treasures Project

SESSION 16: Poster Session and Happy Hour

In 1940 J. Louis Giddings completed the first archaeological survey along the Kobuk River to Hotham Inlet and the community of Kotzebue. Giddings selected sites identified during his preliminary survey for excavation in 1941 and 1947, with progress interrupted due to military service and research obligations. A resulting collection of 7,000 artifacts and dendrochronology samples documents 1,000 years of culture in northwest Alaska and provides the basis for the Arctic Woodland Culture. The University of Alaska Museum of the North was awarded a 2019 Save America's Treasures grant to upgrade these collections which remain largely untouched since their initial curation in the 1940s. Over the next year and half, museum staff and students will inventory the collection, work with a conservator to stabilize artifacts and samples, digitize the collections through photography, scanning, and database updates, compile all relevant documentation, and present the results during public presentations in Kotzebue and Fairbanks.

[38] Faye Ewan (Native Village of Kluti Kaah) and Odin Miller (Athna Intertribal Resource Commission)

Ahtna Fisheries and Food Sovereignty

SESSION 8: Community-Based Participatory Research in Alaska

For thousands of years, Ahtna exercised food sovereignty through a complex set of relationships to Copper River salmon, to each other, and to the river basin itself. Food sovereignty describes the right of peoples to shape their own food systems. During the past 150 years, the advent of colonial fisheries management, and the ever-increasing numbers of people using Copper River salmon, have altered the relationship between humans, fish and river system. Climate change and other environmental changes have likewise impacted the continuity of fishing practices and traditions. Ahtna have employed a variety of approaches to navigate these challenges. Since the early 20th century, they have asserted their interests against pressure from outside user groups and government agencies. In addition to being a lifelong subsistence fisher with extensive knowledge of the middle Copper River, Ahtna elder Faye Ewan has also played an active role in this tradition of food sovereignty activism.

[39] Forrest Kranda

Military Fueling Practices in Alaska during World War II

SESSION 14: The Military in Alaska: World War II and Cold War Cultural Resources

World War II was run on Petroleum, Oil, and Lubricants (POL). POL-related construction, storage, and handling were key aspects of military mobilization and build-up. During World War II, over 68 billion gallons of POL products were shipped overseas to fighting forces; this includes the forces operating in Alaska. Today, World War II military fuel infrastructure are often the subject of environmental remediation projects undertaken by the U.S. Army Corps of Engineers in Alaska. This paper will review the various type of military fuel infrastructure, and discuss how environmental analyses can supplement archaeological

investigations. Environmental Conceptual Site Models (CSMs), developed through chemical analyses, can be used to help identify activity areas related to refueling and fuel storage activities at sites where artifacts and features are scarce and existing historical records are limited.

[40] Gerad M. Smith (University of Alaska Fairbanks) and Evelynn Combs (Healy Lake Tribal Council)

Experimental Approaches to Understanding Traditional Dene Copper Production"

SESSION 13: Learning to Replicate Past Practices, Replicating Past Practices to Learn: Experimental Approaches and New Techniques in Alaskan Archaeology

Traditional Dene Copper implement production has been a recognized part of the last millennium of the Alaskan archaeological record. The high value that Native Alaskans held such items was noted by many early anthropologists and other non-native people who encountered these objects. Their specific craft, however, is largely only known through oral accounts and remnant archaeological finds. Therefore, we endeavored to understand and recreate these methods, learn how copper can be manipulated into objects, and also experience how these objects are still valued in the local Native Alaskan Tanana Valley community.

[41] Government of Yukon, Carcross Tagish First Nation, Champagne and Aishihik First Nation, Kluane First Nation, Kwanlin Dun First Nation, Ta'an Kwachan Council, Teslin Tlingit Council

Yukon Ice Patch Hunting Dart Technology

SESSION 16: Poster Session and Happy Hour

An overview of Ice Patch hunting dart technology from the last 23 years of fieldwork in the Yukon. The poster presents a synthesis of what we have learnt so far with a focus on the 2018 discovery of the Alligator Lake throwing dart, including a life-sized photograph and illustration.

[42] Hannah Atkinson (National Park Service), Nicole Braem (National Park Service), Justin Junge (National Park Service), Marcy Okada (National Park Service), and Jillian Richie (National Park Service)

Summary of the Inupiaq Place Names Workshop

SESSION 4: Placename and Language Research in Alaska

In January 2020, the National Park Service hosted an Inupiaq Place Names workshop to review existing place names data and determine future research goals with tribal representatives across Northwest Alaska. Documentation of cultural and natural resources through Inupiaq place names research will contribute to better protection and management of NPS lands and important public resources for the benefit of all park users. Here, tribal representatives, agency staff, and anthropologists continue the discussion on place names data collection, ownership, and management, and share ways to pass this information to the next generation.

[43] Hannah Bradley (Princeton University)

Frontier Aesthetics on Kachemak Trails: Entitlement, Secrecy, and Access

SESSION 6: General Session on Alaskan Anthropology and Ethnography

Through ethnographic observations of ongoing negotiation of improvement plans for trails through the Fox River Flats Critical Habitat Area, this dissertation research extrapolates how conflicting aesthetic idealizations of wilderness inform senses of resource entitlement. This paper presents some preliminary findings on the role of aesthetics in producing the logic of land access management and secrecy. Proliferation of Cowboy Poetry writing and readings in the Homer area since the mid-90's indicates the vitality of Western Frontier imaginaries, and controversies over public access easements indicate conflicting ideals of land access. Paradoxically, increased use of a trail does not improve access automatically, as increased traffic may erode trails: good trails are good secrets. What are the aesthetic ideals

associated with the Fox River landscape by its users and inhabitants? Classic differing idealizations of wilderness may be evident in the differing perspectives of management goals by state, private, and cattlemen association land managers.

[44] Hilary Hilmer (National Park Service), Justin Junge (National Park Service), Adam Feeburg (National Park Service), Caitlin Holloway (National Park Service), Jeff Rasic (National Park Service), and Thomas Urban (Cornell University)

Recent Archaeological Investigations in Noatak National Preserve

SESSION 16: Poster Session and Happy Hour

Over the past two summers, reconnaissance surveys conducted in Noatak National Preserve have contributed to our understanding of the archaeological record of the western Brooks Range. Surveys focused on hard-to-access drainages, as well as mountain passes along the Brooks Range divide and the central area of the Preserve. In total, 98 new sites were identified and 20 known sites underwent condition assessments and testing. Many of the sites consist of lithic scatters in surface contexts that lack features or datable organic material. However, Paleoarctic, Northern Archaic, Arctic Small Tool, and Late Prehistoric lithic assemblages were identified. Under-represented site types identified during surveys include caribou drive lines (inuksuit), chert raw material quarries, and hunting blinds. Geophysical methods, such as magnetometry, were critical to locating buried hearth features, four of which contained organic remains with radiocarbon dates ranging from 3,984 to 12,245 calibrated years BP. Based on these results, magnetometry is recommended as an effective component of a reconnaissance survey toolkit.

[45] Hollis A. Reddington (University of Alaska Anchorage)

Reevaluating Bone Grease Rendering Efficiency and Evidence of Resource Stress

SESSION 9: General Session on Archaeological Research

Bone greasing is often considered a marker of resource stress in archaeological sites. I replicated Binford's description of the process, using a stone maul and anvil, the ends of two ungulate limb bones, a wooden bowl, and boiling stones heated by coals, and found that most grease was extracted within 10 minutes of boiling: From 477 g of crushed bone, the immediate grease yield was 3 g, while an additional hour yielded only .5 g. I discuss how interpretation of sites with evidence of bone greasing should consider additional indications of resource stress; the size of vessels used for boiling, if they survive; whether the volume of bone chips indicates short or long boiling sessions; and whether the community may have greased bones for cultural reasons, rather than solely nutrition. Future experiments should focus on the time to extract the majority of bone grease and crush only the epiphysial ends.

[46] Hollis K. Miller (University of Washington)

Uncovering Native-Lived Colonialism at Ing'yug, a Sugpiaq Village in the Kodiak Archipelago

SESSION 10: Recent Archaeological Research of the Alaska Peninsula and Kodiak Archipelago

The interaction of Indigenous Alaskan communities with Russian mercantile colonists left a lasting legacy on Alaskan peoples and landscapes as they became entangled in fur trade networks that spanned the Pacific. To shed light on this chapter of Alaskan history, my dissertation research explores how Sugpiaq communities in the region of Old Harbor, bridging southeast Kodiak Island and Sitkalidak Island, negotiated Russian colonialism in their daily lives. I focus my attention on foodways, labor, and gendered and aged social organization and status through excavation of households and middens at Ing'yug, a Sugpiaq village on Sitkalidak Island that was occupied from pre-1784

into the 1830s. In this talk, I discuss my framework for investigation, planned excavations for summer 2020, and community-based goals of the project.

