## A sample entry from the

# **Encyclopedia of Religion and Nature**

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© 2005 All Rights Reserved These observations are significant. The explosion of interest in traditional ecological knowledge in recent years reflects in part the need to derive ecological insights from indigenous practice, and the need to develop a new ecological ethic based in part on indigenous wisdom.

Fikret Berkes

#### **Further Reading**

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Ecological Knowledge among Aboriginal Peoples in Can-

ada; Water Spirits and Indigenous Ecological Management (South Africa); Yunnan Region (Southwest China and

## Traditional Ecological Knowledge among Aboriginal Peoples in Canada

Montane Mainland Southeast Asia).

Each contracting Party shall, as far as possible and as appropriate: Subject to national legislation, 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 wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge innovations and practices (from www.biodiv.org - the Convention on Biological Diversity's website).

For generations, indigenous peoples in what is now known as Canada have been using their own knowledge systems to live sustainably with the land. Indigenous knowledge systems are unique systems of generating, storing and transmitting knowledge completely separate and independent from Western science and Western epistemologies. Rooted in relations with the spirit-world, indigenous knowledge continues to provide Aboriginal peoples with unique worldviews, languages that are constructed to reflect those worldviews, systems of governance, values, and processes and ways of knowing and interacting with the land. Aboriginal philosophies and values reflect worldviews that are based on interrelationships and interdependency with the natural world and all other elements of the cosmos. Traditional teachings, stories, songs, dances and ceremonies reinforce the importance of relationships and process in the lives of individuals, communities and nations. Indigenous knowledge is dynamic and creative and, although it varies from nation to nation, has certain common elements and themes. Indigenous knowledge is at once ancient and contemporary knowledge, recording through the oral tradition the collective knowledge of a people in addition to documenting the impacts of colonization, colonialism and environmental destruction. Experts in indigenous knowledge are not academics or researchers who study TEK, but they are the Elders and knowledge-holders who not only hold the knowledge, but who have lived the knowledge and the teachings over the course of their lives. It is these experts who are best equipped to provide leadership around this topic, and it is these experts that need to be included in an effective way in discussions regarding the many potential applications of Traditional Ecological Knowledge (TEK).

During the initial stages of colonization, Europeans were dependent upon indigenous peoples and their knowledge for their survival. The colonizers relied upon technology in the areas of transportation, hunting, fishing, food gathering, nutrition, healthcare and navigation. They relied upon Aboriginal peoples for their most basic needs and in turn had great respect for indigenous knowledge. However, as the settler economy developed and the infrastructure needed to support the colonizers way of life was realized, they no longer relied on Aboriginal peoples and Aboriginal knowledge for their continuance and survival. Subsequently, over that next five centuries, indigenous knowledge was disrespected, undermined and assimilated into Canadian society with no recognition or acknowledgement for Aboriginal peoples. Many of the modern symbols of Canadian culture, such as maple syrup, canoes, kayaks, snow shoes, wild rice and wild meat, represent appropriated Aboriginal knowledge. The systemic dispossession of Aboriginal nations from their territories along with the assimilative policies of the Canadian government through the Indian Act would have come close to destroying indigenous knowledge if it were not for the resistance and commitment of past generations of Aboriginal peoples.

In recent times, non-Aboriginal researchers, academics, environmentalists, industry and government personnel have once again become interested in what has become known as Traditional Ecological Knowledge. Many environmentalists believe that TEK holds answers to the pending ecological crises and provides Euro-Canadian society with a blueprint toward sustainable living. The pharmaceutical and natural health products industries are interested in the Aboriginal knowledge and use of traditional medicines and medicinal plants so that these might be commercially exploited for profit. Natural resource managers at the federal and provincial levels are interested in TEK in hopes that it can contribute to the management of renewable and non-renewable resources in a positive way. These interests in the knowledge of Aboriginal peoples have unfortunately caused researchers to separate out "ecological" or "environmental" knowledge from other kinds of knowledge, because it is the component of the knowledge system that outside researchers are currently most interested in learning. Existing academic literature regarding TEK continues along this line of thinking, privileging the components of indigenous knowledge that conform well to Western ideals over the spiritual basis of indigenous knowledge. Aboriginal spiritual traditions, beliefs and values form the foundation of traditional knowledge, and are completely integrated into every aspect of TEK and indigenous thought. Much of the TEK literature published in applied scientific journals and publications is written by non-Aboriginal scientists and academics and has focused on introducing TEK to scientists. Works written by Fikret Berkes, for instance, attempt to gain acceptance for TEK and Aboriginal peoples in disciplines that have traditionally ignored the contribution and knowledge of indigenous peoples. Publications in scientific journals generally ignore contemporary impacts of colonization and colonialism on indigenous peoples, the land, and their knowledge, marginalize indigenous elders and knowledge-holders, and undermine the oral tradition, thereby constructing "TEK" in a manner that is often not meaningful to the very people who hold the knowledge. These criticisms, long observed by indigenous elders and

knowledge-holders are making their way into the academic literature articulated by indigenous scholars such as Marie Battiste, James Sa'ke'j Youngblood Henderson, Leanne Simpson and Deborah McGregor.

