The Ecology of Plant Gathering and Tl'azt'en Nation

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INTRODUCTION

Traditional Ecological Knowledge (TEK) of Indigenous peoples has increasingly become a major focus of attention over the last twenty years (Turner et al. 2000). TEK is known to play a crucial role in aboriginal management of land resources and the sustainability of indigenous lifestyles. It is passed down orally from generation to generation and is in danger of being lost due to western influences and culture.

Plant resource use was (and is) infused with ecological knowledge and may take many forms (Turner et al. 2000). The flowering of certain plants, seasonal signals, and production of certain berries all act as indicators for people to know when to gather/harvest particular resources. For example, Indigenous gatherers use these signals to determine when particular roots are ready to be harvested or when to gather certain berries (Turner 1997).

Many medicinal plants which play an essential role in indigenous health care (Hamilton 2004) are considered to be in need of protection and conservation (Hamilton 2004, Kala 2005). This study seeks to support the protection of this important resource.

The Tl'azt'en Nation and UNBC are partnering on this research, which will focus on Tl'azt'en traditional territory, located in north-central BC and consisting of 6500 km² of forestlands.

OBJECTIVES OF STUDY

To consider protective measures for food and medicinal plants, it is necessary to understand the ecology of gathering sites and why some sites are chosen over others. The objectives of the study are:

- To collect information about the ecology of medicinal and food plant gathering sites
- To gain understanding of the criteria for gathering individual plants for medicinal, food and/or traditional technological use (e.g. size and age of the plants, proximity to water, time of day)
- To understand why traditional plant gathering sites may fall out of use
- To assess the impact of current land management practices on the viability of traditional plant gathering sites
- To develop recommendations that will support the protection of plant gathering activities and sites

RELEVANCE

The intent of this study is to consolidate information relevant to protection of traditional gathering sites, which can be formulated into policy for the Tl'azt'en Nation's continued management of their traditional lands. Information specific to individual plant characteristics and plant gathering sites will be part of these recommendations and will be used in current land management and towards the restoration of gathering sites that have been lost.

Perpetuation of this traditional knowledge is important to Tl'azt'en Nation. Information gathered may also be used to develop teaching materials which Tl'azt'en Nation will use in their TEK educational programs.

CURA: Community-University Research Alliances

This project is funded under the Social Science and Humanities Research Council (SSHRC)'s Community-University Research Alliance (CURA) program. The purpose of the program is to support the partnership of community and post-secondary organizations to pursue research of interest to the partnering community. For more information visit: http://www.sshrc.ca/web/apply/program_descriptions/cura_e.asp

CURA members (from left to right): Chris Johnson, Kateri Haskell, Shane Hartman, Deanna Yim, Pam Wright, Amelia Stark, Chris Jackson, Leona Shaw, Sarah Quinn, Vincent Joseph, Diana Kutzner, Gail Fondahl, Kathy Lewis, Matteo Babini, Bev John (Missing: Claudette Bois, Wayne Bulmer, Sue Grainger, Alex Pierre, Erin Sherry, Jane Young).

METHODOLOGY

Initiation phase (spring & summer of 2007):

- Establishment of a support group of knowledgeable and respected community members to guide the research
- Identification of plant species that are of importance to the community
- Identification of community members to act as experts and guides in field phase of project

Gathering traditional plant selection information (spring & summer of 2008):

- Field trips with traditional gatherers, utilizing open-ended interviewing techniques to collect information about individual plant characteristics of importance to them (species, age, developmental stage, etc)
- Recording of field sessions will be undertaken, using written, audio or video recording techniques according to the wishes of the experts
- Gathering of plant material (with permission) will be undertaken to develop herbarium specimens for the community

Collecting traditional plant gathering site information (spring & summer 2008):

- Field trips with traditional gatherers, utilizing open-ended interviewing techniques to identify specifics of the site characteristics pertinent to plant gathering (proximity to water, aspect, etc)
- Field collection of site attributes (plant community composition, tree height and size, soil characteristics, etc)

OUTCOMES

Protection of Tl'azt'en intellectual property is of paramount importance to community members and academic papers arising from this research will be carefully reviewed at the community level for approval prior to publication.

Specific products arising from this research will include the following:

- Community updates and newsletters
- A herbarium collection of representative plant species
- A traditional plant garden established in the community
- Masters thesis and peer-reviewed journal articles
- Community presentation

REFERENCES

Hamilton, A.C. Medicinal plants, conservation and livelihoods. Biodiversity and Conservation 13:1477-1517.

Kala, C.P. 2005. Indigenous uses, population density, and conservation of threatened medicinal plants in protected areas of the Indian Himalayas. Conservation Biology 19(2): 368-378.

Turner, N.J. 1997. Traditional ecological knowledge. Pages 275-298 in P.K. Schoonmaker, B. Von Hagen, and E.C. Wolf, editors. The rain forest of home: profile of a North American bioregion. Ecotrust. Island Press, Covelo, California, USA.

Turner, N.J., M.B. Ignace, and R. Ignace. 2000. Traditional ecological knowledge and wisdom of Aboriginal peoples in British Columbia. Ecological Applications 10(5):1275–1287.

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