Business or Pleasure: Factors Motivating Northeastern Minnesota Non-Timber Forest Products Harvesting

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Non-Timber Forest Products (NTFPs) are harvested in various regions of the United States and around the world. Also referred to as non-wood forest products or specialty forest products, they are defined as forest products of plant or animal origin other than timber. NTFP harvesting raises development, sustainable resource use and forest/species conservation issues. To incorporate this activity into multiple-use management it is important to understand what is being harvested and what motivates this activity.

Issue

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Objectives

- Understand how balsam bough harvesters use the suite of NTFPs in northeastern Minnesota.
- Distinguish different types of harvesters.
- Understand their motivations and how NTFP harvesting has become a livelihood or lifestyle strategy providing economic well being and/or contributing to construction of identity.

Methods

Structured, open-ended interviews with 41 randomly selected permit holders for balsam harvesting on public lands in 2000, stratified by the four northern counties with the greatest number of permit holders (Beltrami, Itasca, Koochiching and St. Louis). Out of a total sample of 293 permit holders, 55 were contacted, 41 completed interviews, resulting in a 75% completion rate. The sample excludes households that harvested exclusively on private or tribal land, and those that harvested illegally.

During personal interviews, harvesters shared information about household demographics, balsam bough harvesting methods, motivations, preferences, and an evaluation of the resource. Interviews were conducted in their homes, harvesting sites, and ranged from 30-45 minutes. At the end harvesters filled out a 1-page survey with closed and open-ended questions.

Study Sites

Demographics

Of the 41 harvesters interviewed, 83% were male and 17% female; 95% were Caucasian and 5% Native American. Ages ranged from 19 to 73 years, averaging 45 years. Sixty-six percent were married, 22% single, and 12% divorced. While a majority of the harvesters had children, only 44% had resident dependents. The average amount of time living in the region was 41 years (2 min, 73 max) years. Harvesters were almost equally divided between rural (51%) and urban areas (49%).
Results

Table 1. Function and importance of non-timber forest products harvested by northern Minnesota harvesters with balsam bough permits in 2000 [N=41]

<table>
<thead>
<tr>
<th>Function</th>
<th>Frequency (%)</th>
<th>Non-timber forest products (most important)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edibles</td>
<td>14 (33%)</td>
<td>Berries: Blueberry, Juneberry, Raspberry, Strawberry, Choke cherries</td>
</tr>
<tr>
<td>Health / Personal Care</td>
<td>7 (16%)</td>
<td>Burdock, Cranberry Bark, Lilly of the Valley, Raspberry Leaf</td>
</tr>
<tr>
<td>Décor / Aesthetics</td>
<td>13 (30%)</td>
<td>Balsam boughs, Birch bark, Birch poles, Cedar Needles, Cedar Poles, Club moss</td>
</tr>
<tr>
<td>Biofuel / Environmental</td>
<td>1 (2%)</td>
<td>Firewood</td>
</tr>
<tr>
<td>Materials / Manufacturing</td>
<td>8 (19%)</td>
<td>Furs / Pelts: Beaver, Bobcat, Coyote, Fischer</td>
</tr>
<tr>
<td>Total</td>
<td>43 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

* a Taxonomy proposed by Mohammed (1999)
  * b Christmas mushroom is the name used by respondent and could not be otherwise identified

- NTFPs are fairly well distributed across functional types with the exception of biofuels.
- Eight NTFPs were identified as most important by frequency of mention during interviews.

<table>
<thead>
<tr>
<th>Type(# items)/ # Individuals</th>
<th>Balsam Bough</th>
<th>Hunter/Trapper</th>
<th>Herbs+Berries</th>
<th>Multiple Harvester</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 NTFP</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>7%</td>
</tr>
<tr>
<td>2-3 NTFPs</td>
<td>-</td>
<td>10</td>
<td>2</td>
<td>1 32%</td>
</tr>
<tr>
<td>4-8 NTFPs</td>
<td>-</td>
<td>6</td>
<td>2</td>
<td>11 46%</td>
</tr>
<tr>
<td>9-17 NTFPs</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>15%</td>
</tr>
<tr>
<td>%</td>
<td>7%</td>
<td>39%</td>
<td>10%</td>
<td>44%</td>
</tr>
</tbody>
</table>

- The average number of NTFPs collected is 5.3 and the mode is 3.0; rural harvesters tended to collect more than urban harvesters.
- Multiple Harvesters, the greatest number, represents those individuals who harvest many NTFPs in all seasons.
- Hunters/Trappers add balsam bough harvesting to their grouse and deer hunting, while some focus on even more animal species.
- Only a few harvesters exclusively focus on balsam boughs and other plant materials or only collect boughs.

Business or Pleasure?

**Harvesting for Livelihood 54%**

Managing Economic Uncertainty
- $ Money in the pot (7)
- $ Holiday expenses (8)

“It gets us from paycheck to paycheck throughout the year.”

Incorporating Seasonality
- $ Seasonally-affected industry (6)
- $ Money (4)

“Getting money for the layoff season.”

**Harvesting for Lifestyle 70%**

Identity
- Having fun (15)
- Way of life (10)
- Fits the season (12)
- Independence (4)

“Harvesting is a blast, I love doing it.”

Reinforce family and tradition
- Bringing family together (7)
- Maintaining traditions (3)

“Picking mushrooms is a good family activity, it takes about 5 hours to get a good meal.”

Conclusions

- NTFPs persist over time because they are harvested for multiple motivations along social and economic gradients.
- The flexibility of some NTFPs allows them to meet diverse needs.
- Research in diverse products meeting diverse harvester needs forces us to revisit a familiar question: “Forests for whom and for what?” (Clausan 1975)
- Diverse NTFPs suggest we must ultimately move towards systems level management.

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Research summary #4