

## USE OF FUNGI BY NATIVE AMERICANS

### **Food**

#### Agarics

- The Lilloet inhabited the Rocky Mountains in Canada and used mushrooms extensively for food including: *Tricholoma gambosum*, *T. populinum*, *Pleurotus ostreatus*, *Hygrophorus gliocyclus*, *Morchella* sp. They also used black tree lichen for food.
- The Nlaka'pamux lived in the Canadian Rocky Mountains and had an extensive recorded ethnobotany which includes four mushrooms used as food sources: *Tricholoma gambosum*, *T. populinum*, *Pleurotus ostreatus* and *Cantharellus cibarius*.
- The Omaha also ate puffballs and morels (Mikai hthi or star sores). The Iroquois relished *Agaricus* mushrooms. They boiled them after peeling and dicing, just as some still do today.
- The Salish ate three types of mushrooms *Tricholoma populinum*, *T. magnivelara* and *Pleurotus ostreatus*.

#### Puffballs

Various species of puffballs are edible and all are harmless when young. They have white flesh and discolored individuals must be rejected.

- The Omaha Indians cut large puffballs into chunks and fried it in sunflower oil, bear oil or deer tallow like meat. They also peeled, diced and then boiled them in water with salt, grease and bits of meat as seasoning to make a tasty puffball soup.
- The Zunis dried them for winter use, while the Iroquois fried them and added them to soups.
- The Kiowa have a published ethnobotany that records they used both puffballs and lichens. The puffballs (ai-pee-o-pa) were eaten at a young age.
- Puffballs are gathered in large quantities in the fresh state for food, and they are also dried for consumption in winter.

#### Polypores

Bracket fungi, sulfur yellow to orange brackets which grow on the bases of decayed or dead trees, were sliced and then boiled for more than thirty minutes before they were eaten.

- The Dakota Indians ate only the young ones and avoided those found on ash trees, owing to their bitterness.
- The Hopi avoided all brackets because they associated them with the malignant growths of cancer and feared contamination.

#### Corn smut

Several tribes gathered smuts as they appeared on corn plants and boiled them as a food.

- The Hopis enjoyed this food too, but they held that smut found on a man's corn is considered a sign that he has defecated in his field.
- The Omaha and Poncho are closely related horticulturists who lived in Nebraska and traded with tribes who occupied what is now Wyoming and Colorado. They grew corn and they ate corn smut which they called Wahaba hthi (corn sores).

#### Lichens

Although the lichens were not regarded as common foods, in emergencies many types were eaten and some were considered delicacies.

## **Medicinal**

### Puffballs

- The use of puffballs as a styptic was universal among Native Americans. The Kiowas used the dried spores of puffballs as a styptic on cuts and scratches and particularly for the umbilical cords of infants.
- Arikari were a plains tribe who inhabited the foothills of the Front Range of Colorado and Wyoming. They used puffballs for poultices on swellings and abscesses.

### Polypores

The Wood Cree's territory was north of Wyoming, reaching into British Columbia. This tribe made use of shelf fungi (*Inonotus obliquus* or *Poria obliqua*) by boiling the conk for tea.

### Ergot alkaloids

Many Amazonian tribes continue to practice traditional plant-based medicine. One of their common medicinal plants is piripiri, a smut fungus (*Balansia cyperi*) that infect various sedges and produces ergot alkaloids that are used as a ritual hallucinogen and as a treatment for various ills, especially those related to reproduction.

### Lichens

The Kiowas used dried and powdered lichens on teething infants' gums, or applied to abscesses.

### Mixtures

The Cheyennes used a mixture of purple coneflower roots mixed with puffball spores and skunk oil in the treatment of boils.

- The Blackfoot name for puffballs is Ka-Ka-Too which translates into 'fallen stars'. They believed that puffballs fell from the sky during supernatural events. Because of this, the fungus was assumed to have a connections with ghosts and was burned as an incense to keep the ghosts away.
- Images of puffballs were painted on the outside of the tipi as a talisman to insure warmth would always be present inside the lodge.
- The puffballs were also used as ornamentation by men. They were worn in a necklace and gave off a 'delicate odor'.
- No other society has used forest fungi to such a dramatic extent as the Indigenous Peoples of the Northwest Coast. An array of art forms carved from and made out of mushrooms were part of the Shamans mystic paraphernalia that provided symbols of spiritual power.

## **Domestic**

- Crow Indians used morels (*Morchella* sp.) as a soap substitute.
- The Sioux used lichens as a dye (*Usnea barbata* and *Palelia borrieri*). These lichens yielded a bright yellow dye used on porcupine quills and hides.
- The Lilloet rolled strands of the black tree lichen together and wove them into clothing. This clothing was not common, and was considered a sign of a person too poor to have leather clothing.
- The Kiowas used some lichens in a smoking mixture. While the lichen is not identified scientifically, the report describes the lichen "growing on the north side of the tree trunk".
- The dried puffballs were used as tinder to start fires.

### Recreational drugs--*Amanita muscaria*?

## **Other**

- The Sioux used *Pleurotus ulmarius* as an indicator of rotting box elder trees. Once they found a tree with good fruiting of *Pleurotus*, they collected the same, boiled it down and used it like maple syrup.

