

but the males are larger and develop on a cycle quite different from females. These and a plethora of other facts reveal that indeed the biology of this sub-Antarctic population is basically the same as its northern hemisphere conspecifics. The introduced reindeer took only two years to acclimatize to the austral seasons, which are of course six months out of phase with the northern hemisphere. It seems the reindeer's biological clock is strongly synchronized to photoperiod. The reproductive biology of these sub-Antarctic reindeer is similar to that of the domesticated stock from which they are derived. Their wild cousins in North America mature slowly. Female caribou rarely give birth until they are three years old. Through millennia of domestication, reindeer seem to have been artificially selected to mature more rapidly. Typical of Scandinavian reindeer, the South Georgia males are sexually mature as calves, and females nearly always give birth to their first calves as two-year-olds.

Part 3 examines the South Georgia introduction in the context of other island introductions and theories on the ecology of introductions. In the absence of predators, on an island with no woody vegetation and no evolutionary history of herbivorous grazing, the introduced population predictably irrupted, dispersed in waves from the release site, caused habitat damage (some of it long term) and eventually reached a saturated, fairly stable relationship with available habitat. Interestingly, in the absence of most northern hemisphere mortality factors, falling off cliffs has become a significant cause of mortality for the South Georgia reindeer. Because more easily accessible forage has been overgrazed and because foraging sites on exposed cliffs are often blown free of snow, they often present fatally attractive feeding alternatives to the large-hooved animals.

The book is well illustrated with maps, tables, figures and photographs, including striking full-colour cover and frontispiece photographs showing the reindeer in their beautiful sub-Antarctic alpine landscape. Some of the figures are too convoluted and cryptic for me to easily follow. Would you know that a dark spot on a histological section labeled rSCL was a regressing secondary corpus luteum, unless you were told? Otherwise the book is handsomely produced, richly documented and cleanly edited.

On the coffee table by the armchair this book might stimulate conversation about interesting anomalies in far away places. On the library shelf it will provide a useful review document that lends further support to already well-supported theories of island biogeography and population ecology. But in the packsack of the conservation biologist responsible for hundreds of thousands of animals in millions of square kilometres of habitat alive with predators, diseases, hunters and parasites and besieged by a changing climate and the constant threat of nuclear disaster, this book won't cut much ice.

*Jack Van Camp
Arctic College
Box 600
Fort Smith, Northwest Territories, Canada
X0E 0P0*

QULIAQTUAT IÑUPIAT NUNANIÑÑIÑ: THE REPORT OF THE CHIPPIKPUK RIVER AND UPPER MEADE RIVER ORAL HISTORY PROJECT. By WENDY H. ARUNDALE and WILLIAM S. SCHNEIDER. Barrow, Alaska: North Slope Borough Planning Department, 1987. 100 p., 4 tables, 14 maps and figs., 19 photos, bib. Softbound. No price indicated.

Potential readers of this report should not be put off by its unfamiliar title, as it is one of the more cogent statements of a particular people's culture that I can recall. Therein lies much of its value and timeliness. For northern residents, scholars, scientists and policy makers alike, there is increasing awareness of the value of fostering collaboration between the traditional and local knowledge of northern aboriginal peoples and mainstream science.

Documenting traditional knowledge is essential to move beyond the rhetoric, and Arundale and Schneider provide a glimpse of the knowledge that is available when time is spent with some unheralded experts — the North Slope Iñupiat.

This report is an attempt to understand the history of two river drainages that have provided important resources for these northwest Alaska residents for hundreds and perhaps thousands of years. It is based on tape-recorded interviews with 15 residents, in combination with a literature review covering a number of related subjects. The paramount role of the Iñupiat in this study is apparent.

The authors advise the reader at the outset that, in the analysis and in the writing, the oral materials are given priority. Although the written sources take supporting roles, they are nonetheless important. One of the strengths of this report is the balance, as all too often the oral history is either forced to fit a preconceived framework based on written sources, or conversely, the written sources are simply ignored.

