



# NAWO NEWS



## COURTING CLIMATE CHAOS

Reckless, ignorant, cartel-serving energy management is the primary reason why people inject about 30 billion metric tones per year of carbon dioxide into the Earth's atmosphere. At the risk of belaboring the obvious, dumping this waste, and millions of metric tones of other combustion and industrial wastes into the air, alters atmospheric chemistry. When people alter the chemistry of our atmosphere, physical characteristics also get changed. Specifically, the chemical changes increase the amount of heat that Planet Earth absorbs and retains. Because so much more energy cycles through our air and water, we now court Climate Chaos.

Severe and more frequent droughts of longer duration occur over more continental land masses. Wildfires burn drought stricken forests. More intense and more frequent violent weather events are spawned. Earlier Springs. Hotter Summers. Later Autumns. Milder Winters. Invasive species. More pestilence and insect borne disease. Less food. More hunger, and more waring over life's necessities.

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SACRED FOOD EQUALS HEALTHY LIVES

CHOKECHERRIES IN FULL FLOWER

TYLER CROCKER

SACRED FOOD EQUALS HEALTHY LIVES



Renee Prince



## Chokecherry

*Prunus virginiana* L.

- America's Indigenous People have a sacred relationship with the chokecherry. Cherry juice has been used since time immemorial as food, drink, and as medicine.
- Chokecherries are a ritual food and a vital part of Indigenous identity. Chokecherries are used to make berry soup (wojapi) served at many ceremonies and eaten by all.
- The ripeness of the fruit is an indicator that it is Sun Dance time. Small branches are sucked or chewed for thirst during the Sun Dance.
- Chokecherry twigs are used to make a tea during pregnancy.
- A decoction (extract by boiling) of the inner bark is taken for cramps.
- Infusion of chokecherry cambium (embryonic plant cells) and Juneberries when eaten by a nursing mother passes the medicinal qualities to the baby through the breast milk.
- Cherry bark tea for lung troubles from cold, coughs, diarrhea, also used as an internal pain reliever (Charlotte Erichsen Brown).
- The seeds are toxic because they contain hydrocyanic acid. (Hydrogen cyanide or prussic acid.) This poison is volatile and can be driven off by cooking.
- Dried chokecherries (blueberries, juneberries, cranberries) are an ingredient in pemmican (wasna). Cherries were pounded pits and all and added to lean meat and fat packed in intestines and used as travel or survival food. Thorough drying mitigates the cyanide content in the cherry pits.
- Anishinaabe consider chokecherries bear medicine cited in Densmore's How Indians Use Wild Plants for Food, Medicine & Crafts.
- Moerman identified chokecherry as the plant with the most food uses 163. He also quantified 132 medical uses of chokecherry in Native American Ethnobotany.
- Choke cherry bark used as tea, or in the bath as a soaking agent helps relieve pain from arthritis.
- Chokecherry leaves yield a green dye, while the ripe cherries yield a purplish-red dye.
- Bears love chokecherries, as do birds, rabbits, hares, and rodents. The flowers provide nectar for butterflies, bees and ants.



## Low Bush Wild Blueberry

*Vaccinium angustifolium*



- Legend identifies blueberries as a gift from Waynaboozhoo (Original man/First Man.) Wild blueberries are called the star berry because of the five pointed star on the blossom end.
- Used for 13,000 years by Indigenous Peoples.
- Blueberry leaves are used in a tea infusion to purify the blood, ease colic and labor pains and as a tonic after miscarriage. The fumes of burning dried flowers are inhaled to treat madness. As food they are eaten fresh and dried and as seasoning in soups and with meat.
- Modern research has shown blueberries can improve motor skills, reverse the short-term memory loss of aging, namely Alzheimer's, inhibit all stages of cancer, protect against heart disease, damage from stroke, prevent urinary tract infection, improve night vision and prevent tired eyes.
- Wild low bush blueberries have more antioxidants than at least twenty other fruits. Antioxidants

block the damage done to our cells by unstable oxygen molecules (free radicals) that cause cancer, heart disease and aging in the human body. Natural chemicals that give the berries the deep blue color are thought to be an anti-diabetic, anti-obesity agent and are the subject of scientific study.

- Blueberries are a staple food for black bears from June through September. Elimination of this preferred food due to diminished precipitation will force bears to find substitute foods, or they simply starve. Some speculate that black bears will move north to colder climates. Climate change interferes with bear hibernation because unnatural signals of decreased snowfall and milder winter temperatures cause them to stay awake outside their dens. These behavior changes in diet and hibernation patterns expose black bears to hunting by their worst predator, humans, as well as dogs and in some places grizzly bears. Reproduction is also threatened if diminished food supplies cause black bears to hibernate without adequate fat reserves to nourish cubs in spring.

...Climate Chaos continued.

Much of the food focus in mainstream media has been on corn and beans, and what that will mean for the price of meat, dairy and eggs. There's been a little attention on fruits and a few other foods, but probably not enough.

Sour cherries in the Great Lakes Basin, including choke cherries, are at high risk to rising temperatures and unstable spring weather. Early warm days cause flowering to occur before our frost free days arrive, and a temperature swing, back to below freezing temperature, can subsequently wipe out the reproductive ability of flowers, thereby eliminating an entire annual harvest of cherries. They blossomed too early. This climate chaos scenario wiped out the sour cherry harvest in Northwest Michigan this year, and eliminated a significant portion of the Upper Midwest apple crop.

Extended drought, severe storms and the rising temperatures associated with climate change are causing of decline in many plant species such as sugar and red maple seedlings, and old growth white and red pine forest. Climate chaos is causing wild low bush blue berry flowers to dry up before they can become fruit according to Minnesota Department of Natural Resources studies conducted around Lake Itasca.



Chokecherries have the highest number of utilizations as food and medicines among North American Indigenous Peoples. Scientific analyses completed in 2007 of the cherries confirms that their amylase-inhibiting activity slows down the process of turning starch into sugar (i.e., it has an important impact on diabetes); berries contain varying levels of antioxidants; and the protease inhibitors in berries may help fight HIV/AIDS, parasitic diseases, and metabolic disorders. Our collective failure to curb corporate cartel greed is now killing the sacred plants that we need for health and survival.

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