[47] Holly Smith (Government of Yukon), Christian Thomas (Government of Yukon), Valerie Monahan (Canadian Conservation Institute), Claire Alix (University Paris 1 Pantheon Sorbonne), Jenifer Poulin (Canadian Conservation Institute), Kate Helwig (Canadian Conservation Institute), Jen Herkes (Carcross/Tagish First Nation), Carcross/Tagish First Nation, and Kwanlin Dun First Nation

The Alligator Lake Throwing Dart: New Insights into Ancient Hunting Technology from Yukon Ice Patches

SESSION 2: General Session on Archaeology of Yukon and Northern Interior

In the mountains of the Yukon, northern Canada, mountain ice patches have been melting and revealing a 9,000-year record of First Nations' hunting weapons. Included in these assemblages are dozens of lost hunting arrows and the fragmentary remains of more ancient hunting spears referred to as throwing darts or atlatls. For 20 years the fragmentary remains of this locally extinct technology have been recovered from a variety of sites across southern Yukon. For the first time in the summer of 2018 a complete, and entirely intact throwing dart was recovered from the overlapping territories of the Carcross/Tagish and Kwanlin Dün First Nation's. This specimen is crafted from three separate pieces of wood and features an intact stone point, sinew bindings and carefully applied fletching. In this talk we will describe the construction and design of this weapon and how new insights from our analysis lend insight to previously made discoveries.

[48] Jake Anders (Stephen R. Braund & Associates), Justin M. Hays (Stephen R. Braund & Associates), Patrick T. Hall (Stephen R. Braund & Associates), and Randy M. Tedor (Stephen R. Braund & Associates)

2019 Archaeological Investigations in the Lake Iliamna Region: Methods and Results

SESSION 10: Recent Archaeological Research of the Alaska Peninsula and Kodiak Archipelago

The Upper Alaska Peninsula is a diverse region with deep prehistory that has been one of the least studied areas of Alaska despite being only 200 air-miles from Anchorage. In 2019, Stephen R. Braund & Associates (SRB&A) conducted archaeological and historic resources investigations at locations around Iliamna Lake and along portions of the Newhalen and Gibraltar rivers, identifying eight previously undocumented archaeological sites, and conducted revisits of three known sites to collect more detailed information. SRB&A also incorporated interview-identified cultural resources obtained though cultural resources interviews with indigenous communities surrounding Lake Iliamna into their survey work. Radiocarbon dates obtained from cultural deposits indicate that human use of the region was underway by approximately 10,350 cal BP, and tentative artifact and ceramic comparisons are presented against chronologies developed for the Brooks Lake/Naknek River area.

[49] Jake Anders (Stephen R. Braund & Associates), Pat T. Hall (Stephen R. Braund & Associates), Justin M. Hays (Stephen R. Braund & Associates), Randy M. Tedor (Stephen R. Braund & Associates), and Crystal Glassburn (Bureau of Land Management)

Compliance for Science: Two Years of Archaeological Survey at Toolik Lake Research Natural Area

SESSION 9: General Session on Archaeological Research

In 2018 and 2019, Stephen R. Braund & Associates (SRB&A) completed Phase I investigations of approximately 20,000 acres on lands managed by the Bureau of Land Management (BLM) near the Toolik Field Station (TFS) within the Arctic Foothills of Alaska. The investigations were

conducted on behalf of the BLM and the National Science Foundation to meet a need for baseline archaeological survey coverage of the area that is impacted by on-going ecological, biological, and climate research. A total of 45 previously undocumented archaeological sites were recorded and include surface lithic scatters with and without formal tools, surface and subsurface hearths (one with analyzed charcoal), tent rings, subsurface deposits which include obsidian sourced to Batza Tena, and boulder caches. Obsidian from three sites has been geochemically sourced by the National Park Service.

[50] James Kari (Alaska Native Language Center) and Anna Berge (Alaska Native Language Center)

Identifying Substrata in the Dena'ina and Alutiiq Language Areas

SESSION 4: Placename and Language Research in Alaska

The Dena'ina language area is an archaic periphery at the northwest edge of the Dene language family (Kari 2007). The Alutiiq language area is the result of a more recent spread to the north Pacific coast. The resulting lexical diffusion between Dena'ina and Alutiiq is complex and requires explanation. In this paper, we identify and interpret the patterns of lexical diffusion between Dena'ina and Alutiiq. We distinguish between a) Alutiiq loans in Dena'ina that can be traced to Proto-Eskimo-Aleut; b) Alutiiq loans in Dena'ina that were originally borrowed into Alutiiq from Aleut (Berge 2019); and c) items in Dena'ina whose provenance is as yet unidentified; we do not discuss Russian or English loans.

[51] Jamie Clark (University of Alaska Fairbanks), Taylor Vollman (University of Alaska Fairbanks), Sophie Zhang (University of Alaska Fairbanks), Audra Darcy (University of Alaska Fairbanks), Korovin Ellis (University of Alaska Fairbanks), Nicolette Edwards (Southern Methodist University), Joseph Keeney (Bureau of Land Management), and Joshua Reuther (University of Alaska Museum of the North)

Engaging Students in Zooarchaeological Research at the Croxton Site (Tukuto Lake, Northern Alaska)"

SESSION 16: Poster Session and Happy Hour

The Croxton Site was originally excavated by Craig Gerlach and colleagues in the 1980s. The assemblage, housed at the University of Alaska Museum of the North, includes tens of thousands of animal bones, a majority which are associated with the Ipiutak component of the site. Previous analyses at Croxton suggest that it served as a focal point for the hunting and processing of caribou (Rangifer tarandus) during their seasonal migration through the Brooks Range. Since 2016, students enrolled in zooarchaeology classes at UAF have been involved in basic data collection and taphonomic analysis of material from the upper two layers at Croxton; our goal is to produce a series of publications with students as co-authors. In this poster, we report on the data collected to date; the sample includes an NISP (number of identified specimens) of ~2500; we will also present new radiocarbon dates from unit under study.

[52] Jodie MacMillan (Government of Yukon)

An Archaeological Investigation of Subalpine and Alpine Use in the Southeast Yukon

SESSION 2: General Session on Archaeology of Yukon and Northern Interior

This paper presents the results of my Master's thesis. An archaeological land use model for subalpine and alpine environments for southeast Yukon was developed using available ethnographic, archaeological and environmental data. The model describes a pattern of dispersed predominantly short-term hunting camps or lookouts located primarily

in the subalpine with limited use of alpine zones. These results were compared to the findings of a heritage resource management project conducted in Don Creek Valley and Howard's Pass, Yukon. This data generally conformed well to the model with some unexpected exceptions regarding the density and increased number of sites (n=47) recorded in the subalpine and alpine. Factors for the unexpected site density could possibly be due to the concentration of economically important resources or the use of Howard's Pass as a travel route. Overall the results underscore the importance of upland areas to the groups that inhabited this region of the Yukon.

[53] Joshua J. Lynch (Texas A&M and Colorado State University)

Investigating Beringian Toolkits from an Experimental Perspective

SESSION 13: Learning to Replicate Past Practices, Replicating Past Practices to Learn: Experimental Approaches and New Techniques in Alaskan Archaeology

Experimental archaeology is an underutilized methodology for investigating variability in projectile point technologies of Upper Paleolithic Siberia and Late Pleistocene/early Holocene eastern Beringia. This paper presents the results of a multifaceted experimental research project combining actualistic testing of three Paleo-arctic projectile point styles and use wear analysis of a large sample of osseous and lithic tools from 33 eastern and western Beringian archaeological sites to test established hypotheses of projectile point variability. A third major component of this project was the development of scaffolded and scalable student-centered learning activities tailored to engaging the general public, stakeholders, and native Alaskan communities through hands-on experimental archaeology and object-based teaching. Understanding the functions of these important artifacts can inform on the significance of inter- and intra-site assemblage variability, landscape use, and adaptive response to shifting resources during the Pleistocene/Holocene transition across Beringia.

[54] Joseph Sparaga (U.S. Army Corps of Engineers, Arctic District)

Airfields, Radars and Quonset Huts: Military Debris and the Community of Bethel

SESSION 14: The Military in Alaska: World War II and Cold War Cultural Resources

Military installations developed during World War II and the Cold War were often established adjacent to existing Alaska Native communities. Occasionally, Alaska Native communities developed side-by-side with the military installation. Today, these communities increasingly question the importance of what are now historic facilities. Contamination from historic military remnants can impact the well-being of the population and their subsistence lifestyle. The Alaska Native community of Bethel was established long before militarization of the area. World War II and the Cold War had a large impact on the area, with Bethel serving as a location for an Army Airfield, White Alice Station, Air Force Station, Radio Towers, landfills, fuel storage areas, and a number of additional installations. This paper aims to identify local perceptions of these historic military properties and discuss the concerns of the residents who live in proximity to these facilities.