The interview methodology is spelled out clearly, including the fact that the authors reviewed the draft report with all but two of the individuals who provided the oral information. These narrators provided further corrections, comments, clarifications and additions to what had been written. This procedure should become standard practice in all oral history work, as should Arundale and Schneider's practice of referencing oral testimony from the elders as a source, just like any other source of information. The authors provide specific instructions on how to do this, with the hope of promoting consistency and accuracy. This is not yet a canon of scholarly or scientific inquiry, and the sooner we adopt this practice the more enlightened we will become.

The report has five basic parts. These include an introduction, a presentation on the lives of the people who provided the oral history and an overview of the landscape and resources as seen by both the informants and the authors. The fourth part is an historical overview that provides the personal perspectives of the informants within a novel historical framework. Of particular interest here is the authors' recognition of the Unknown Past, a section that discusses events of a timeless or epic nature. This simple act of recognizing and categorizing this kind of information may help to further an awareness of different cultural perspectives among those who are more comfortable with the Western scientific perspective. The fifth part of the report is basically a gazetteer, which consists of an alphabetical set of descriptions listing important sites (campsites, hunting and fishing grounds, trap lines, etc.) in both study areas.

In the remainder of this review I want to highlight some of my reasons for commending this study and recommending it to everyone with an interest in northern aboriginal cultures, irrespective of their scientific bias or perspective. A constant theme that emerges throughout the course of this report is the acquisition of knowledge about the land and its resources gained through experience. Whether by walking the country as reindeer herders or listening to endless stories from knowledgeable elders, the North Slope Iñupiat continually demonstrate the intimate link between their way of life and their knowledge of the region. The sum total of their lives demonstrates the inseparability of these. Without wishing to engage in polemics, it is reasonable to suggest that aspiring northern scientists and resource managers should have the option of spending several months travelling and living with northern hunters. Or perhaps this could be part of their professional development once they are employed — self-evident, perhaps, but extremely difficult to achieve in the current climate of pressing scientific concerns and modest resources. Yet, nothing is as effective in fostering mutual respect.

The section on food resources is basically a summary of traditional knowledge on that subject. Although not classified and categorized in ways that are consistent with formal scientific training, the knowledge and insight are there in narrative form. The challenge for those who seek to build bridges between this knowledge and mainstream science is to collect and codify this information so that it is more available to those who, for want of time, money or incli-

nation, do not undertake oral histories or ethnographies. Whether or not this is realistic or achievable remains to be seen.

Another aspect of the living/experience/knowledge continuum that this report makes abundantly clear is the indispensable value of a diachronic perspective. The North Slope Iñupiat, for example, are acutely aware of the ever-changing character of rivers as one of their most important attributes. Their knowledge of the complexities of the seasonal movements of caribou is also well documented in this study and again underscores the value of cumulative experience. The empirical knowledge of a particular culture is not bounded by the individual lives of its members — hence the meaning of oral tradition. This section of the report makes clear the fallacy of theory building and statistical modelling based on observations at a single point in time, without reference to historical occurrences.

Turning to the historical overview, I note with interest that E.S. Burch is credited as the primary source of information for the Traditional Past (1800-49), based on both historical sources and his interviews with many of northwest Alaska's most outstanding native historians. The native historians get no more recognition than this passing reference, something I find surprising in this particular report. The authors should also check the dates of the three bone artifacts from Old Crow that they discuss in this section, at least one of which has been found to be much more recent.

The historical overview, and the report as a whole, constitute a case history of Iñupiat adaptation in the face of external changes, and to describe it as dynamic is an understatement. This is also a story of persistence and innovation, as evidenced by one individual who became a leader in the coastal expansion of the fur trade when commercial whaling ceased. It is often only through oral history that we transcend the abstract processes of cultural change and discover once again that individuals are key ingredients in the historical process.

In the end, it is traditional and local knowledge that lie at the foundation of Iñupiat adaptability and persistence. This report demonstrates, as does history, that long after the agent of the dominant culture is gone, it is the knowledge of subsistence resources that has allowed the Iñupiat to endure with freedom and security. I suspect that the same is true of all northern aboriginal peoples. We can only hope that traditional knowledge will play an even greater role in mitigating the stress than many of these peoples are experiencing as a result of culture change in the late 20th century.

