### A REPORT TO THE NATIONAL PARK SERVICE-ALASKA REGIONAL OFFICE (NPS-ARO)

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### INTRODUCTION

The purpose of this report is to outline the successes, short-comings and unexpected events associated with a National Park Service-Alaska Regional Office (NPS-ARO) Shared Beringian Heritage project, Iñupiag Landscapes and Architecture: preserving Alaska Native community histories.<sup>1</sup> The project's objective has been throughout to combine applied social scientific research with educational outreach in the Bering Strait region. The project has given special attention to the Native village of Wales, located on the westernmost point of Alaska's Seward Peninsula, and the remote Native village of Inalig or Diomede, located on the western slope of Little Diomede Island at the center of the bottleneck region of Bering Strait on the United States/Russia border at the edge of the International Dateline. The project's data has depended on earlier research carried out by the PI, Carol Zane Jolles (Anthropology Department, University of Washington, Seattle, WA 98195-3100), and Co-PI, Herbert Agiygaq Anungazuk (NPS-Alaska Regional Office) from 2002 to 2006.<sup>2</sup> While the original research had resulted in the accumulation of indigenous Iñupiag place names and subsistence site locations for both villages, including numerous photos of community architecture, documentation of subsistence resources and their locations, and historic markers; and histories of family residences documented in photographs and tape-recorded interviews, much of the data lacked final verification by respected Native Elder scholars and traditional knowledge experts. In addition, much of the data was in rough hand-drawn maps and hand-written notes.

The research team headed by Jolles and Anungazuk included Don Callaway, Grant Crosby, Joel Cusick and Stacy Deming (all of NPS-ARO). The combined tasks assigned to the project included:

- finalizing documentation of Iñupiaq place names, resource areas, and historic and contemporary residences with the assistance of Native knowledge experts and Elders by Jolles, Anungazuk, Deming, and Crosby
- ground-truth mapping of the locations on the list above by Deming
- preparation of historical and analytical background papers based on interviews and consultations with members of the two villages by Callaway with assistance from Jolles and Anungazuk
- preparation of drawings of historical structures by Crosby, based on a guided tour of the buildings and other historical sites by a knowledgeable village resident
- oversight and/or preparation of finalized maps, charts, and DVDs by Jolles and members of the research team (Note: originally CDs and/or DVDs were to be designed and reproduced by *Imig/Video* in Anchorage.)
- reproduction and shipping of finalized maps, charts and other audio-visual materials for transfer to the villages and interested local organizations by NPS-ARO.

## NARRATIVE OF A RESEARCH PROJECT

The various tasks depended on the expertise of each individual researcher. Unfortunately, the project lost one team member very early in the life of the project. Stacy Deming, the mapping technician and specialist assigned to the project by NPS-ARO, left employment with the Park Service shortly after the project began and was not replaced. Her critical position as mapper and "ground-truther" affected the project's ability to carry out its responsibilities substantially. Nevertheless, Jolles and, to some extent, Anungazuk were eventually able to create a series of maps with the able assistance of Native Elders and traditional knowledge scholars in each community. (Unfortunately, the project's budget did not provide

<sup>&</sup>lt;sup>1</sup> NPS-Task Agreement: J8W0708002304; Cooperative Agreement: H8W07060001

<sup>&</sup>lt;sup>2</sup>The original research, entitled *Collaborative Research- Change and Its Impact on Culture, Economy, and Identity in Three North Bering Strait Alaska Iñupiaq Communities: Diomede, Wales, King Island,* was funded by the National Science Foundation's Arctic Social Science Program (Grant No. OPP-0095120).

for the services of someone to perform all of Deming's tasks.<sup>3</sup>) The resulting maps, as well as community resource charts and PowerPoints have been placed on DVDs. These will be sent to NPS-ARO at the beginning of December 2013. NPS-ARO is responsible for reproduction and distribution. Maps and charts will be reproduced both as laminated posters and as computer files on DVDs. The organizations receiving the products include: the National Park Service offices in Nome and Anchorage, the Native Village of Diomede IRA, the Native Village of Wales IRA, the Diomede Native Corporation, the Wales Native Corporation; the Kingigen School in Wales, and the Diomede School on Little Diomede Island. Kawerak, Incorporated, the regional Native corporation, and the Bering Strait School District regional office in Unalakleet.

