



A dance of balance; Seeing Pokeberry

It is November and just last week the shifting temperatures in our region quite suddenly plummeted to the mid-thirties giving us a clear indication that we have entered a new season. The leaves on the deciduous trees are beginning to fall in fleeting piles, and although it may be difficult to find berries on the stems of the local pokeweed, their eye-catching central stems of magenta play against the brilliant yellows of the turning leaves. We gathered our pokeberries for dyeing in early September and froze them for use later in the season. Even so, on these changeable days of late autumn it is possible to find a few overlooked berries on the uppermost branches--at least enough for a little ink making.

Pokeweed or Pokeberry, *Phytolacca americana*, is native to most landscapes across the US and, although Pokeweed can be considered a noxious weed, it carries an important history as a medicinal plant in indigenous culture, and plays a valuable role as a wild food source for our local suburban, city and country fauna. Pokeweed is a perennial plant capable of reaching a height of 10 feet. It grows wild throughout our area and in some parts of the world is cultivated as a garden plant. The stalk of the plant is a notable red-magenta and the sculptural branches and leaves carry traces of the same color in the leaf veins and stalks. In the late summer its

white to light pink blooms appear singularly, and star-shaped along tall vertical spikes. As the blooms fade and mature to berry the color shifts from verdant green to a dark purple when ripe. With a little squeeze the berries release the magenta liquid, which albeit of a transitory nature, have been used for a multitude of things including an ink and a textile dye.

A word of caution...

Pokeweed is, as Rita Buchanan writes in her book, *A Weaver's Garden*, "a more or less-or-less poisonous plant" and great care should be taken to make sure this is understood as the **root, leaves and berries all carry elements which are poisonous in varying degrees**--the root being the most dangerous. That said, pokeweed does have another interesting history as a spring edible but only the 5-6" fresh green shoots of the early spring can be harvested, and even then, they need special preparation to release toxins (see Euell Gibbons, *Stalking the Wild Asparagus*). The pokeweed root is highly poisonous. The berries are poisonous too, although it seems less so after cooking, care should still be taken in handling the liquid. Given the potential dangers involved in absorbing toxins through our skin, and as well, bringing toxic substances into dye projects with groups (sometimes including children), I have often wondered why we embrace the processes involved in working with pokeweed. And yet, because of the vivid color of the berries, Pokeweed carries a significant invitation as the potential for a local red. And, despite warnings of its fugitive nature there seems to be an irresistible urge to just see what will happen.



Color release from pokeberries...a simple ink.

As building developments continue to encroach on important ecologically rich resources in our fibershed area, Pokeweed in particular provides important sustenance for deer communities and migratory birds. Fresh and dried leaves and berries continue to provide nourishment in the later fall and through the winter. For many gardeners the sight of pokeweed is a warning call to action as the general belief is that this strong, vigorous plant will quickly take over an area. Even with careful attention to removing the plants down the last root fragment, poke does have a way of re-emerging through the transport of seed (thanks to the birds and deer!). Noticing where pokeweed grows can be a helpful indication of soil imbalance as this plant tends to find its home in disrupted areas and in particular it gravitates to areas which are not easily able to move water (see *Weeds and What they Tell Us*, Pfeiffer). Nancy Lawson, author of the *Humane Gardener*, questions the notion of pokeweed being invasive and out of balance and speaks of pokeweed as a plant that almost chooses its allies, and grows with grace, balance and in a visual partnership (and perhaps a deeper relationship too), with local trees and bushes. It is as though pokeweed is a great transformer, capable of standing out in dramatic color statements of reds and magenta, and yet its form has us wondering how well we actually know its shape, as the architecture of pokeweed is as varied as the multitude of landscapes it appears within. An exercise in overcoming preconceived notions might be to embrace the beauty of this plant and

allow it to grow alongside other strong growing cultivated plants--just to see. Perhaps an over abundance of Pokeberry plants is only an indication of an environmental imbalance and, in order to allow Pokeweed to maintain its proclivity towards natural balance within our ecosystem, our task is to caretake the health of the soil, rather than eradicate the plants we call weeds.

In an area of my own yard I have let Pokeweed run its course for a number of years, in large part to allow a small supply of berries for use in the dye pot. This year it has been a quiet, understated visitor. Instead of spreading as it has in the past, it seems to have satisfied itself with two modest corners where it continues to provide food for the wandering deer (lower leaves and berries) and to the local and visiting birds who take from the berries on the upper most reaches. I am hardly able to harvest enough for a dye pot as I recognize the insistent needs of the wildlife and have been content to use a few berries to create fugitive and yet poignant color notes on paper--exploring wild ink in a simple recipe of pokeberry juice alone. (See *Make Ink* by Jason Logan for more on ink making with pokeberries).



