Western and Indigenous Perspectives of an Endangered Plant, Sweetgrass, Hierochloe odorata

At November's meeting, Sharyn requested that I continue to write for our website. After a lapse of more than three years, I chose Sweetgrass, also known as Fragrant Holy Grass. Recently, I listened to <u>Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants</u> by Robin Wall Kimmerer with the Overdrive App. In retrospect, I should have listened much earlier. As many of you know, the author was the keynote speaker at the 2017 International Herb Symposium. I regret not being there. Her writing is beautiful and the content is truly profound.

Kimmerer compares the Western and Indigenous roles of the Plant Harvester. The Western point of view conserves threatened plants by limiting land access and direct contact with the plant. People are viewed as outside threats to the plant's survival. In contrast, the Indigenous Citizens are considered as inside participants and are taught by elders to harvest the plant carefully. The conclusion is that if plants are used by people respectfully, they will flourish.

The Indigenous view is scrutinized by the Western Scientific method in a book chapter. A graduate student, Laurie Galluzzi, guided by Professor Kimmerer at State University of New York College of Environmental Science and Forestry, studied the growth of sweetgrass as related to harvesting. Over a span of two years, Laurie maintained and observed plots of sweetgrass with different management techniques. All plots were weeded and fertilized. A comparison was made of harvesting by pulling, grabbing, and leaving grass blades untouched. The study data showed clearly that healthy sweetgrass coexists with human harvesting. Removing blades of grass was done with care to let roots stay intact in the ground. The sickest plants in the study were the unharvested plants.

As Herbalists we have already heard many lessons about stewardship with plant harvesting from our peers and teachers. Robin calls this The Honorable Harvest. The author states that we are never to take the first plant we see. We need to make sure there is an abundant population. Other lessons include the following: Ask Permission; Listen for the answer; Take only what you need; Use everything that you take; Be grateful; Minimize harm. In response to the plant's gift to you it is important to reciprocate with an offering. The Indigenous practice of gratitude is to talk to the plants and leave a gift of tobacco. Many Tribal Nations share this practice.

As herbalists and foragers, I believe we should offer gifts to wild and cultivated medicinal plants that we are comfortable with. Sprinkling tobacco does not feel right and does not fit with my heritage. Instead, I take the perspective of a loving gardener. For me, offering a gift as part of the reciprocal relationship means dispersing seed, cuttings, and removing invasive competitor species.

I asked a Plant Physiologist, Aleel Grennan, PhD, her opinion on the benefits of human harvest of an endangered plant. I wondered if sweetgrass is genetically programmed to grow in response to harvest. Aleel commented that a grass plant tends to suffocate itself with dead growth. Since sweetgrass is a member of the grass family, the actual harvest is stimulating new growth. Removing grass blades creates physical space for new healthy shoots to emerge. An analogous situation is with hay crops. Removal of first cut stimulates regrowth and results in the harvest of high quality second cut. Depending on the field and the season, sometimes a protein and nutrient dense third cut hay is harvested, too.

Another comment from Aleel was a comparison between sweetgrass and heritage grain crops. Our society has lost many of our ancient grain varieties in favor of modern strains that work well with automation and fossil fuel inputs. Is sweetgrass an ancient cultivated plant instead of a wild plant?

Sweetgrass has a long history of thriving where indigenous people make baskets. With the decline and forced relocation of Indian populations over the centuries, sweetgrass populations dwindled to an endangered status. As our modern society has ignored ancient grain varieties, these seed stocks have disappeared.

These observations beg explanations. Do we know the difference between cultivated and wild plants? Are the two groups of plants very different scientifically from each other? Both cultivated and wild plants have a relationship with humans. With this thinking, there might be more active management of our endangered medicinal plants that matches the efforts to reestablish ancient grain crops such as emmer and einkorn. This perspective is a bridge to Indigenous Wisdom of using the plant respectfully and allowing it to flourish.

Even if you are not a basket maker, you can grow sweetgrass in a moist meadow to enjoy the vanilla scent. Handling and braiding the grass is described as calming and satisfying. The book cover shows an image of delicate green braids that reminds you that another plant name is Hair of Mother Earth. You are best off purchasing a live plant by mail order. Seeds are difficult to grow. The most sought after taller and vigorous sweetgrass plants often have sterile seeds. The plant's energy is directed towards vegetative growth instead of reproduction.

From an Herbalist perspective, sweetgrass has medicinal benefits. Pompeii Organics in Pennsylvania sells a sweetgrass hydrosol promoted as, "the essence of the grass and can be used in the same manner to smudge the home. The company says the hydrosol has a calming effect, while being emotionally uplifting. In addition to its energetic properties, the product and can be used for a sore throat and cough. It is added to tea or used as a gargle. Use as skin toner is recommended.

The historic Western perspective in Google Scholar shows sweetgrass classified as a weed. I see sad irony in a 1922 book, North Dakota Weeds by Orin Alva Stevens from the North Dakota Agricultural College. Sweetgrass is described as, "A common grass in rather moist soil. Not usually troublesome in cultivated fields unless in a places which are often too wet for cultivation. If troublesome, it may be treated like quackgrass." The description of sweetgrass is much like our government's treatment of Native Americans. Cultivated crops represent settlers and sweetgrass is equivalent to Indian tribes that were removed forcibly from productive soil. We have much to be thankful for with our modern era of publishing. Many voices can be heard. More cultural traditions are explained to us. Our culture is so much richer for having the Indigenous perspective and wisdom of authors like Robin Wall Kimmerer. As Herbalists we can learn from both Western perspectives and Indigenous traditions and make for healthier beings and a better planet.

By Abbie White, December 9, 2018