

# Traditional Ecological Knowledge

## In Canada

Traditional Ecological Knowledge (TEK): Intergenerational knowledge that developed over thousands of years that pertains to the ecological, or interconnectivity between living things and their environments. Over time, people accidentally and purposely accumulated intimate knowledge of interrelationships amongst living things as well as the relationships between living individuals/communities and the abiotic components of their environments such as climate, disturbance and topography. TEK is integrated in land management because of its alliance to ecology and importance in ecosystem management. It can also be useful in medicine (pharmaceuticals), health, agriculture and technology.

The photos to the left show some of the innovations and practices of Indigenous peoples in the early days when people were living traditional lifestyles. People learned which species were optimal for virtually every aspect of life including transportation, sustenance, health and tools.

(Top to Bottom): Man in kayak; woman weaving a cedar basket; whaling/fishing party in umiak; and woman harvesting 'Indian potato'.

Left: Soopalallie (*Sheperdia canadensis*) and countless other plants were harvested for their nutritional and medicinal properties. Soopalallie was collected and consumed when it ripened. It not only provided nutrition after a long winter of eating only preserved vegetables and fruit but it is also contains compounds that are good for the immune system. A favourite way to prepare it is to whip it into a frothy like substance and sweeten it with other berries or sugar. Traditionally, long pine needles were used as a whisk. The berries while not palatable to most, were sought out due to their high nutrition and medicinal properties. Indigenous peoples used methodical prescribed burning to rejuvenate berry patches and other valuable forage as well as to limit the intensity of natural burns. The resulting landscape heightened berry and vegetative production—a benefit to wildlife and the greater ecosystem as well as people.

TEK recognizes all living things and their interrelationships. While many animals were held in high regard for their nutritional quality, such as the sockeye salmon shown below, others were valued for their ecological roles. For example, the coyote (shown above) was highly regarded in some Indigenous cultures as a supernatural being that had abilities such as transformation into other beings and performing acts of forces upon whomever or whatever it saw fit. In respect to coyote, many of its abilities are analogous to forces of nature such as natural and sexual selection. What better way to teach the moral lessons of life, evolution and science-ecology than to embody it in a being? Other cultures have embodied such knowledge in creatures local to their region, such as the raven on the west coast.

