# Huna Tlingit Gull Egg Harvests in Glacier Bay National Park

Eugene S. Hunn<sup>1,5</sup>, Darryll R. Johnson<sup>2</sup>, Priscilla N. Russell<sup>3</sup>, Thomas F. Thornton<sup>4</sup>

**Abstract**. We report the results of an ethnographic study of the cultural significance and traditional practice of Glaucous-winged Gull egg harvests by the Huna Tlingit people of Hoonah, Alaska, with particular reference to Glacier Bay National Park. The study involved semi-structured interviews with 48 Huna individuals knowledgeable about such harvests. Huna gull egg harvests were a seasonal family activity supportive of important social and cultural values. Most Huna today resent the fact that they are no longer able to harvest eggs at the Marble Islands within Glacier Bay, a favored site. Huna gull egg harvests were also guided by a set of traditional rules which likely served to conserve the resource, e.g., take eggs only from nests with incomplete clutches.

### Introduction

There is a vigorous debate in academic and management circles with regard to the question of whether indigenous peoples conserve their natural resources. Proponents argue that indigenous communities are more deeply attached to their homelands than are other stake holders in the locality, such as recent settlers and transient resource users. Indigenous communities with deep roots in local landscapes typically develop detailed knowledge and deep appreciation of local natural environments by virtue of their dependence on local resources for their livelihood. Such knowledge and understanding is prerequisite to careful management of local resources for long-term sustainability.

Skeptics question whether indigenous communities are in fact so stable, whether instead human history involves a succession of environmental crises and violent population shifts more like modern human history. They further question whether humans are by nature capable of sacrificing shortterm selfish gains in the interests of a collective concern to protect long-term stable relationships between the community and its natural environment. The impact of new technologies on the sustainability of harvests is also at issue. Our Huna gull egg harvest study provides one example that should help clarify these contentious issues.

### **Methods**

Our team was brought in at the joint request of the Glacier Bay National Park administration and the Hoonah Indian Association to document the history and contemporary

<sup>5</sup> Corresponding author: hunn@u.washington.edu, 206-543-5240

significance of gull egg harvests by Huna people. Wayne Howell of the Glacier Bay National Park Service administration introduced our team at an open meeting at Hoonah and we developed a procedure acceptable to both the Park Service and the Huna community. We would seek to interview all knowledgeable Huna willing and able to speak for the record. We subsequently completed 48 interviews. These were tape recorded and transcribed. The interviews focused on the significance of gull egg harvests and how such harvests were conducted, based on the personal recollections of the interviewees. A detailed analysis of the results were first circulated in draft form to Glacier Bay National Park personnel and Huna community representatives, modified in response to comments received, then published (Hunn and others, 2004).

### Results

First, our review of the archaeological, linguistic, and historical evidence strongly supports the view that the Huna Tlingit people are the direct descendents of Native communities in continuous occupation of the Icy Straits and Glacier Bay region for 6,000 to 10,000 years. The ethnographic record demonstrates further that the local community has inherited an extensive body of Traditional Environmental Knowledge (TEK)—detailed, empirically and experientially grounded knowledge of local plants, animals, and places—that informs their occupation and use of the local landscape and its natural resources. We demonstrate furthermore a specific linkage between local knowledge of gull breeding biology and behavior and resource harvest practices based in that knowledge that may represent an instance of indigenous conservation.

Our Huna Tlingit consultants describe the traditional seasonal harvest of glaucous-winged gull eggs as of particular cultural significance because it marked a key transition in their annual cycle of travels and harvests. Seagull eggs were available for harvest for but a few weeks at the first of June

<sup>&</sup>lt;sup>1</sup> Department of Anthropology, University of Washington, Seattle, WA 98195-3100

<sup>&</sup>lt;sup>2</sup> Cooperative Ecosystem Studies Unit, School of Forestry, University of Washington, Seattle, WA 98195

<sup>&</sup>lt;sup>3</sup> 4550 West 57th St., Apt 1A-2, Chicago, Illinois 60629

<sup>&</sup>lt;sup>4</sup> Department of Anthropology, St. Lawrence University, Canton, NY 13617, tthornton@stlawu.edu

and this was the occasion for family outings to the gull colonies, most notably those on the Marble Islands in Glacier Bay, where the sheltered waters allowed even young children to participate and learn the basics of Tlingit resource harvest etiquette.