Aboriginal peoples have approached these outside interests with caution, concerned that their knowledge could be taken out of context, misused and appropriated. Indeed, there have been several examples of this kind of exploitation increasingly occurring, and indigenous peoples continue to take special precautions when sharing knowledge with people from outside their communities and nations. Many communities have developed information-sharing policies and guidelines for researchers entering their territories in addition to their traditional protocols for sharing and transmitting knowledge. Some communities and organizations, like the Pauktuutit Inuit Women's Organization are investigating the possibility of using Canadian Intellectual Property law to protect aspects of their knowledge, despite current deficiencies in the laws in terms of indigenous knowledge.

Internationally, TEK has most recently been recognized in the United Nations Convention on Biological Diversity. Article 8j (see the epigraph) of the Convention outlines the importance of indigenous knowledge and indigenous peoples in the protection of biodiversity. Canada, as a signatory to the Convention, is slowly working toward implementing Article 8j in its domestic legislation. As a result, environmental impact assessments, comanagement agreements, and certain pieces of legislation such as the proposed Species at Risk Act are beginning to include certain aspects of indigenous knowledge within them. Despite these initiatives, there are many barriers to including TEK in environmental management in ways that respect Aboriginal peoples and bring about meaningful change to these processes. Scientists and resource managers have little opportunity to learn about Aboriginal peoples and their TEK first-hand. This can create misunderstandings regarding the nature of TEK. Governments often require their bureaucrats to include TEK in policy and legislation without proper consultation with Aboriginal peoples, in unrealistic timeframes, and without appropriate financial support. Governments also regularly require TEK to be written down or documented before it is considered useful. Documented TEK is then integrated into processes and frameworks that remain strongly rooted in Western science, and much of the transformative potential of indigenous knowledge is assimilated in the process. Many Elders are concerned that once their knowledge is removed from the oral tradition and the knowledgeholders, translated into English and textualized, it is removed from its context and all of the relationships that give the knowledge its meaning. Aboriginal advocates have challenged this approach and Aboriginal peoples are monitoring these initiatives with concern. It is critical that Aboriginal people, not just isolated components of their knowledge, are included in a meaningful and respectful way in environmental management in Canada, and it is important to realize that including the knowledge of Aboriginal peoples in environmental decision making ultimately means that different decisions will be made.

Contemporary Aboriginal peoples in Canada are concerned about protecting their territories from environmental destruction not only as a way of protecting their relations with the natural world, the health of their communities and their cultures, but also as a way of protecting their knowledge systems. Indigenous knowledge comes from the land. Without these relationships, it is difficult to strengthen, promote and preserve the knowledge of Aboriginal peoples for the coming generations and it is difficult to envision healthy, sustainable Aboriginal nations in the future. TEK has much to offer Aboriginal and non-Aboriginal societies if it is accessed and used in a way that is respectful and fair from the perspective of the people who hold the knowledge. As interest in TEK grows, and Aboriginal voices are listened to, so does the potential for using both indigenous and Western forms of knowledge together to address some of the many local, national and global environmental issues facing the world.

Leanne Simpson (Anishnaabe Kwe)

### **Further Reading**

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See also: American Indians as "First Ecologists"; Ecological Anthropology; Ecology and Religion; Ethnobotany; Ethnoecology; Evolutionary Biology, Religion, and Stewardship; Indigenous Environmental Network; Native American Languages (North America); Religious Environmentalist Paradigm; Traditional Ecological Knowledge; Water Spirits and Indigenous Ecological Management (South Africa).

## Transcendental Meditation

Transcendental Meditation is a spiritual movement organized by Maharishi Mahesh Yogi, an Indian who came to the U.S. in 1959 to utilize modern media and communications to spread his teachings. These teachings are based on monistic Advaita-Vedanta, a Hindu tradition that describes the universe as diverse manifestations of a single, underlying Absolute, called Brahman. The goal of meditation is personally to experience direct knowledge of Brahman, and realize that the essence of one's own self is this same Brahman. In the 1970s, Maharishi rephrased his teachings to use Western scientific terminology and described his meditation program as the Science of Creative Intelligence (SCI) with Creative Intelligence being the all-pervasive, organizing principle of the universe. Nature appears in two areas of SCI, first as Brahman and second in the context of environmentalism.

In writings from the 1980s, Maharishi often used "Nature" instead of "Brahman" when describing the underlying foundation of the cosmos. In this context, nature is described as the basis of all order and the goal of meditation is to become aware of it. TM uses the language of physics, mathematics, and chemistry to explain the order of the universe and show that modern science is describing a unified cosmos that coincides with the ancient Indian scriptures, the Vedas. Maharishi makes effective use of the Grand Unification Theories of physics to communicate the idea of the basic unity of all material existence to a Western audience. This emphasis on science also allows TM to define itself as a practical technique for improving modern life rather than a religion with a creed. Referring to the Absolute as "nature" rather than God or Brahman facilitates the movement's non-religious identity.

Nature is not, however, completely passive. It is the Creative Intelligence that organizes the cosmos and is said to have "moved Maharishi" to begin his life of teaching. This teaching is necessary for "nature to work out its divine plan for the spiritual regeneration of mankind" (Maharishi 1986: 2). From such statements, it is clear that nature is an active, conscious force in Maharishi's philosophy. And the divine plan requires that people learn to