In conclusion, this report provides lucid evidence of the value of oral knowledge and its place in cultural evolution. There is nothing earth-shattering to read here, however, and some readers may even consider much of the contents to be mundane. But simplicity masks wisdom. It is both the contents of this book and the way in which it is presented that make it important reading for anyone with an interest in the circumpolar world. Similar studies must proliferate if we are to remain hopeful about the 21st century.

*Robert R. Janes
Glenbow Museum
Calgary, Alberta, Canada
T2G 0P3*

GUIDE TO THE WILLIAM A. EGAN PAPERS, 1940-1984. By BARBARA M. TABBERT. Elmer E. Rasmuson Library Occasional Paper No. 13. Fairbanks: Elmer E. Rasmuson Library, Alaska and Polar Regions Department, University of Alaska Fairbanks, 1987. 17 p., illus., microfiche. Softbound. US\$12.00.

GUIDE TO THE MIKE GRAVEL PAPERS, 1957-1980. By BARBARA M. TABBERT. Elmer E. Rasmuson Library Occasional Paper No. 12. Fairbanks: Elmer E. Rasmuson Library, Alaska and Polar Regions Department, University of Alaska Fairbanks, 1986. 54 p., illus., microfiche. Softbound. US\$12.00.

Would that all the major Alaska archival collections had the extensive references to assist the researcher that these two resources have. Each guide begins with a brief chronological outline of the politician's life. Unfortunately these biographies, spanning the collection materials themselves, conclude with the end of the men's political careers — Egan's in 1974 (he died ten years later) and Gravel's in 1980 (he is still living). Given the men's considerable influence over both Alaskan politics and United States policies on Alaska, the reader may wish, and thus have to look elsewhere, for more detail on their political and personal lives. A further elaboration of the men's lives would have required that the chroniclers editorialize, when their intent was quite simply to objectively describe the contents of these collections.

Rather than requiring the reader to read through each "Series" description to understand the breadth of the collection, each guide, immediately following the biography, summarizes the materials in a short "Scope and Content Notes." This overview explains what materials occur in the collection, how the material is organized, and any limitations of the collection. Because the Gravel collection is more extensive, the cataloguers were required to include an additional category, "Record Group," found in the *Guide*, to their organization of the papers. This detailed arrangement serves to make the researcher's job of tracking down specific issues and events much easier. Both guides provide excellent detailed "Series Descriptions" of the materials, numerous photographs, and an additional container list on microfiche attached to the back cover delineating the contents of each box in the collection by series and subseries numbers, folder title, and folder and box numbers.

Some distinctions between the two guides should be noted. These differences are as a result of not only the differences in the amount and the type of material contained within the two collections but also an indication of the different times and styles of the two men. For example, substantial audiovisual materials for Gravel are contained in this collection (he was the first Alaskan politician to take full advantage of the media and sophisticated polling techniques), whereas audiovisual materials from Egan's lengthy career are not a part of the collection but are located elsewhere, in the Alaska and Polar Regions Department's Oral History Program. Furthermore, although the Egan materials extensively cover his Alaskan work (the researcher would also want to consult the official records of his three gubernatorial terms found in the Juneau State Historical Library), there is minimal information on Gravel's Alaska political work from 1957 through 1967. On the other hand, Gravel's bid for vice president in 1972 and his work on major Alaska issues of the seventies, including the Alaska Native Claims Settlement Act, the Alaska National Interest Lands controversy, and pipeline legislation, is quite complete.

For insight into Egan's private life the researcher will not be disappointed. The collection contains memorabilia from his personal and family history that "reflects Egan's 'down home' personality" and how this "'people person' who enjoyed entertaining visitors and colleagues" ably communicated an "informality as well as his policy of being easily accessible" to Alaskans. Besides a series on the celebrated Liz Ray scandal, the controversial Aspen House investment property and Denali City recreational tourist attraction, the Gravel guide offers little insight into what his collection might reveal about his personal side. Arguably these subjective reflections are the task of the researcher, not the cataloguer. The descriptions of the collections aptly demonstrate that there is a wealth of information for those eager to plumb the rich lives of Alaska's William A. Egan and Mike Gravel.

*Susan H. Koester
School of Education and Liberal Arts
University of Alaska Southeast
11120 Glacier Highway
Juneau, Alaska 99801
U.S.A.*