Our most striking finding was that nearly all knowledgeable Huna-we interviewed 48 Huna residents with some knowledge of the traditional practice of gull egg harvests-referred to traditional rules governing these harvests. A substantial majority (24 of 39 consultants, 64 percent of those specifying a rule) agreed that they had been taught to carefully note the number of eggs in each nest and to harvest the eggs only if one or two had been laid but to leave the nest undisturbed if there were three eggs present. There was some disagreement as to the precise rule, with some stressing the need to leave one egg in the nest. Though one respondent described a more radical strategy involving destroying the eggs in full nests, then returning later to harvest fresh eggs laid to replace those that had been destroyed, several elderly consultants vigorously denied that such a practice was ever sanctioned.

## Discussion

Initially we did not appreciate the significance of these cultural rules, but on further investigation learned that the glaucous-winged gull (*Larus glaucescens*), the primary target of these harvests, is an "indeterminate nester," that is, females are "programmed" to lay a clutch of a particular size—in this case, the modal clutch size is three eggs—laying a single egg approximately every second day, continuing to lay until the target clutch size is achieved. When a full clutch is present in the nest, the female begins to incubate and her hormonal system shuts off egg production. However, if eggs are removed from the nest before the clutch is complete, she will continue to lay.

In short, the Huna community had devised a traditional resource management system, transmitted from generation to generation by explicit instruction of the young during the harvest itself and enforced by public opinion, that was very likely designed to sustain a culturally significant harvest of a potentially vulnerable natural resource. Furthermore, this resource management strategy was informed by careful empirical observation of gull breeding habits.

After a preliminary review of our findings by Glacier Park staff, the Park contracted with U.S. Geological Survey to support a biology student (Stephani Zador) and to conduct a detailed study of the Marble Island glaucous-winged gull colonies in Glacier Bay. Zador's research (Zador, 2001; Zador and Piatt, 2002; Zador and others, 2006) raised a number of questions with regard to the long-term sustainability of the traditional Huna Tlingit practice. Firstly, it is obvious that the size and distribution of glaucous-winged gull nesting colonies in the Glacier Bay region is highly dynamic, regardless of the intensity of indigenous harvests. Several colonies noted as being of significance to the Huna historically no longer support nesting gulls, while new colonies have been established far up Glacier Bay in areas more recently freed from the retreating glaciers. These changes are due in large part to vegetational succession subsequent to glacial retreat. A second dynamic factor is predation by bald eagles. According to Zador, eagle predation is now the most significant contributing natural factor in the destruction of eggs and chicks at the Marble Island colonies. Finally, Zador notes that the traditional harvest strategy might nevertheless negatively impact gull nesting success by introducing additional stresses on breeding females through colony disturbance and the energetic demands of producing extra eggs.

## **Management Implications**

Evidence to assess the impact of a given harvest practice over the long haul is rarely available. Thus, if subsistence egg harvests by Huna in Glacier Bay were to be legalized, there would remain considerable uncertainty with respect to the sustainability and appropriate scale of such harvests. The Glacier Bay National Park administration is in a difficult position; on the one hand charged to protect for all Americans Glacier Bay as a premier "wilderness" park, while on the other hand, recognizing that Huna Tlingit people have a legitimate interest in managing resources that constitute the material and symbolic foundation of their community.

Park staff has worked with the Huna community since the completion of our study to help arrange the harvest of gull eggs at a small colony outside of the Park at Middle Pass Rock in Icy Straits, which has allowed elders and young people from the community to experience this traditional subsistence practice without fear of arrest for the first time in decades. However, the Middle Pass Rock colony is subject to stronger currents and wave action than is the case at the Marble Islands and thus is not safe for younger children. If the legal obstacles to the resumption of Huna Tlingit harvests in Glacier Bay can be resolved, the administrative details of a truly cooperative management effort will still need to be hammered out, in the face of stiff opposition by those committed to the notion of parks as "wilderness," on the one hand, and by indigenous activists on the other who reject as illegitimate any federal presence in their traditional homeland.

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Mew Gulls are common breeding seabirds in Glacier Bay. (Photograph by Mayumi Arimitsu, U.S. Geological Survey.)