Ethnobotany, the science of survival: a declaration from Kaua'i

A group of 44 people from ethnobotany and associated disciplines participated in an Ethnobotany Summit at NTBG Headquarters in January 2007. Considering the grave environmental crisis facing the world today, the loss of biodiversity and the loss of culture, the group decided to issue a statement to stress the importance of ethnobotany for providing some of the solutions towards more sustainable living.

The initial draft of the resulting *Kaua'i Declaration* is being shared here. The final declaration text, along with a white paper, will be published on NTBG's website in the near future.

The Kaua'i Declaration

Ethnobotany is the study of the interactions and relationships between plants and people over time and space. If plants did not exist, human life would not be possible. All members of the human family depend on plants for their survival in myriad different ways; today we also depend on them for many of our opportunities to improve the quality of human life in the future. Plants are fundamental to the functioning of all human societies and to the operation of all ecosystems. Along with the photosynthetic bacteria and algae, plants are responsible for the formation of almost all of the energy that we consume. In terms of the energy from biomass that we are so actively seeking to develop now, they also provide the hope for energy supplies in the future. Yet despite their central importance, plants are often poorly appreciated.

Ethnobotany along with the related disciplines of ethnobiology and ethnoecology are of central importance for understanding and improving the sustainability of our relationships with the living world. The greatest resource that people have is their ability to innovate, and that ability is shared with all groups of humans who live or have lived on the Earth. We also stress here that we consider the survival of individual human cultures important in and of itself, since we have so much more to learn from these cultures as living societies rather than from

descriptions and images of those societies that might be left behind once they have disappeared forever. Further, we believe that cultures have a right to exist that we should respect and facilitate to the extent that is feasible. This capacity to innovate has been expressed in creative ways by different groups of people faced with varied environmental and social challenges; we must attempt to understand those ways for our individual and common benefit. Combining concepts derived from the disciplines of anthropology, agriculture, archaeology, biochemistry, genetics, horticulture, ecology, conservation biology, and botany, the field of ethnobotany holds extraordinary promise for helping us build a better future.

Sustainability is defined as the use of resources at a rate slower than that at which they are being created. Building sustainability depends not only on our use of the environment, but also on cultural, political, and economic considerations. Our collective management of the world's resources is unsustainable at present. Rapidly rising population levels, the runaway growth of individual consumption, and the continued use of inappropriate technologies are progressively limiting the options for the future, and the kind of world that our descendants will inhabit. The application of ethnobotany is a possible way of breaking free of our passive approach to the world and dealing with this seemingly overwhelming set of challenges in a positive way.

Such vital environmental resources as the air we breathe, the quality of the water we drink, the topsoil upon which our agriculture depends, the relatively stable global climate we have enjoyed until recently, and the global stock of biodiversity are all being degraded rapidly. Concurrently, the diversity of human cultures is being eroded rapidly everywhere. For example, every week one of the remaining 7,000 languages is being lost. Each of these represents a distinct philosophical and pragmatic approach to the organization of our lives which means we are

losing our cultural heritage at a rate that will seriously diminish our opportunities to achieve sustainability in the future.

To reverse these trends, we need to respect the wisdom of the diverse approaches to nature that exist in every society. This knowledge is central to the preservation of the integrity of the cultures that possess it, and important for us all to understand, record, and, when appropriate and helpful, apply in other situations. The capacity to innovate and to share lessons learned is a quintessential human characteristic, and one that we have a special need to exercise well in the challenging times that face us now.

The strong links between biological and cultural diversity uniquely position ethnobotany to help us craft effective local solutions to many of the global issues that confront us as a species. Some of the most challenging of these issues are food security, deforestation, pollution, the maintenance of human health, the quality of human life, and resource depletion of all kinds. The concepts and practices of ethnobotany accord well with the "land ethic" of the great conservationist Aldo Leopold, which he describes as changing "the role of *Homo sapiens* from conqueror of the land-community to plain member and citizen of it."

Ethnobotany can strengthen our links to the natural world. It is of central importance for understanding the collective experience of humankind in a series of exceedingly diverse environments and using those experiences to meet the challenges that we face. It makes it possible for us to learn from the past and from the diverse approaches to plants represented by the different human cultures that exist today. Ethnobotany is at once a vital key to preserving the diversity of plants as well as to understanding and interpreting the knowledge by which we are, and will be, enabled to deal with them effectively and sustainably throughout the world. Thus ethnobotany is the science of survival.