

Ethnobotany: Future Directions for the New Millennium

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Davidson-Hunt's article on new practices and paradigms in Ecological Ethnobotany has presented the proposition that ethnobotany as a discipline is evolving towards a more holistic, all-encompassing, ecologically-based endeavor, which focuses less on the utility of plants alone and more on the relationships between people and plants and on the meaning of those relationships. From my perspective as an ethnobotanist, having worked within the discipline for over 30 years, I concur with Davidson-Hunt's general assessment. In this commentary, I would like to point out some specific directions I see for ethnobotany in the future.

In 1994, Richard Ford developed an elegant tree-ring schematic to represent the growth and evolution of ethnobotany as a discipline since its inception in the late 1800s with J.W. Harshberger's brief proposition, characterization and recommendations for "The purposes of ethno-botany" (Harshberger, 1896). As Ford and others have noted, ethnobotany has matured over the past century from rather shallow rooting in the documentation of "useful plants of primitive peoples" for potential economic application and the betterment of "mankind", to addressing a more complex web of applied and theoretical issues of human-plant interactions from cognition to biodiversity conservation. In fact the very premises Harshberger was operating under have been shattered: "The well-known classification of men into savage, pastoral, agricultural and civilized" (Harshberger 1896: 146) is no longer accepted as "given", and the shift in underlying premises has led to a more inclusive, more respectful, and more effective and realistic approach, not just in ethnobotany but in all its associated disciplines.

Within the past decade (1990s) there has been a notably stronger element of collaboration and partnership in ethnobotany with indigenous and local communities, and ethnobotanists have taken on a more intensive advocacy role to help preserve the integrity of both cultures and languages and the places where they are situated. This role is parallel in many ways to the

advocacy role taken on by conservation biologists and restoration ecologists to protect and enhance the world's biodiversity.

This advocacy and service role of ethnobotanists will continue and strengthen in the coming years, as indigenous peoples and local communities, governments, educators, non-government organizations (NGOs) and corporations all struggle to address impending environmental degradation and accelerating loss of cultural knowledge and language. This trend is borne within the context of international imperatives to respect and support the rights and knowledge of indigenous peoples worldwide.

On the international front are Agenda 21, the Biodiversity Convention and the Agreement on Forestry, all arising from the United Nations Conference on Environment and Development in Brazil in 1992, and all with strong exhortations for supporting Indigenous Peoples in preserving their knowledge and practices relating to conservation, and for safeguarding the rights of these peoples. For example, the Preamble to the Convention on Biological Diversity clearly acknowledges the close interrelationships between indigenous peoples and their lands, and the critical importance of their knowledge of their local environments and biological resources. In particular, it recognizes the often under-rated role of women as practitioners of resource conservation and management and as keepers of traditional ecological knowledge. It directly advocates for the need for full participation of women in decision-making and policy formulation in biodiversity conservation at all levels. The Articles of the Convention, which are binding for all signatories, including Canada, include, for example, Article 8(j), In-Situ Conservation:

Subject to its national legislation, [a country is to] respect, preserve, and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wide application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing

of benefits arising from the utilization of such knowledge, innovation and practices....
(quoted in Murphy 2000: 21).

Ethnobotanists have a major role to play in this requirement, and their work can and should take place both at the community level, in assisting local cultural groups to document, perpetuate and protect their botanical and ecological knowledge, and at broader regional, national and international levels in helping to define policy and legislation to ensure the recognition and protection of such knowledge. This work can take many forms. One, which, as an ethnobotanist, I have been privileged to participate in, is to serve, along with my students, as a resource person in providing information on plant identification, broad-scale ecological knowledge, and linkages to other communities with similar needs and goals of preserving and perpetuating ethnobotanical and environmental knowledge.

Assistance in developing school and college curricula, science and cultural camp activities, museum exhibits, locally relevant plant guides (e.g., Hebda et al. 1998; U'mista Cultural Society, Pasco and Compton 1998), ethnobotanical gardens and eco-cultural centres can be a practical and effective way for an ethnobotanist to support local communities. Ethnobotanists can also serve as intermediaries between local indigenous peoples and other scientists who wish to undertake collaborative research, a role which I undertook in the work of the Scientific Panel for Sustainable Forest Practices in Clayoquot Sound (1995).

In British Columbia, ethnobotanists have, and will continue to have for the foreseeable future, a particular role in corroborating, substantiating, validating indigenous knowledge in treaty negotiations and land rights issues. Until relatively recently, oral traditions were not recognized in litigation, and this led to the rather absurd situation where the written notes, journals and publications of outside researchers, no matter how sketchy or out of context, were given higher

legal validity than the knowledge, recollections and experiences of indigenous elders as orally transmitted (see Gisday Wa and Delgam Uukw 1987). Under these circumstances, written corroboration of oral testimony can be useful in supporting local peoples' land and resource rights (see Turner and Peacock 1995). While oral testimony of elders and cultural specialists is being given more credence in the courts, there is still a bias towards Western methodologies for research and knowledge transmission, and as long as this bias exists, ethnobotanists can support and advocate for the original knowledge holders within the broader context of society.

In practical applications of ethnobotanical knowledge for local economic development, ethnobotanists can also play a role. This can be in helping to develop programs for communicating ethnobotanical knowledge and practices in ecotourism ventures, in undertaking collaborative research on sustainable harvesting of Non-Timber Forest Products, or in helping to link indigenous and local communities with ethical partners for developing and marketing local products. Another example is in collaborative research on propagation and commercial production of local plant resources using methods that are culturally and ecologically appropriate. For example, Kimberlee Chambers, a Masters student in ethnobotany at the University of Victoria, is working with the Xaxli'p First Nation near Lillooet, B.C. on a project to develop techniques for propagation of balsamroot, or spring sunflower (*Balsamorhiza sagittata*), a traditional root vegetable and edible green of the dry Southern Interior of the province. Balsamroot was used extensively by Interior Salish peoples, and has horticultural potential as an ornamental and crop species, for which First Nations as original managers and users of the plant should have primary rights. Developing plans and practices for ecological restoration is also part of the potential applied work of ethnobotanists. Balsamroot itself is a species that has promise for use in restoring degraded landscapes in certain areas.

All of these applications are currently being undertaken in British Columbia and elsewhere. They are all based, ultimately, on the original, careful, systematic, collaborative documentation of peoples' relationship with the plant world and its species, habitats, and landscapes through all of the conventional methodologies to date: interviewing and conversation, ethnographic and ethnohistoric research, field archaeology and archaeobotany, paleoecology, linguistic analysis, research on the role of plants and environments in discourse, narrative, ceremony, and art, ethnoecology, cognitive anthropology, nutritional and pharmacological analysis and experimentation, experiential learning and participatory action, cultural and landscape reconstruction, and social interaction and education. All of these types of research are critical to understanding and practicing ethnobotany, and all will be important in the future role of ethnobotanists in helping to maintain and enhance the cultural and biological diversity of our planet.

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