[55] Julie Esdale (Colorado State University)

Slogging, Humping, and Mucking through Northern Alaska: The More Things Change, the More they Stay the Same

SESSION 1: Early Days in Large Project Archaeology in North Alaska

Large scale CRM projects in the north from the 70s and 80s provided the first large scale inventories of archaeological sites in Alaska and demonstrated the need for full-time archaeology positions in land-managing organizations across the state. The generation of archaeologists that were part of these projects ended up filling dozens of federal, CRM academic, and CRM positions. Everywhere I have worked in Alaska I have encountered reports, documents, and notes left behind by these legends. I was even fortunate to have some of them as mentors during graduate school. Now that I run large crews of my own, I have learned that although much has changed in the last 40

years, the work, the comradery, and the enthusiasm for the mysteries of the past has largely stayed the same.

[56] Kaitlyn Fuqua (University of Alaska Fairbanks)

A Study of Variation Among Side-Notched Bifaces from Northern Archaic Sites in Alaska

SESSION 9: General Session on Archaeological Research

The Northern Archaic (~6,000-1,000 cal years BP), is often identified based on the presence of side-notched bifaces, which have been generally thought of as a distinct and morphologically homogenous artifact type. Any variation among these bifaces is not well understood. This study examines the potential for variability across a sample of 209 side-notched bifaces from 63 Northern Archaic sites in central and northern Alaska. Variability was examined on several scales, including: 1) across ecological regions of Alaska, 2) throughout the mid-Holocene, and 3) within a single site. Morphological variation was found among tools at the regional and temporal scales; despite this, functional variation remained relatively consistent at each scale. In addition, this study explores variation from the perspective of human behavioral ecology, focusing on how strategies for mitigating risk may be reflected in lithic assemblages (through invention, innovation, and standardization). Increased standardization among side notched bifaces during 4,000-2,000 cal. years BP may reflect risk-averse behavior.

[57] Kaitlyn Hosken (HDR, Inc.), Robyn Miller (HDR, Inc.), and Sean Teeter (HDR, Inc.)

40 Years of Archaeological Research for the Sterling Highway Realignment Project

SESSION 9: General Session on Archaeological Research

Cultural resource investigations on behalf of the Sterling Highway realignment project have been ongoing since the late 1970s. This paper will present a history of the previous archaeological research that has occurred on behalf of the project, including a timeline; various

methods used by investigators over the decades; and how changing project alignments, state priorities, and new technologies have affected the results of the cultural resources investigations.

[58] Kale Bruner (University of Kansas and Museum of the Aleutians)

Minimum Nodule Analysis of three eastern Aleutian lithic assemblages – changes in planning and lithic procurement from the early to middle Holocene

SESSION 16: Poster Session and Happy Hour

Lithic technological variability from three sites in Unalaska Bay is investigated using minimum nodule analysis. Reconstructed nodules demonstrate differences in toolstone procurement, transportation, and core organization between the early Holocene Russian Spruce assemblage and two middle Holocene occupations at the Margaret Bay site (Levels 4 and 5) that can be related to shifts in settlement organization and land use through time.

[59] Kathryn E. Krasinski (Adelphi University) and Angela Wade (Chickaloon Native Village)

Community Collaboration in the Matanuska Watershed

SESSION 8: Community-Based Participatory Research in Alaska

Community collaboration can take many forms and serve multiple functions. We report the results of a multi-year community collaboration on the archaeology and broader cultural resources of the Matanuska Watershed. Methodologically we engaged in Oral History interviews, community hikes, pedestrian survey and site testing. Over four years this project has identified new sites and provided a chronological framework for their occupation. More broadly, the close association with Oral History and site discovery indicates a thorough community knowledge and the ancient connections that Chickaloon Native Village has throughout the Matanuska Watershed.

[60] Kellie Patricia Lynch (University of Alaska Fairbanks)

Participatory Action Methods in Community Engaged Music

SESSION 5: Innovations and Experiences in Undergraduate Anthropological

Gamelan music has been used in musical pedagogy in university musical programs since the mid-1970s. A group of ten to twenty musicians on large xylophone type instruments and a chorus of gongs learns the music and techniques by rote. Each instrument plays a unique role in the music. I have built a set of gamelan instruments for the Fairbanks community focusing on engaging community members who are unable to participate in music education programs available in our community. Gamelan music does not require an ability to read music, so participants do not need to feel as if they need special training to play. Open rehearsals and community engaged presentations only require the participants to come to the instruments and learn the music by group communication and listening. The ensemble is traveling this spring to rural Alaska to be used in communities as opportunity to explore musical concepts in group learning sessions.

[61] Kelly A. Eldridge (U.S. Army Corps of Engineers)

World War II U.S. Coastal Defense Guns in Alaska

SESSION 14: The Military in Alaska: World War II and Cold War Cultural Resources

Gun emplacements remain a significant part of the World War II landscape across Alaska. But these large coastal defense features rarely retain their associated large-caliber artillery, as they were often removed at the end of the war or decommissioned through physical alteration for safety reasons. The purpose of this paper is to identify those World War II-era coastal defense guns that are still emplaced in Alaska, and discuss their various post-war modifications. The intact 6-inch guns emplaced at the Cape Kiugilak Battery on Great Sitkin Island will be more thoroughly examined. The treatment of the U.S. World War II guns in Alaska and their status as cultural resources will also be

compared to similar emplaced guns located at coastal defense batteries in the Lower 48 states.

[62] Kendrick Nelson McCabe (University of Alaska Fairbanks)

Conducting Research as A Non-Traditional Undergraduate Student

SESSION 5: Innovations and Experiences in Undergraduate Anthropological

Kendrick McCabe is a Navajo student currently set to graduate May 2020 from University of Alaska Fairbanks. Using a wealth of prior experience as a Behavioral Health Non-Commissioned Officer in the U.S. Army spanning a period of seven years, he has learned to reform his prior experience concentrating and scanning the mental health of soldiers to observing cultural traits and conducting field research on his reservation. Not only has this experience changed his observance of his own culture and the associated intermixing of cultural traits, this is a reclamation of his own indigenous way. The span of his research entails delving into ideas of indigenous identity, past cultural traditions, and current name usage amongst Navajo. The project is entitled, Reclaiming Traditional to Promote Dine (Navajo) Language and Culture. He has gone through the process of attaining approval from both the UAF and Navajo Nation Human Research and Review Board.

[63] Kevin M. Sippel (University of Alaska Fairbanks)

Zooarchaeological Analysis at 49-RAT-32: Historical Ecology and Maritime Subsistence in the Late Aleutian Period

SESSION 12: General Session on Aleutian Archaeology

This thesis utilizes a zooarchaeological collection from 49-RAT-32 on Amchitka Island in the Western Aleutians to examine Unangax subsistence strategies and human/environment interactions from 620 ± 20 to 320 ± 20 years B.P. Marine mammals, fish, and sea urchin remains were analyzed to understand subsistence practices, seasonality, and land/seascape use. The relative abundance of exploited taxa and fork lengths of marine fishes were also analyzed to

identify potential resource stress and change over time. Atka mackerel dominates the assemblage and Pacific cod are present in very low frequencies, both of which appear to be unique compared to other Aleutian assemblages. Atka mackerel, Pacific cod, and Irish lords recovered in this analysis are larger in size than their modern counterparts. The analysis of fauna from 49-RAT-32 does not indicate the presence of human driven resource depression, rather, fish sizes were increasing, while the diet breadth was shrinking.

[64] Kirsten Freeman (Colorado State University)

Hiding in Plain Sight: Identifying and Investigating the Off-Installation World War II and Cold War sites of the Fairbanks North Star Borough

SESSION 14: The Military in Alaska: World War II and Cold War Cultural Resources

Alaska served as a key strategic location in both World War II and the Cold War. Throughout the Fairbanks North Star Borough, a number of sites with an association to World War II or the Cold War have not been thoroughly documented or researched. Many of these sites were demolished or severely altered, while others were repurposed for another need. Some of these sites are relatively unknown or were simply forgotten by the general public. The purpose of this project is to identify, document, and research these sites in order to create a more comprehensive picture of the Army's presence, involvement and influence in the region. This presentation will cover the research conducted thus far on identified sites and detail some of the goals going forward as the project continues.