- o DVD: PowerPoint that combines an archaeological and contemporary village tour of Diomede
- Map and DVD: Little Diomede Island showing Diomede Iñupiaq place names
- o Map and DVD: Little Diomede Island showing currents and water sources
- o DVD: a photographic record of Wales, with approximately 300-400 photos, dated 2004
- o DVD: PowerPoint documenting Wales plant resources
- o Map and DVD: village and local environmental maps showing Wales Iñupiaq place names
- Map and DVD: village residences as they existed in 2004. Residences include both occupied and unoccupied dwellings and out-buildings. Many had been in existence since the 1930s. These older structures were torn down in 2005. The photographic record noted above is therefore the last record of these earlier structures

# The Diomede Maps

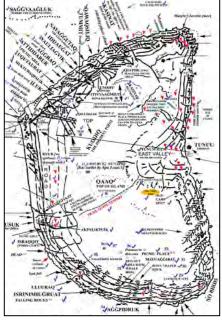


Figure 1. Diomede working map using hand-drawn base map, 2009

Mapping Diomede place names involved a series of steps, based on original work in Inalig by Jolles and Diomede Elders (2002-2006) and applied research tied to the project and carried out from 2008-2012 in Inaliq and at the University of Washington. Originally the map had begun as a simple hand-drawn 8.5" x 11" mimeographed sheet developed by a state agency in association with "bird" counts on the island in 1999 (Fig. 1). Because no other source was available until AeroMetric, LLC, took aerial photographs of the island, this sheet was duplicated again and again so that the Elders could write in place names and pin-point sites known to them. Much of this work was carried out with the guidance of Elders Patrick Omiak and Arthur Ahkinga. At the end of 2005 the accumulated map notations were consolidated and a poster sized version of the layers of information was created. Jolles then carried the resulting map from house to house, pencil in hand, so that every adult could add data.

The second task was to compose acceptable spellings for the long list of place names. As of 2013, Diomede Iñupiaq had not yet been documented and placed in a unique dictionary. To Patrick Omiak and Arthur Ahkinga fell the task of determining a correct spelling for all of the Iñupiaq words used in the maps, PowerPoint

<sup>&</sup>lt;sup>3</sup> The project experienced significant problems because of the shifting of funds back and forth between NPS-Alaska Regional Office and the University of Washington. While these problems were resolved, no additional funds were provided that would have made it possible to hire a new mapping technician. Problems related to air travel to the Bering Strait region also prevented NPS researchers from flying to Little Diomede Island because of the strict requirement of the NPS regarding air travel of personnel over the Bering Sea in small planes and/or helicopters. (I am not entirely certain of the nature of this restriction, but it did prevent travel of NPS research team members Anungazuk, Callaway and Crosby to Diomede and involved specialized protective gear that NPS did not possess.)

documents and resource charts. Jolles served as recorder as the two men quietly engaged in long conversations in Iñupiaq as they spoke in favor of a preferred spelling for each of the approximately 100 place names and related terms. (One could say they argued, but they were extremely formal and polite, in spite of their disagreements). Each of us was aware that the map was inaccurate as only a hand-drawn map approximation could be. Imagine the excitement, then, when AeroMetric's aerial survey photo-maps became available. This introduced a whole new level of mapping tasks.



The first step was 'abstract' ground-truthing, that is, visual or sight-truthing. This task was performed by Patrick and Arthur, the two traditional knowledge experts. They, in turn, had recommended that local Inalig plant expert Frances Sistuq Ozenna be included as well. Thus, this abstract form of ground-truthing depended on the intimate acquaintance of these three consultants with the island's geography, topography and heavily indented shoreline. Most of the work in Diomede on the AeroMetric survey photo documentation was performed in 2010. Additional correction and

Figure 2. Segment of Diomede "aero-map" with notations, 2009

documentation was carried out in Nome the following year by Omiak and Jolles. Kawerak, Inc., the regional Native corporation, offered office space and lent two employees, Diomeders Edwina Krier and Eva Menadelook, to the project.