Fall Pokeweed and Tulip Poplar...a wild tangle of yellow and magenta.

Notes on creating a dye pot below...



Slow cooking pokeberry...

Many pokeweed dye recipes speak of the importance of using vinegar or acetic acid to prepare the fibers and to extract the dye from the berries without which the signature magenta of pokeberry is quite fleeting and incredibly light sensitive. Carol Leigh's recipe for pokeberry dye holds a place of honor as her research has been a great resource in developing pokeberry dye light-fastness in textiles. Even with extreme measures, high ratios of dye stuff to fiber, and the use of an acidic environment to prepare dye bath and fiber, expect to see changes in the vivid coloring of your pokeberry-dyed textiles over time. It may be that through the processes described below you will be able to attain and hold magenta for many years and still you may want to consider using pokeweed to dye fibers which can be overdyeed in the future--textiles without intricate knit colorwork or woven pattern work.

Like many dye processes, it seems exactitude of measure is not a necessity, but rather a sense of proportion based on experience and observation can be your best guide. Carol Leigh makes reference to this phenomena and speaks of her general practice of working with pokeberries and other wild foraged plants, supporting the idea that cultivating a sense of *how much is enough* is our best measure. I would advocate for the same practice to be applied to your

foraging in the field and even your own backyard. A general rule is useful, but does not necessarily speak to the specific conditions and needs of the community of wildlife supported by the plants you harvest. (Carol Leigh estimates about 1.5-2 gallons of berries (off the stem) will be sufficient to dye 8 ounces of wool. In her book, *Harvesting Color*, Rebecca Burgess interprets and brings her own vision to this recipe, and suggests a ratio in a weight of poke to weight of fiber as roughly 25:1.)

For our pokeweed exploration we soaked approximately 1 ½ gallons of pokeberries on the stem in a solution of vinegar and water overnight. We added approximately ½-1 cup vinegar per gallon of water. Our fibers were pre-treated with cold soaks in, roughly, a 1:1 ratio of water to vinegar. Some of the fibers had a four day soak in this solution and others had an overnight soak and a few had an *on the day soak* too. Many recipes also advocate simmering your fibers in an acidic solution before the dyeing process.

Our dye vat was slowly heated over the course of two hours after which the pokeberries were strained. Half of our pre-wetted and pre-treated fibers were added to this dye liquor and the dye pot was returned to a gentle heat for approximately two hours. The remaining fibers were added to a large mason jar of hot dye liquor (taken from our extracted berries), and allowed to sit and ferment for four days. Our intent was to allow for long slow seeps in the dye pot for both the extraction and for the subsequent dyeing process to allow for color intensity. Overheating (bringing the temperatures above 160) will denature the dye stuff resulting in a significant color change from a red/magenta dye to a grey.

After the process of dyeing, allow your fibers to oxidize and cure (for an hour, to a day or more) before carefully soaking and rinsing.

Here are some of the colors which emerged from our pots...



Pokeberry dyed farm yarns dyed at the Flying Goat Farm studio. The fibers allowed to sit and ferment retained a clear pink-magenta (right) and the cooked fibers took a more earthy tone towards a magenta-red (left).

Reflecting on the collection of recipes and experiences shared in dialog it is clear that variables such as the high proportion of berry to fiber, working with a highly acidic pre-mordant and dye bath environment, as well as a close watch on heating below a temperature of 160, will all assist in drawing colors into your fibers. As with all dye plants, there seem to be so many variables to work with and so many directions to take your fiber--so much potential. The joy of the experience was in the slow cooking, the element of time and the freedom to follow our own sense of when things were ready to move from one process to another--a process of being in tune with the plant, with each other and with the balance of things. The question remains how and what do we dye knowing that this particular dye source can be more changeable by nature.

Please share your adventures on...

A few resources on dyeing with Pokeweed are listed below:

A Weaver's Garden, Rita Buchanan

Carol Leigh of Hill Creek Fiber Studio:

<http://www.hillcreekfiberstudio.com/CL-PokeberryRec.html>

Harvesting Color, Rebecca Burgess

For ink making see:

Make Ink; A Forager's Guide to Natural Ink Making, Jason Logan