[65] Kristin Reynolds (University of Alaska Anchorage)

Munsell Soil Color Identification Using Digital Cell Phone Camera Apps

SESSION 11: Research Assessment of Digital Technology in Alaska Field Archaeology

The Munsell Soil Color Chart provides a common system for archaeologists to identify soil colors. The process is subjective, with a human eye used to record the discernible match of a soil color to a color chart. Due to human color interpretation, the outcome can vary from one person to another. The University of South Florida is developing an online program to analyze digital images of soil samples to produce the Munsell color identification more accurately by removing the human interpretation. I evaluated four cell phone applications to determine if they provide consistent results and if they differ from human determinations, and if this is a useful tool for quick, accurate, light weight, and inexpensive, field documentation.

[66] Laura Stelson (Pennsylvania State University)

Katmai Before and After Novarupta: A Geospatial Model for Precontact Regional Interaction

SESSION 10: Recent Archaeological Research of the Alaska Peninsula and Kodiak Archipelago

From 1913-1919 the National Geographic Society sponsored a series of expeditions exploring the aftermath of the Novarupta volcanic event in what is today known as Katmai National Park on the Alaska Peninsula. The route of these scientific explorations inadvertently retraced prehistoric trade routes across a major mountain pass between the recently abandoned historic villages of Katmai and Savonoski. This paper seeks to contextualize these two settlements and their connection to each other within a broader network of regional interaction across the Northern Alaska Peninsula. Using a predictive geospatial model that incorporates multiple modes of transport and environmental data that reflect seasonal conditions, I identify multiple least-cost routes potentially used for travel and exchange between 46

different pre-contact settlements dispersed beyond Katmai's boundaries. A comparison with the regional archaeological record suggests that 54 of the identified corridors likely played a role in sustaining larger social networks under various conditions.

[67] Leslie McCartney (University of Alaska Fairbanks)

Our Whole Gwich'in Way of Life Has Changed. Gwich'in K'yuu Gwiidandài' Tthak Ejuk Gòonlih. Stories from the People of the Land

SESSION 4: Placename and Language Research in Alaska

McCartney was asked by the Gwich'in Social and Cultural Institute (GSCI) to interview Gwich'in Elders in Canada's Northwest Territories. The project was to help the GSCI fulfill their mandate of 'documenting, preserving and promoting the practice of Gwich'in culture, language, traditional knowledge and values.' The 23 Elders' stories are comprised of personal narratives, traditional knowledge, oral tradition, legends, songs and prayers. Each story can be read individually or collectively as a testament of social and cultural history. The Elders discuss and reflect on the massive changes they have witnessed and experienced in their lifetime. The book, over 20 years in the making, is to be published later this year by the University of Alberta Press.

[68] Leslie McCartney (University of Alaska Fairbanks)

Observing Change in Alaska's National Parks Project Jukebox

SESSION 6: General Session on Alaskan Anthropology and Ethnography

Through oral history interviews, this project compares and contrasts long-time residents of Skagway Alaska who talk about their observations of environmental change in and around Klondike Gold Rush National Historical Park and with those of residents of Nome and National Park Service employees about the environmental changes they have witnessed in and around Bering Land Bridge National Preserve. The interviewees discuss: vegetation succession, differences in plant and animal species, retreating glaciers, vertical advance of tree

lines, changes to coastal lagoons and formation of sea ice, lake drainages, shoreline erosion, permafrost melt, and shifts in phenology. Additionally, the interviews highlight the impact of such changes on the flora, fauna and humans, and the adaptations all are making to these changes. Support for this project was provided by the National Park Service.

[69] Lisa Schwarzburg (University of Alaska Anchorage)

Exploring Implications of Indigenous Local Birth on Alaska Native Community Health

SESSION 3: Current Directions in Alaska Medical Anthropology

Developing project to explore implications of community birth in overall community health among indigenous communities. Design maps connections of relationships associated with community birth, using theoretical frameworks of the anthropology of birth, and social network analysis, along with indicators of community health. Some studies associate lack of continuity in care, and disconnect from family and community—inherit to transport—with poor maternal, infant, and even community outcomes. In efforts to offset these factors, some communities have effectively revived local birth, facilitated local knowledge-based practices and trained local providers. Alaska Native families experience post-neonatal mortality at higher rates than non-native families in Alaska; and higher rates of youth suicides, STDs, and other health disparities associated with community health. By looking into dynamics behind local birth and community health, constructs for investigating the applicability of including such features in Alaska Native communities to improve maternal, infant and community health can be explored.

[70] Marine Vanlandeghem (Université Paris 1 Pantheon Sorbonne)

Fire Among the Iñupiat

SESSION 8: Community-Based Participatory Research in Alaska

In an effort to promote Alaska's Iñupiaq culture and heritage, a recently published YouTube video presents ethnographic data on domestic fire management in northwestern Alaska during the historical tradition. The video is part of the animated series called "Past and Curious" that strives to share the archaeological work of both doctoral students and doctors. The idea behind the Past and Curious initiative is to give life to archaeological research in an accessible and fun way and for researchers to share their findings with a wider audience. This project takes place in the framework of my doctoral research at Paris 1 Pantheon-Sorbonne University focusing on the fuel economy of late prehistoric coastal occupations in northwestern Alaska. The video presents what local inhabitants used to build fires before Western contact. The inspiration for the animation came from the ethnographic and oral history work written by Ernest S. “Tiger” Burch, Jr. during his time as an Arctic anthropologist in the region. With this short film, my goal was to offer a visual representation that provides a glimpse of the ingenious technologies that the Iñupiat created and relied on to live, as well as share a positive representation of this Alaskan culture.

[71] Marine Vanlandeghem (Université Paris 1 Pantheon Sorbonne), Bruno Desachy (Université Paris 1 Pantheon Sorbonne), Tammy Buonasera (Instituto de Bio-organica Antonio Gonzalez and University of California Davis), Lauren Norman (University of Kansas), Isabelle Théry (University Nice Sophia Antipolis), Alain Carré (University Nice Sophia Antipolis), Christophe Petit (Université Paris 1 Pantheon Sorbonne), Michelle Elliott (Université Paris 1 Pantheon Sorbonne), and Claire Alix (Université Paris 1 Pantheon Sorbonne)

Ancient Arctic Pyro-Technologies: Experimental Fires to Document the Impact of Animal Origin Fuels on Wood Combustion

SESSION 13: Learning to Replicate Past Practices, Replicating Past Practices to Learn: Experimental Approaches and New Techniques in Alaskan Archaeology

Our oral presentation introduces a new scientific article (under review) about 55 fire experiments conducted under controlled laboratory conditions in France, and under outdoor conditions in an Arctic coastal setting in northwestern Alaska. We compared fuel combinations of driftwood, animal fat, and caribou bones over these 55 combustions and we described conditions necessary to achieve a reproducible and statistically representative experimental fire sample. We found that a minimum of thirty replicate fires was needed to obtain statistically significant results and to reduce variability. We obtained key figures and descriptive data on the impact of different animal fuels on fire temperature and duration, as well as on the firewood spectrum, with important implications for the representation of different woody fuels and the fragmentation patterns of charcoals.

[72] Martin Callanan (Dept. of Historical Studies, NTNU Trondheim, Norway)

"Thinking like an Icepatch" at Kringsollfonna, Oppdal

SESSION 9: General Session on Archaeological Research

Ice patch archaeology has been very much in focus in recent years, with a flurry of popular and academic publications. In Norway, the

tendency has been to focus on regional overviews and general presentations rather than on site-specific analyses. But each site, each ice patch is a world onto itself through time. With all the new knowledge we have gained in recent years, what happens if we return to the site and instead look outwards? What if we try to 'think like an ice patch' as it were? The focus of this attempt will be Krigsollfonna, a prolific ice patch from Oppdal, Norway.

[73] Matt Ganley (Bering Straits Native Corporation)

New Insights: An Inuit Pictograph on Alaska's Seward Peninsula

SESSION 9: General Session on Archaeological Research

Over the past 30 years, I have had the opportunity to occasionally re-visit one of only two pictograph sites known in the northern Inuit area of Alaska. The site was one of Bering Straits Native Corporation's (BSNC) cemetery and historic site selections (Section 14(h)(1)), and was determined eligible for conveyance to BSNC. A nearby village site was included in the same application and the available information indicates that the creator(s) of the images on the rock face, likely resided at this village site. Recent revelations concerning the human figures represented on the rock face further attest to the importance of this site and the significance of certain ceremonies in precontact Qawiaramiut society. This presentation will offer an interpretation of the pictograph, based on oral testimony, images from other sources, and ceremonial material culture.