Figure **3.** Patrick Omiak (L), Arthur Ahkinga (R) working on the Diomede map in the Diomede "City"

At the end of 2011, with most local documentation recorded in hand-written form on the aerial photo map, the task of transformation was the next stage. It required someone familiar with GIS and the ability to move between GIS and Adobe Pro to prepare the necessary documents that would meet NPS-ARO requirements and satisfy the



Figure **4.** Adam Freeburg

requirements for standard poster prints for the villages. Jolles hired graduate student, Adam Freeburg, Ph.C., (Fig. 4) to complete the GIS work and map creation for Diomede. He relied on basic research carried out by Jolles and by Patrick and

Arthur (Fig. 3), and traditional greens expert Sistuq Ozenna, to tackle this daunting set of tasks. The map included not only traditional place names, but hunting, birding and plant gathering sites, unusual land

forms, water sources, and any other unique sites deemed worthy of mention.<sup>4</sup> Jolles made final corrections to the spelling of Iñupiaq words at this time.

#### The Wales Maps

Wales data also lent itself to two major maps. The first is a traditional place name map. Place name data was gathered beginning in 2004 and continued until 2011, when Jolles was unable to return to the village. For the technical assembly and production of the map, Jolles received valuable assistance from Eileen Devinney (NPS-ARO) and David Carlson, a University of Washington graduate student.<sup>5</sup> Original data

collection for both maps depended heavily on Jolles, Anungazuk, Pete and Lena Sereadlook, and Faye Ongtowasruk (Fig. 5). Carlson was responsible for GIS issues and for general map production.

A second Wales map identifies households and abandoned dwelling structures in Wales and the nearby Wales environs as of 2004. The map is the result of work which commenced as a National Science Foundation project in 2004 and continued throughout the *Iñupiaq Landscapes* project. Its basis was a series of photographic surveys conducted in the summer of 2004 by Jolles and Anungazuk with the assistance of student photographers, Sonja Ongtowasruk (deceased), Kim Oxereok (deceased), Katie Ongtowasruk and Alex



Figure **5**. Faye Ongtowasruk (L) and Carol Jolles (R) work on place names using a USGS map, 2011

Okpealuk. It continued as a housing identification project and depended on the combined efforts of Elders Pete and Lena Sereadlook, Herbert Anungazuk, Faye Ongtowasruk and many other village residents. These are named on the map.

### RESOURCE DOCUMENTATION: CHARTS, POWERPOINTS

Food resource charts for both Diomede and Wales were reviewed and updated. These charts reflect the diversity of resources that have sustained the two communities into the present. Food charts give either Diomede or Wales Iñupiaq names, Latin scientific names, and common English names of each resource, seasonal month-by-month harvest times and locations, and additional notes containing specialized information and traditional knowledge about individual resources.

The charts include the following categories of resources: marine mammals, land mammals, fish, shellfish, greens (including seaweeds and berries), and birds. Each chart is divided up into months. Chart legends use symbols to indicate the following:

- when a species arrives and leaves
- when it is hunted, fished or gathered
- whether it is currently harvested.

Individual symbols represent:

- o whether a species is no longer taken or seldom taken
- whether harvesting has ceased because it is not a preferred item
- whether a lack of harvesting is occurring because the species is not available or is present but not taken at this time because of weather or for some other reason.

<sup>&</sup>lt;sup>4</sup> One example of a unique site is *Tuvuq* (tent), where Avuunga, a hunter who had traveled with the walrus, lived in a tent after he returned to Iŋaliq. A second is *Itivyaaġmiuut*, where killer whales live when they leave the water and reside on the island.

<sup>&</sup>lt;sup>5</sup> Carlson's work was paid for with private funds.

### The Wales Resource Chart and Plant Guide

The Wales chart illustrates the wide variety of foods available to a subsistence-oriented community with a large land base as well as access to the sea. Within the categories listed above, the Wales chart shows approximately 113 items listed. Of these, some are subcategories, as in the break down for walrus depending on age and sex. Each item includes scientific name, "common" or English name and Wales Iñupiaq name wherever possible; however, in some cases, only the Iñupiaq name is known and therefore there is no scientific or common name given. And, in a few cases, only the English name is known. Herbert Anungazuk was responsible for a substantial amount of the information contained in the notes that accompany each item on the Wales chart. Below are two selections from his notes regarding bearded seals and Pacific bull walruses.

