

Community Forestry Research Fellowship
Final Report for Pre-Dissertation Fellowship

Assessing the Role of Non-Timber Forest Products in Interior Alaska Communities

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Research Focus and Goals

The harvest of non-timber forest products (NTFPs) is a prominent activity in Interior Alaska for both personal and subsistence uses. A survey conducted in 2004 showed that one-third of households in Alaska's Tanana Valley picked wild blueberries and one-quarter of the households harvested firewood (ABFC 2003). A few niche industries in Alaska are based off NTFP resources such as birch syrup production. The birch syrup industry is almost two decades old. Alaskan birch syrup has created quite a buzz and has an unsatiated global market demand (Pounds 2000). Demand for birch syrup is growing (Cameron 2001), and it is a unique forest product that piques the interest of people ranging from tourists visiting Alaska to food connoisseurs (Jackinsky 2001). The number of birch syrup operations in Alaska increased during the 1990's (ABFC 2005) but has since has declined with only two operations producing birch syrup in 2007.

Little data is collected on NTFP harvest practices in Interior Alaska so forest managers do not have a clear idea about (1) who is collecting NTFPs (2) what NTFPs are being harvested, and (3) what non-market and non-tangible benefits people are also seeking and receiving from their harvesting practices. Therefore my research questions are:

1. Are forest management plans needed for personal-use NTFP harvesting? Are people's current expectations for NTFP harvests being met under the present management?
2. How do other forest uses conflict with the community's forest harvesting practices and how do these conflicts infringe on the social benefits attained from harvesting? Where they are conflicts of interests, how can these conflicts be mitigated? What are the non-market benefits from NTFP harvest that community members are seeking?
3. What are the impacts from commercial harvest of an NTFP?

My goal for this past year as a Community Forestry Research Pre-dissertation fellow has been to evaluate my research questions and continue to build relationships with the birch syruping community. I also wanted to begin to build a relationship with the village of Northway in order to engage them into my research interest. Northway is a rural village with approximately 100 residents, the majority are Upper Tanana Athabascan. Northway, located on the Alaska Highway near the Canadian border, is in the region where commercial morel mushroom harvesters from the Lower 48 came to mushroom pick in 2005. (Alaska had extremely extensive wildfires in Summer 2004 and there are often bumper crops of morels the following summer). I am interested in beginning a

dialogue with residents of Northway discussing their thoughts and impressions on how their NTFP harvesting practices are impacted by resource availability, land tenure, and competing outside interest (and possibly internal competing interests). While I am interested in conducting these conversations with other non-rural residents of Interior Alaska, I feel that engaging a rural community will be the most challenging and that it will take time to develop a relationship

Although my basic research questions haven't really changed, I have rethought my methods of trying to answer these questions because of the input I've received from personal and commercial NTFP harvesters on their thoughts and concerns.

Preliminary findings

At the end of April I visited Alaska Birch Syrupmakers Association member Kahiltna Birchworks to observe and participate in their sap harvest season. While at the Kahiltna homestead (approximately 40 miles west of the road system), I interviewed company staff on their motivations for participating in birch syrup production. Overwhelmingly, the people involved in the laborious job of birch syrup production weren't out there for an easy way to make money, but rather they valued the experience of spending time working in the woods and helping create a unique product. In addition to the interviews, I took recorded temperature data from the area and extracted tree cores to analyze for effects of weather on sap flow and impacts of tapping on the growth of the trees. The climatic data and tree ring data are still in the process of being analyzed.

Listening to Michael East and Dulce Ben-East, owners of Kahiltna Birchworks, I gained a lot of insight into what their primary concerns are including access to birch trees to tap, weather influence on the variability of sap production between years, and the long-term effects of tapping on the trees. Their valuable input has helped prioritize the way that I develop my research projects. The results of the tree ring analysis will help them make informed tree management decisions on how often to tap trees and when trees should be retired from tapping. Results from the climatic data will help them decide how to invest their energy early in the sap season. While Kahiltna has daily goals for the amount of sap they would like to harvest in order to produce a target amount of birch syrup, the amount of sap a tree produces depends to a certain extent on temperatures and water availability. Michael East is particularly interested in understanding the snow pack and daily temperature may impact trees' sap production.

In July I visited Northway to receive an initial introduction into the community. I have just begun to meet with the community members and initiate discussions on any concerns they may have over access to harvesting areas and the importance of harvesting to their rural lifestyles. Unfortunately, I have not been able to make it back to Northway since the summer due to scheduling conflicts.

Benefits to the community

Since I am still fairly early in my work, I have not yet provided too many benefits to Alaskan birch syrup producers or the village of Northway. I have been able to provide birch syrup producers with information about birch tapping in other regions of the world and previous scientific research on the health of birch trees and tapping birch. While in

Northway I was able to take a village elder, Ada Gallen, out to harvest spruce roots for the afternoon. This, in fact, was more beneficial to me to be able to spend the afternoon with Ada and being able to learn from her about pulling roots although I was able to provide her with transportation and a strong back to assist her in harvesting so she can make more birch bark baskets. I expect that the benefits that I provide will increase in the near future.

Literature Cited

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Cameron, M. 2001. Establishing an Alaskan Birch Syrup Industry: Birch Syrup--It's the Un-maple. *USDA Forest Service General Technical Report*, NC-217:135-9.

Jackinsky, M. 2001. Tapping Alaska's Birch. *Alaska Business Monthly*, 17:54-56

Pounds, N. 2000. Birch syrup maker taps globe. *Alaska Journal of Commerce*, 24:12-14.



Buckets collecting spring birch sap for birch syrup production.



Dulce Ben-East of Kahiltna Birchworks testing the sugar content of birch syrup being drawn of the wood-fired evaporator.



Evidence of two previous tap holes in a birch tree retired from birch sap harvest for syrup production.



Ada Gallen of Northway harvesting spruce roots used to sew together birch bark baskets.