[74] Meghan Ussing (University of Alaska Anchorage)

Genetics and Indigenous Identity in Alaska and Canada

SESSION 3: Current Directions in Alaska Medical Anthropology

This paper explores the impact of genetic research and legal classification of Indigenous people in Canada and the United States with a particular focus on Indigenous perspectives of identity. This paper discusses the implications of blood quantum rules both within and imposed upon Indigenous communities on Indigenous identity. The

ways in which Indigenous people in Canada and the United States have been legally and scientifically defined first in colonialist encounters and then through the use of genetic research has introduced new and complicated issues of identity. Indigenous people should be able to benefit from what genomic research has to offer in terms of health improvements without fear of their DNA being used non-consensually.

[75] Michael C. Grooms (University of New Mexico) and Norman Alexander Easton (Yukon College)

Geoarchaeology at the Little John Site (KdVo-6), Yukon Territory, Canada

SESSION 16: Poster Session and Happy Hour

The Little John Site (KdVo-6), Yukon Territory, Canada, contains the presence of both Chindadn/Nenana and Denali artifacts in unique stratified contexts. Continued analysis of the loess/paleosol stratigraphic sequences using XRD, INAA/ICP-MS, and thin section analysis have illuminated the chronology, environment, and depositional history of the site's unique geologic context and archaeological materials.

[76] Michael Kunz (Independent Researcher)

Low Tech Cultural Resource Fieldwork: How we did it in the "Early Days"

SESSION 1: Early Days in Large Project Archaeology in North Alaska

The Trans-Alaska Pipeline project, the transfer of Navel Petroleum Reserve #4 to the management of the Department of the Interior and the creation of Gates of the Arctic National Park and Preserve all occurred between 1970 and 1980. Cultural resource management was a fledgling enterprise and the tools available to conduct fieldwork in roadless arctic Alaska by todays' standards were lacking: no GPS, large scale topographic maps, aerial photos, satellite phones, computerized survey systems, etc. This talk is about "nuts and bolts" what the job

was, the difficulties the job presented, what resources were available to us, and how we did what we did.

[77] Michael Livingston (Aleutian Pribilof Islands Association, Inc.)

"Project Unangam Ulaa: A Preliminary Report"

SESSION 12: General Session on Aleutian Archaeology

Similar to other regions of the Arctic and sub-Arctic, people living in the Aleutian and Pribilof Islands are facing practical day-to-day challenges as the global climate changes. One of these challenges is reliance upon fossil fuels for heating of dwellings, forcing people in remote communities to face the stark reality of possibly closing and moving to larger, less-expensive urban centers, resulting in the loss of cultural survival knowledge gained over millennia. Ironically, people have lived in the Aleutians for millennia without reliance upon fossil fuels. In the fall of 2019, the National Science Foundation's Navigating the New Arctic program awarded Aleutian Pribilof Island Association's Cultural Heritage Department a grant to test the hypothesis that ancient construction techniques of the Unangam Ulaa (barabara in Russian or sod house in English) can be applied to modern materials to build energy efficient dwellings. This will be a preliminary report on progress thus far.

[78] Michael Livingston (Aleutian Pribilof Islands Association, Inc.) and Martha G. Murray (Aleutian Pribilof Islands Association, Inc.)

Benny Benson's Ethnic Heritage

SESSION 12: General Session on Aleutian Archaeology

Since 13-year-old Benny Benson won the Alaska flag design in 1927, much has been published about his ethnic heritage, sometimes describing him as Aleut, Swedish, Indian, Russian, Sugpiat, or Alutiiq. Sometimes these publications are second hand, without reference, or contradictory. Three Alaska genealogists (with help from others) researched Benny's ancestry, locating perhaps some of the strongest primary sources in Russian Orthodox church records in the Unangax̂ region and previously unrecognized US Federal Census records. They

also found that Benny Benson was repeatedly short-changed by several organizations throughout his life, yet maintained an optimistic outlook. Although this paper focuses on one individual, it illuminates the broader need for deep genealogical research in the Arctic so that family history may be accurately passed from generation to generation.

[79] Michael Yarborough (Cultural Resource Consultants LLC) and James Meyers (Bethel Environmental Solutions LLC)

3D Mapping of the Chernoski Harbor Supply and Storage Site on Unalaska Island, Alaska

SESSION 14: The Military in Alaska: World War II and Cold War Cultural Resources

Unmanned aerial vehicles (UAVs) are a low-cost alternative for photogrammetric data acquisition and can be a useful tool in archaeological and historical fieldwork. Data can be easily and quickly acquired, even in remote areas with difficult access, and 3D results such digital surface or terrain models, contours, textured models, and vector information can be created at low cost and high resolution. This presentation describes mapping of the large and topographically complex Chernoski Harbor site using a relatively inexpensive commercial drone and online image processing.

[80] Molly E. Odell (Alutiiq Museum & Archaeological Repository) and Patrick G. Saltonstall (Alutiiq Museum & Archaeological Repository)

Stream Side Settlement of the Karluk River, Kodiak Island, Alaska

SESSION 16: Poster Session and Happy Hour

The Karluk river valley has been home to Alutiiq people for more than 6000 years. Surveys from the river mouth to the head of Karluk Lake illustrate that the entire drainage has a prolonged and intense history of settlement. To better understand how Kodiak's maritime societies used inland environments, the Alutiiq Museum and Koniag, Inc. are partnering on a long-term research program aimed at studying the evolution of settlement patterns, the season and duration of

settlement, and connections to the coast. A 2019 pilot excavation at the outlet of Karluk Lake uncovered two rooms in a late prehistoric multi-room house and a sample of the associated midden. Notable discoveries include a substantial sod structure that was repeatedly re-used, extensive evidence of food processing inside the house, and faunal remains indicating significant contact with and/or travel to the coast.

[81] Monty Rogers (Municipality of Anchorage Historic Preservation Commission)

Developing a Local Landmarks Register in Alaska

SESSION 8: Community-Based Participatory Research in Alaska

As a Certified Local Government under the National Historic Preservation Act, the Municipality of Anchorage has made a commitment to "encourage and further the interests of historic preservation by identifying, protecting, and interpreting the municipality's significant historic and cultural resources for the economic and social benefit of the community (AMC 4.60.030.A)." One way the municipality is doing this is by creating a Local Landmarks Register where its citizenry can nominate and list important historical places in the area. The Local Landmarks Register reflects aspects of the National Register of Historic Places and the state's Landmark Register but is designed to promote the unique heritage of the municipality. This presentation discusses the purpose of this register, the process of developing a register of culturally significant places, and why this may be a valuable tool for your local government.

[82] Nathan Harmston (University of Alaska Anchorage) and Diego Fernandez (University of Utah)

Searching for Archaeological Caribou Herd Identity: The Relationship Between the Neonatal Line and Stable Strontium Isotopes via Laser Ablation Multi-Collector Inductive Coupled Plasma Mass Spectrometry (LA-MC-ICP-MS)

SESSION 9: General Session on Archaeological Research

Five archaeological caribou (Rangifer tarandus granti) permanent molars, two first molars (M1) and three second molars (M2), from the Lake Kaiyak site (MIS-00032) in Northwestern Alaska were serially sampled for 87Sr/86Sr. The neonatal line, a pathological marker in teeth that is the result of physiological stress during birth, in the two M1s was expressly sampled. The resulting 87Sr/86Sr were compared with the modern Western Arctic Caribou Herd (WAH) range and the mean predicted strontium isoscape for Alaska published in Bataille et al. (2014 Figure 3B). The 87Sr/86Sr values of the neonatal lines correlated with the areas within and around the WAH calving grounds. The remaining values correlated well with the modern WAH herd range. A maxillary M1 from the same archaeological feature was radiocarbon dated to 1800±30 AD.

[83] Nicholas Schmuck (University of Alaska Fairbanks and Tongass National Forest), Joshua Reuther (University of Alaska Museum of the North), and Jim Baichtal (Tongass National Forest)

The Marine Reservoir Effect in Southeast Alaska, and the Importance of Compounding Uncertainty

SESSION 9: General Session on Alaskan Archaeology

Numerous potential drivers for the Marine Reservoir Effect (the offset in radiocarbon age between contemporary terrestrial and marine samples) operating at different spatial and temporal scales has led to an increase in publications of local ΔR calibrations that speak to narrow windows in time and space. We report a robust sample of shell-wood pairs for early and mid-Holocene Southeast Alaska, addressing methodological questions of inter-species variability and the impact of

sample proximity to karst, a potential source of radiocarbon-depleted dissolved inorganic carbon. Our dataset is then situated squarely among extant MRE calibrations for the Northwest Coast of North America to consider regional variability in the MRE through time from the Bølling-Allerod to present, coincident with changes in climate.

[84] Nicole Misarti (University of Alaska Fairbanks), Joshua Reuther (University of Alaska Museum of the North), Garrett Knudson (Area M Consulting), Scott Shirar (University of Alaska Museum of the North), Bruce Finney (Idaho State University), Mark Shapley (University of Minnesota)

Is Variability in Sockeye Salmon Abundance Connected to Site Location on the Alaska Peninsula?