Bearded seals: *Uġruk* is the largest true seal; hunted with extreme care. Males sing underwater in March to attract females. Lovelorn males may ignore hunters, making it possible to strike with a harpoon before taking them, insuring harvest. Male meat is pure unlike smaller seals whose meats have a musky odor in mating season. Some say harvested males in musk smell worse than ring seal cousins. *Uġruk* is taken in all seasons, but most are taken in spring migration

Pacific walrus bull (*nugaqzazuq*<sup>6</sup>): Some say a different type bull walrus from Bristol Bay area has been sighted. Probably from Bristol Bay or Round Island herd passing through Bering Strait mid- to late-July in a bulls-only run. Ice is gone, but herds move with current in sight of Kiŋikmiut hunters hunting in fair weather. Usually the last opportunity to hunt walrus and other sea mammals, although all are present in summer. Walrus arrival heralded by return of *iiziqkanisiq* [Lapland longspur], a northern songbird. Past harvests occurred in summer and winter depending on conditions, but harvests have declined from poor hunting conditions.

(Herbert Anungazuk, chart entries, n.d.)

In addition, a *Wales Plant Resource Guide* was researched designed and updated as a PowerPoint. It identifies 26 plants used or once used by Wales residents. The guide is the product of work by graduate student Laura Zanotti, Wales Elder Faye Ongtowasruk, Carol Jolles, and generous contributions by residents Lena Sereadlook and Ellen Richard, with many other contributions from Wales residents.

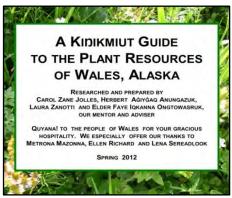


Figure 6. The Wales Plant Guide PowerPoint

### The Diomede Resource Chart

Many people in Diomede contributed to the food chart. However, the majority of the documentation of food resources depended on the contribution of Arthur Ahkinga with major assistance from Patrick Omiak. The approximate number of resource items on the Diomede chart is 69. As in the Wales chart, the Diomede chart includes subcategories and extensive harvest time information. In addition, it makes greater reference to changes that have occurred in harvest times and resource availability. Because

<sup>&</sup>lt;sup>6</sup> Herbert Anungazuk developed his own spellings for Wales Iñupiaq words. Iñupiaq terms in the Wales chart use his spellings.

Diomede is an island, it is characterized especially by the seasonal appearance of the birds that arrive each spring to breed and provide eggs and meat for the community. The relative isolation of the island is also the reason that it has access to far fewer resources than Wales and depends on trade with mainland communities that are fortunate enough to have fresh water fish, Arctic char, Tom cod, a large selection of greens and berries, and, of course, such land creatures caribou and mainland-managed reindeer. Diomede residents maintain trade relationships with Teller and Wales residents especially.

Entries in the note area of the Diomede chart were provided almost exclusively by Arthur Ahkinga. Below are some selections:

Crested or parakeet auklets (*tayak*): (*Hunters*) used to form lines of drummers with 5 gallon Blazo drums after birds returned to nest. As they flew out they would be netted by lines of netters below (drummers are above). Drummers and beaters shared birds. (from the chart columns: arrived at end of May, harvested shortly after arrival, eggs laid at end of June, gone by last week of September.

Clams (*immanit*): Most often taken from female and bull walrus (at the) end of May and month of June. Takes 2 people to lift full bull walrus stomach!

Arthur Ahkinga, chart entries, n.d.)

The dependence on subsistence-based, locally harvested foods is true for both villages. However, in some respects, the physical isolation of Diomede from the mainland has meant that it is perhaps more dependent on local harvests than Wales with its regular air delivery of with non-Native, 'store-bought' goods, that is, "White-man's food". (Diomede has regular air transportation reaching the village only once a week "when the weather is good".) A typical Diomede household may contain as many as 3 large (9 foot) chest freezers in addition to the under-house and stone semi-underground food storages that serve families. In contrast, Wales' residents have, in many cases, abandoned the semi-underground storage units and rely, instead, on a combination of household chest freezers and the local store. Wales also has a reindeer herd, owned and managed by the Ongtowasruk family. Reindeer meat is regularly harvested and placed in the store for purchase.