SESSION 10: Recent Archaeological Research of the Alaska Peninsula and Kodiak Archipelago

Sockeye salmon have been an important resource to people inhabiting the Alaska Peninsula for thousands of years and continue to be an important subsistence and commercial resource today. We have compiled data from two interdisciplinary projects to investigate whether archaeological site location and relative numbers of returning salmon are related. One project collected and analyzed sediment cores from Sapsuk Lake, a sockeye spawning lake with traditionally large sockeye returns, to determine fluctuations in sockeye in the area over the last few thousand years. The other project, focused on sampling middens at Hot Springs Village site, collected and analyzed additional radio carbon samples, augmenting and reinforcing previous data about timing of occupation at Hot Springs Village. Published dates from sites located along the Sapsuk River were also utilized in the analysis. Preliminary findings show linkages between site location and numbers of returning salmon on the Alaska Peninsula.

[85] Norma M. Johnson (University of Alaska Anchorage)

Artifacts of Shepard Point Cannery

SESSION 16: Poster Session and Happy Hour

The salmon industry remains an important part of Alaskan economy today. It has a long history over the last 130 years in the state. Each year canneries brought in ethnic immigrant laborers to facilitate the rapid growth of the industry. Shepard Point Cannery was one of many small independent canneries in the Pacific Northwest, located just north of Cordova, Alaska. The results of this CRM project provided greater insight to the ethnic groups who lived and worked at Shepard Point between 1917-1945.

[86] Norman Alexander Easton (Yukon College)

Map Making, Anthropology, and the Construction of Geophysical Cultural Boundaries in the Western Subarctic of North America

SESSION 4: Placename and Language Research in Alaska

This paper considers map making of the western subarctic. Map making can be viewed as a product of human curiosity and exploration of this geography that continues to this day, seeking answers to the questions "What is there?" and "Who is there?". These questions seem fundamental to human existence. They certainly motivate the anthropologist and the discipline has played a major role in refining our sense of cultural groups and their territories. However, we need to recognize this activity has taken place within the larger European Colonial project in which boundary making and boundary maintenance is a critical feature of the control and administration of State governing structures. More recently, the development of self-governing First Nations has further reified the cultural boundaries of the Yukon. In this paper I reflect on the role of anthropology in this process.

[87] Norman Alexander Easton (Yukon College), Michael Grooms (University of New Mexico), and Jordan Handley (University of British Columbia)

2019 Update on Analysis of the Borderlands Culture History Project

SESSION 2: General Session on Archaeology of Yukon and Northern Interior

This presentation will provide an account of analysis of data generated by this project through 2019. We will review the radiocarbon chronology of the Yukon-Alaskan borderlands in the region of the Alaska Highway, discuss the emergent culture historical sequence of the Little John site, and present new results from our faunal analysis.

[88] Norman Alexander Easton (Yukon College)

Summary of Fauna Distribution and Taphonomy from the Little John Site (KdVo-6), Yukon Territory, Canada

SESSION 16: Poster Session and Happy Hour

This poster will present summary graphics of fauna distribution across the Little John excavations and through time, as well as taphonomic indicators such as completeness, impact fractures, cut marks, and other indicators. Implications of these data, such as discrete activity areas and changing subsistence focus through time will be explored.

[89] Odin Miller (Ahtna Intertribal Resource Commission) and Shirley "Tursey" Smelcer (Ahtna Intertribal Resource Commission)

Fisheries, Research and Management on the Copper River: Patterns and Trends in Public Engagement

SESSION 8: Community-Based Participatory Research in Alaska

This ongoing research from the Ahtna Intertribal Resource Commission seeks to document contemporary trends in the Copper River drainage's inriver fisheries, with the goal of identifying data needs and facilitating

local engagement in the research, management and regulatory processes. Drawing on previous ethnographic work, we provide an overview of contemporary fishing practices and document contemporary trends of social and environmental change that have affected them in recent years. Based on the knowledge and viewpoints of our research participants, we suggest some areas of local priority for future fisheries research and monitoring. Additionally, this project will offer analysis of the regulatory and management processes, identifying major areas of consensus and disagreement among stakeholder groups. Through this analysis, we describe ways that Copper River basin residents are engaging in these processes, and infer points at which further intervention may be effective.

[90] Olga Lauter (École des Hautes Études en Sciences Sociales (EHESS), Paris, France)

Preservation of Alaska Native Traditions in the Anchorage Urban Environment

SESSION 6: General Session on Alaskan Anthropology and Ethnography

Alaska Native Peoples residing in cities face ethnic complexity and diversity. Anchorage is known as the biggest Native village in Alaska with the highest concentration of Alaska Native population. The Russian Orthodox in villages and cities throughout Alaska share the same tradition of celebrating the Russian Orthodox Christmas that is called Selaviq or Starring, while the ways of its celebration vary according to every region and village. For the Yupik Native Peoples, Selaviq is a combination of Christian and Yupik traditions and beliefs. The aim of this paper is to analyze how the Southwest Alaska rural traditions of celebrating Selaviq are preserved in Anchorage to examine in what ways the Yupik Russian Orthodox community negotiates their traditions in the ethnically diverse urban environment. The paper also highlights the historical and current relationships between the Russian Orthodox and Moravian denominations whose parishioners participate in the celebration of Selaviq.

[91] Owen K. Mason (University of Colorado Boulder) and Jeffrey T. Rasic (National Park Service)

Walrusing, Whaling and the Origins of the Old Bering Sea Culture

SESSION 9: General Session on Archaeological Research

For a century, archaeologists have puzzled over the enigma of whaling unfolding with no immediate predecessors. Social complexity in Bering Strait emerges with the Old Bering Sea (OBS) aesthetic engraved on walrus ivory implements recovered in sites with large cemeteries and thick middens. Many OBS sites co-occur with haulout locations for walrus, whose procurement engendered relationships were pivotal drivers that fostered whaling. Our revision of extant 14C assays to correct for marine carbon produces a younger "Low" chronology placing the OBS florescence between AD 650-1250, with its earliest phase Okvik and allied Ipiutak communities from AD 300 to 600. The lithic technology of OBS is distinctive in its notched bifaces with affinities to 3000-year-old Chukchi Archaic assemblages. Ipiutak lithic technology had an impact that suggests migration, warfare, or trading relationships with Alaska. The acquisition of rare commodities (driftwood, iron and obsidian) contributed to differential success and resulted in inequality evident in burials.

[92] Paddy Eileen Colligan (Hunter College, City University of New York)

"Big Data provide the big archaeological picture -- and may contradict a small scale view"

SESSION 9: General Session on Archaeological Research

The availability of large archaeological datasets allows us to search for patterns in material culture across chronological periods and huge geographical expanses to inform regional scale research. These datasets enable us to gain a broader perspective on what we can know about Arctic material culture. Because the Thule occupation was so extensive throughout the entire North American Arctic, datasets of this type enable the reexamination of two widely accepted assumptions

made by Robert McGhee and Allen McCartney related to Thule iron use. For this I drew on datasets from Alaska, Yukon, Northwest Territories, Manitoba, Nunavut, Quebec, Newfoundland and Labrador, and Greenland. Notwithstanding gaps in these large datasets, these data are sufficient to challenge the extrapolations to the wider Thule experience that McGhee and McCartney made, based largely on their work in Nunavut.

[93] Patrick G. Saltonstall (Alutiiq Museum & Archaeological Repository), Amy F. Steffian (Alutiiq Museum & Archaeological Repository), and Molly E. Odell (Alutiiq Museum & Archaeological Repository)

Intertidal Fish Traps of the Kodiak Archipelago

SESSION 10: Recent Archaeological Research of the Alaska Peninsula and Kodiak Archipelago

Anthropologists have long known that the Alutiiq people practiced barrier fishing. The use of barricades to harvest salmon from Kodiak's streams is noted in ethnographic accounts, reported by Alutiiq elders, and preserved in v-shaped stone weirs in the upper Karluk River. Recent archaeological surveys illustrate that Alutiiq fishermen also built intertidal fish traps—stone walled featured used to trap salmon massing around stream mouths. In 2019, museum archaeologists documented three such traps on the coasts of Afognak and Kodiak islands. Each trap is adjacent to a late prehistoric settlement, suggesting intertidal barrier fishing developed during the Koniag tradition—ca. 500 years ago. Two of the traps are associated with a unique style of petroglyph, pits and lines cut in stream-side boulders. The data suggest that barrier fishing was a new way of harvesting large quantities of salmon to feed the growing Native community and accumulate stores to fuel a status-based economy.