#### Interruptions: unexpected events that affected the project



Figure **7**. Laura Zanotti (L), Ellen Richard (M), and Herbert Anungazuk (R), at work on Wales plant identification, Summer 2004

The Iñupiaq Landscape project was plagued with interruptions, some of them disastrous. All managed to interfere with the project, slowing it and in some cases seriously impacting the ability of the research objectives to be met. Stacy Deming's departure has already been noted. Other events had to do with the health and wellbeing of the research team. While in Wales in February 2009, Jolles developed a torn retina and had to leave Wales immediately, thus postponing a scheduled trip to Diomede until the following year. The most devastating set of events, however, was Herbert Anungazuk's declining health. Jolles and Callaway had known that Herbert had emphysema. The emphysema became more noticeable some time during 2009 when Herbert had trouble walking short distances and/or climbing the hardened snow banks in Wales in winter. In 2009, for

example, while he and Jolles were in Wales, he slept through the morning, a time when work meetings had been scheduled with his uncle, Elder Pete Sereadlook and Elder Faye Ongtowasruk. What was not so apparent, but would be soon after that trip, was that Herbert was suffering from cancer as well and it was

spreading. Sadly, Herbert had sought treatment too late and the disease took its toll all too quickly. Herbert Anungazuk passed away in August of 2010. A significant portion of the project's work in Wales had depended on him and the products were modified as a result of his untimely departure.<sup>7</sup>

### A BRIEF CONCLUSION: RETURNING TO THE OBJECTIVES

Because of the problems described above the greatest concern was how to meet obligations both to the National Park Service-ARO and to the Native Villages of Wales and Diomede. It was determined that much of the information could be delivered as posters and/or PowerPoints. These could all be made available as computer accessible files as well. Where maps and charts are the products, the primary recipients would receive both DVDs and posters. Others, such as the Bering Strait School District would receive DVDs only, but would be free to print any items for conditional use as educational materials only.

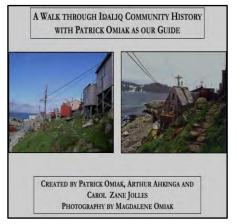


Figure 8. Diomede Architectural and Historical "Walking" Tour PowerPoint

To summarize once more, the research products themselves are a series of maps, resource charts, and PowerPoints, described in some detail above, that illustrate village architecture, residential history and subsistence resources that characterize each place. Diomede history is further documented using a PowerPoint focused specifically on the location of families, both historically and in the present, using dwellings and resource storage areas to tell this story. Wales plant use and gathering locations are further documented via a PowerPoint that moves the viewer through the harvesting landscapes and has the potential to educate young people about locally available plants. These products have some limitations, stemming from a lack of personnel with technical expertise. Nevertheless, all of the products offer significant visual and text-based accounts of the two communities with their vibrant histories as subsistencebased societies. Products for both villages should be useful as

local teaching resources in the Diomede School and Kingigen School, with additional availability made possible through the community IRAs and corporations.

The *Iñupiaq Landscape* project was conceptualized from its beginning as an applied research project with a commitment to return to each community products that visualized and celebrated their unique locations within the Bering Strait region. The limitations created by the loss of research team members did limit the ability to accomplish all that we as a team had set out for ourselves. Nevertheless, the maps, charts, the plant resources chart and the visualization of community histories are meant to meet those original objectives using the personnel and resources available to us. It is our hope that these products will find much use in the two local schools, in the regional office of Kawerak in Nome, within the National Park Service offices in Nome and Anchorage, and in the Bering Strait School District. The projects' materials are meant to be used widely as educational materials and, hopefully, will become an inspiration to other Native communities to document their own compelling histories of land use and residence in the Bering Strait areas.

Quyana

<sup>&</sup>lt;sup>7</sup> Jolles's health also had health problems: major surgery, 2011; spinal fracture, 2012; hip instability, 2012-present. Doctor's recommendation: no more travel to rural Alaska.