[94] Richard E. Reanier (Aurora)

The Use and Abuse of Data from Early North Slope Projects

SESSION 1: Early Days in Large Project Archaeology in North Alaska

My archaeological experience in Alaska began in 1975 as a field archaeologist on the TAPS project. In the summer of 1976, I was the first archaeologist working in the NPR-A for BLM, until Bob Gal arrived that fall to formally set up the program. I have continued to be engaged in Alaskan archaeology in the intervening years, and this paper discusses some of the problems with using archaeological data produced by those early projects. Using examples from the TAPS and NPR-A projects, I review survey methods and site location recording in the 1970s and ways to overcome the lack of geospatial accuracy in present records descended from these early projects. These include map and aerial photograph analysis, and the use of original field notes.

[95] Richard L. Martin (Knik Tribe)

2019 Field Season Update, Knik Tribe

SESSION 9: General Session on Archaeological Research

Radiocarbon dates from Knikatnu Inc parcel near Settlers Bay on the west side of Knik Arm reveals a proto-historic Dena'ina Village. An uncalibrated 845 ±29 BP cache pit array near Cottonwood Creek opens new lines of investigations into the early Dena'ina habitation of Knik Arm, Alaska.

[96] Richard O. Stern (RETIRED)

What I Did on a Summer Break from Grad School One Year Way Back When, and How It Lead to A Lifetime in Alaska

SESSION 1: Early Days in Large Project Archaeology in North Alaska

My career in the North started with a summer's fieldwork in the Northwest Territories, followed by a summer following Ed Hall throughout Alaska by floatplane, boat, and on foot. That summer's fieldwork, along with a three-week stint working with Dale Slaughter and Mike Kunz at Galbraith Lake on the TAPS Archaeology Project cemented my interest in working and living in Alaska. This paper touches on the changes in archaeology fieldwork methods, laboratory and site analysis, and the technology advances that have transformed contemporary Alaskan CRM work. Big project CRM work then and now is presented and contrasted in the areas of logistics, recordation techniques, technology available, administration, and analysis and post-processing concepts.

[97] Robert A. Sattler (Tanana Chiefs Conference)

Community-Based Collaboration on the Tochak Discovery McGrath in the Village of McGrath, Upper Kuskokwim River

SESSION 13: Learning to Replicate Past Practices, Replicating Past Practices to Learn: Experimental Approaches and New Techniques in Alaskan Archaeology

The inadvertent discovery of the Tochak site in the village of McGrath in the Upper Kuskokwim River region in the fall of 2013 rapidly turned into a collaborative research endeavor. Following the discovery, many entities have worked collaboratively to tell an evolving story of this pre-contact subsistence camp located in the center of the community. Those involved include tribal, state and federal agencies, a broad network of academic researchers, medical doctors, the local historical society, the tribal leadership, local consortium of ANCSA village corporations, and local school district. Multiple lines of inquiry and information sharing include standard archaeological testing,

radiocarbon dating, ancient DNA analysis, faunal identifications, ground-penetrating radar, public education and analysis with the assistance of local students. The story of the Tochak site is about mutual contributions among collaborators, but the larger story is a novel outcome in science, education and community-based research.

[98] Robert C. Bowman (National Park Service) and Robert A. Sattler (Tanana Chiefs Conference)

Ground-Penetrating Radar in Alaska: Common Complications Conducting GPR in Alaska and Overcoming Them

SESSION 11: Research Assessment of Digital Technology in Alaska Field Archaeology

Ground-Penetrating Radar (GPR) has enhanced our ability to interpret cultural sites the world over. However, this technique does not operate as "plug and play" technology giving operators an exact picture of objects present underground. Rather, raw data must be processed and arranged before interpretations can be rendered. Further complications arise in variable sediment contexts and terrain features in remote settings that are impractical to revisit. Given the remoteness of most cultural sites in Alaska, coupled with our extreme seasonality, ground conditions, surface vegetation obstacles, and in some cases, issues with subsurface mediums, many complications can be present in GPR data interpretation. This presentation will describe the common complications that may and often do occur when collecting and processing GPR data from sites across Alaska. Special attention will be paid to methods (both in the field and during the processing stage) that can be used to overcome them.

[99] Robert E. King (Bureau of Land Management)

Implementing NAGPRA: A Look at BLM's Experiences in Alaska, 1990-2020

SESSION 6: General Session on Alaskan Anthropology and Ethnography

This year marks the 30th anniversary of the passage of the Native American Graves Protection and Repatriation Act (NAGPRA). This milestone legislation resulted in new responsibilities for the Bureau of Land Management in Alaska. These included working with museums and tribes concerning certain items in museums removed from federal land sometimes over a century earlier with often incomplete documentation. Under NAGPRA, Native American human remains, associated and unassociated funerary objects, sacred objects, and objects of cultural patrimony, held by museums and federal agencies, were to be identified and worked through a process, which could result in their being "repatriated" (returned) to qualified lineal descendants and Indian tribes. As a result of NAGPRA's passage, by 2020, BLM has completed numerous Federal Register Notices for repatriating human remains or other items subject to NAGPRA, with more in progress. This paper briefly looks at some of BLM's experiences and challenges over 30 years.

[100] Robert Gal (National Park Service – Retired)

Salvage, Rescue, Conserve

SESSION 1: Early Days in Large Project Archaeology in North Alaska

I first excavated in Alaska at Unalakleet in 1969, having previously worked at excavations in Wyoming, New Mexico, Pennsylvania and in Lincolnshire and Wiltshire in England, on Paleo-Indian, Mimbres, Cochise (Archaic), Late Woodland, Roman, Bronze Age and Neolithic sites. These broad field experiences and an anthropology degree with a specialty in archaeology from the University of Pennsylvania hardly prepared me for the politics of statehood, land claims/classification, resource development/protection that confounded the burgeoning of

cultural resource management (CRM) in Alaska. In 1970 and 1974-1976 I worked on the TAPS/Alyeska Project and between 1976 and 1981 I worked on the BLM NPR-A Project. Between 1981 and 1989 I was employed by BLM, Hall & Associates and NPS for CRM activities involving the Red Dog Mine/DMTS. I will reflect on my career experience on these three projects to illustrate the rapid transformation of the CRM regulatory environment during this time period and the special demands that the Arctic imposes. One size does not fit all. Alaska IS different.

[101] Roberta Gordaoff (University in Trosmø- The Arctic University of Norway)

Chernofski Bay Land Use from Historic and Archaeological Data

SESSION 12: General Session on Aleutian Archaeology

Once one of the richest marine mammal hunting villages on Unalaska Island during the Russian period, Chernofski village, on southwest Unalaska Island, the Aleutian Islands, Alaska was abandoned in 1928. After surviving the Russian period and transition to the American period, Chernofski went into steep decline following the Fur Seal Act in 1910 that ended sea otter hunting in territorial waters of the United States. Data from Russian and American period censes between 1791-1920 and ethnohistoric sources including historic period site, family and household data is compared to field survey data from nine archaeological sites around Chernofski Bay. The historic and archaeological data are integrated to form a case study of prehistoric land use in the eastern Aleutian Islands.

[102] Sally Carraher (University of Alaska Anchorage)

What Do You Mean by "household" and Other Thorny Issues in Kinship Research with Indigenous Communities

SESSION 3: Current Directions in Alaska Medical Anthropology

The “household” is an important concept in the health sciences, often treated as an independent unit bounded by a physical structure, with a

fixed occupancy whose members only belong to a single household unit at any given time. Kinship and related research in anthropology demonstrate that this is simply not how people live in many Indigenous communities in the North. In fact, "household" ought be added to a long list of problematic terms forced onto Indigenous peoples by researchers, colonizers, and politicians – including "nation", "tribe," "horde," "band," and "genetic ancestry." To assist a health research team in Canada who are beginning a new project combining human kinship, household-level health factors, and bacterial genomic research, UAA anthropology students completed a critical review of Arctic kinship literature. We discuss findings from the class project, which will inform this research team's community planning meetings later this spring in our Indigenous partner communities.

[103] Sally Carraher (University of Alaska Anchorage)

The Ghosts of Research Past: Mapping Kinship and Genetics Research in the Western Arctic

SESSION 16: Poster Session and Happy Hour

The Canadian North Helicobacter pylori (CANHelp) Working Group is launching a new project that will combine human kinship, household-level health factors, and bacterial genomics analysis to investigate the health burden of H. pylori infection in western Arctic communities. While people in our Indigenous partner communities want this research to be done, we acknowledge that both kinship research and genetics/genomics research have been harmful at times to Indigenous peoples. To assist with planning for this new research, students in the UAA course "Kinship and Family" completed a review of kinship research history and theory focusing on northwestern North America (Alaska, Yukon, and Northwest Territories). This poster maps out the history of kinship and genomics research that have occurred in the region where our different partner communities are located, and identifies issues and concerns from historic research to be addressed when we plan next steps with our Indigenous partner communities.

[104] Sam Coffman (University of Alaska Museum of the North) and Linda Chisholm (National Park Service)

Recent Archaeological Survey Along the Savonoski River and Hallo Bay, Katmai National Park and Preserve, Alaska

SESSION 10: Recent Archaeological Research of the Alaska Peninsula and Kodiak Archipelago

In 2016, Katmai National Park & Preserve and the University of Alaska/Museum of the North partnered in a multi-year archaeological survey of a historic travel route from Katmai's Pacific coast to the Savonoski River drainage at Naknek Lake. Field surveys of the Savonoski (2017), north Hallo Bay and Ninagiak river (2018) documented six new archaeological sites and tested seven previously-recorded prehistoric and protohistoric sites. New and updated radiocarbon dates from these sites assisted archeologists in assigning cultural phases to discrete locations. Concomitantly, newly collected artifacts and geological samples have improved our basic understanding of local environmental stability, resource use, prehistoric raw material procurement, site use and related activities along the Naknek River drainage and Pacific coast by pre-contact Alaska Native peoples.

[105] Scott Shirar (University of Alaska Museum of the North), Molly Proue (Alaska DOT&PF), and Josh Reuther (University of Alaska Museum of the North)

The Legacy Collections of Edwin S. Hall Jr. and Continuing Research at the Sikoruk Site

SESSION 9: General Session on Archaeological Research

An ongoing effort is underway to transfer significant collections made by Ed Hall during his career of field research in Alaska from upstate New York to the University of Alaska Museum of the North and the Alaska and Polar Regions Collections & Archives at UAF. Largest among the archaeological collections are artifacts and faunal remains from the Sikoruk site, situated on the shore of Tukuto Lake in the central-western Brooks Range. The Sikoruk Site is the largest Late Prehistoric village site in interior Northwest Alaska consisting of over 100 house

features, more than 350 cache pit features, and a substantial midden. This paper presents the history of excavation and research at the site, but also new radiocarbon dates for two house features as well as future research aspirations for the collection.

[106] Scott Shirar (University of Alaska Museum of the North), Nicole Misarti (University of Alaska Fairbanks), Josh Reuther (University of Alaska Museum of the North), and Holly McKinney (University of Alaska Fairbanks)

The Zooarchaeology of Recent Excavations at Hot Springs Village, Lower Alaska Peninsula

SESSION 10: Recent Archaeological Research of the Alaska Peninsula and Kodiak Archipelago

The Hot Springs Village Site, located in Port Moller on the Lower Alaska Peninsula, is one of the largest village sites on the Bering Sea Coast with nearly 300 house features and substantial well-preserved midden deposits. Previous work, beginning as early as 1928, reveals multiple episodes of human occupation at the site occurring over the past 5000 years. Field research initiated at Hot Springs in 2014 consisted of excavations at targeted locations in temporally distinct midden deposits with the goal of collecting large samples of representative faunal material to create an assemblage that could be used to investigate a number of major archaeological and ecological questions in the Bering Sea region. This paper presents preliminary results of the initial identification and analysis of over 335,000 individual zooarchaeological specimens collected from the site.

[107] Sean Mack (Bureau of Indian Affairs)

Ride of the Archaeological Valkyries

SESSION 11: Research Assessment of Digital Technology in Alaska Field Archaeology

The Bureau of Indian Affairs (BIA) has recently acquired an Unmanned Aerial System (UAS), or "drone", and would like to present our methods and data collected during the 2019 field season. This includes acquiring

high resolution aerial imagery in very remote regions at a fraction of the cost of traditional methods, creation of 3D landscapes, using Digital Elevation Models (DEMs) to locate surficial features, and the potential to use the data to monitor erosion of archaeological sites.

[108] Senna Catenacci (University of Michigan) and Briana Doering (University of Michigan)

Evaluating Terminal Pleistocene Stone Tool Production at Delta Creek, Alaska

SESSION 16: Poster Session and Happy Hour

The objective of this project is to attempt to understand the lifestyles of nomadic hunter-gatherers in Alaska by analyzing lithic material from a multicomponent site, called XBD-110, dating to 9,435±100 calibrated years before present. This was achieved by conducting a functional lithic analysis of the artifacts found at the site. This type of analysis can give insight into important information about an artifact, such as the type of material it is, what its function was, and if it was a tool, what it was used for. A greater understanding of subsistence during this period can help us to potentially understand the movements and habits of hunter-gatherers from this time period, and thus allow us to create a more detailed picture of why they migrated to where they did and for what possible reasons.

[109] Stacey Fritz (Bureau of Land Management)

Pay Alaska Natives to Attend Public Meetings: Why the Alaska Anthropological Association Should Take a Stand

SESSION 8: Community-Based Participatory Research in Alaska

Compensating traditional knowledge holders for their time and input is anthropologists' long-established ethical standard. It's fair, shows respect, and often results in valuable information. Federal government agencies are required to hold public meetings in communities to get input on, for example, development projects that can affect people's homeland and way of life. Federal rules prohibit monetary compensation for attendance, door prizes, raffles, and with rare

exceptions, the use of federal funds to purchase food. These repetitive meetings, recognized as a social impact, are often contentious if not borderline traumatic, and there is little trust that comments are incorporated into decisions. Non-participation is problematic: people may be forfeiting their heritage by inaction. Paying people to attend is not a perfect solution, but it is better than not paying them. I lay out the case for compensation here in hopes the Alaska Anthropological Association will take a stand for the practice.

[110] Sveta Yamin-Pasterna (University of Alaska Fairbanks)

Engaging Alaskan Undergraduates, an Experientially Anthropological Reflection on Being a Mentor in the Great Land

SESSION 5: Innovations and Experiences in Undergraduate Anthropological

Today's University of Alaska Fairbanks Anthropology faculty represent a strikingly broader array of regional expertise, compared to the predominantly or exclusively Arctic focus it held throughout most of its history. "Are you even an Arctic department?" is a question/challenge I frequently hear from members of the Arctic social sciences community, reacting to the fact that alongside the Circumpolar North, the current Anthropology faculty conduct research in parts of Africa, Central America, Oceania, Middle East, Europe, Central Asia, and North America. This contribution to the session on undergraduate research is by an Arctic anthropologist attempting a professional reflection, specifically with regard to serving undergraduate students studying in Alaska, on whether in fact we are, and ought to be, "an Arctic department."

[111] Ted Parsons (University of Alaska Anchorage)

Low-Cost 3D Modeling of Archaeological Sites and Artifacts

SESSION 11: Research Assessment of Digital Technology in Alaska Field Archaeology

I build on prior research that highlighted cost-efficient, portable, and user-friendly techniques for digitally documenting archaeological sites

and artifacts in the field. This is an in-depth comparison of off-the-shelf methods for creating three-dimensional (3D) models, using Structure from Motion photo modeling, infrared structured light scanning on smartphones, and a commercial all-in-one smart-tablet based system.

[112] Tyler Teese (University of Alaska Anchorage)

A Legacy of Collecting Bodies in Alaska

SESSION 16: Poster Session and Happy Hour

Human skeletal remains without provenience are shelved within collections and are under-analyzed because of a lack of background information. I describe best practices for identification and repatriation of these collections. Osteobiographies are generated to create profiles and identify taphonomic markers that may lead to an identification of regions or activities. Minimally destructive testing for radiocarbon dating, stable isotope analysis, and DNA samples are obtained to identify regional information, age of the remains, and descendants if any. The intent is to produce a standard for data collection and best practices at the University of Alaska Anchorage (UAA) that could be applied at other institutions, with the potential benefit of assisting in ameliorating the backlog of collections of human skeletal remains without provenience.

[113] Will D. Norton (University of Virginia)

"Studying My Own Language In Writing": Peter Kalifornsky and the Construction of Dena'ina Literacy

SESSION 4: Placename and Language Research in Alaska

This paper examines the work of the Dena'ina writer Peter Kalifornsky (1911-1993) through a linguistic lens - in particular, his theories on the spelling of Dena'ina words, which eventually led him to diverge with the linguists he had previously worked with, who accounted for their spelling differences in a way that minimized Kalifornsky's theories. Making use of the large archive of interviews, manuscripts, and audio recordings assembled by Katherine McNamara in collaboration with Kalifornsky, I systematically compare Kalifornsky's spelling practices to

the orthography developed and used by the linguists who worked with him, in order to show how he represents the Dena'ina language as he believed it to work, and situate the orthography within the social history of the "reduction" of Native American languages to alphabetic writing, and within Kalifornsky's broader thought on Dena'ina language, literature, and culture.

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