

Natural Dyes from the Backyard

by

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Preface

Preface

Many years ago, after my daughter was born in 1975, my husband and I went to a craft show near our home in eastern Michigan. We walked around the crafters, pushing the baby carriage, relaxing on a summer afternoon. Nothing really struck us until we came to a woman spinning yarn on a Country Craftsman wheel. Behind her peg boards covered with a rainbow spectrum of her handspun, naturally dyed yarns delighted the eyes. My husband was just as impressed as I was, and bought me the same wheel a few weeks later. I feel so badly about not remembering who she was, but her lovely yarn started a lifelong obsession with wool. I am possessed by yarn. She was also my



first spinning teacher. Spinning it myself, then dyeing it with natural dyes is the most gratifying of all the processes I do.

Something about gathering the plant material, getting the supplies ready, and preforming the actual dye procedure just thrills me. I think I became an OR nurse for the same reason; I love procedures. (I just realized I was an OR Tech first before becoming a dyer. Maybe I needed the complete change of scene dyeing provided.)

Thank you so much for your interest in my dye experiments with berries and plants from my yard and garden. Lichens from the bark of downed wood were collected by my friend Betty on walks taken in the woods surrounding her home in the Allegan Forest. She collected the Elderberries from my friend Stephen's farm. To read more about Steve go to http://shelteringpines.blogspot.com/

This booklet is not meant to be anything more than a basic, fun introduction to dyeing with plants and weeds in your yard. A more precise study of natural dyeing can be done using any of the wonderful books available. I list several of my favorites in the Fabulous Instruction Book list. You may be surprised and delighted by the results you obtain with the

simplest materials.

A problem that may occur could be the yarn not taking up any color. The yarn and fiber must be 100% wool. Synthetics won't accept the dye. Also, make sure your alum is alum sulfate. Alum Potassium isn't the same thing and I have heard it may alter your results.

So Many Projects, So Little Time Chapter 1

So Many Projects, So Little Time!

Or what do you want to make?

Determine what Fiber you want to dye and for what use. Is it Yarn for a baby blanket or a lace shawl? Or fabric for a quilt?

The Use will help you determine what Color you may want to try. Blues and purples are easily acquired from berries, but are often not wash or light fast. So a berry dyed yarn would be suitable for a shawl which won't require much laundering, but not as much for a baby blanket.

The same rule applies to fabric dyed with berries. A naturally dyed quilt square may fade if it is used in a project that requires repeated washing, like a baby quilt. An art piece hung in a room away from natural light may be more appropriate and will protect your precious work from the effects of sunlight and laundering.

Check the Interweave Magazines for project ideas. And of course, if you haven't joined Ravelry yet, get busy!

http://goo.gl/S0A5X http://www.ravelry.com/

Supplies Chapter 2

Supplies

1. Protein yarns or fleece. I decided to limit this booklet to protein fibers to keep things simple. However, dyeing cotton or baste fibers like linen and ramie with natural dyes is a very similar process. Make sure the yarn is in skeins that are loosely secured with evenly spaced figure eight ties wrapped around the skein. If you don't secure the skein, you'll have a tangled mess in the dye pot. I dye both loose, thoroughly scoured wool, and roving. Make sure the fiber is completely wetted out by soaking in hot water with a drop or two of liquid dish-washing detergent. Do not agitate while the fiber is soaking. I soak for 30 minutes. Drain.



img align="right" src="P1010611.JPG" width="200" height="320">

2. Plants, weeds & berries; yellow cosmos (pink doesn't work) blossoms Marigolds-flower heads

Raspberry Brambles-just the canes. Leave the berries for the birds Nettles

Horsetail

Goldenrod

Queen Anne's lace

Pokeberries

Elderberries

Mullein

- 3. Nuts and lichens. I pick up nuts off the ground to use; the shells are fine. I've gotten to our hickory tree after the squirrels and other critters had their way with it, and picked up the empty shells to dye with. Lichen are plentiful on fallen wood. I never take any off rocks or standing timber. A little lichen goes a long way. (I haven't dyed with moss or mushrooms, but had read online that it is gratifying to do so.)
 - 4. Clear, non-sudsing ammonia

- 5. Alum Sulfate-available from Dharma Trading.
- 6. White vinegar
- 7. Enameled or stainless steel dye pot.
- 8. Rubber gloves, mask & apron
- 9. Mesh strainer or cheesecloth to strain the dye plants out of the dye bath. It's a mess trying to get all those little seeds out of your fiber.

There is some discussion about not freezing berries, but I do it all the time. I have a freezer full of frozen cosmos blossoms and frozen pokeberries.

Fabulous Instruction Books for Dyeing With Plants Chapter 3

Fabulous Instruction Books for Dyeing With Plants

There are many more books available on the subject than are listed here. The following are the books I own and use whenever I dye. I've had the book on Lichens for forty years and value the contents; it's out of print, but if you come across a copy, grab it.

Harvesting Color: How to Find Plants and Make Natural Dyes by Rebecca Burgess http://goo.gl/DNX1D

Growing Herbs and Plants for Dyeing by Betty E.M. Jacobs http://goo.gl/TWkce

A Dyer's Garden by Rita Buchanan http://goo.gl/k1SGx
Dye Plants and Dyeing John and Margaret Cannon http://goo.gl/f6Vgl
Dyes from Lichens & Plants by Judy Waldner McGrath
http://goo.gl/ASWll

Natural Dye Instruction Book by Michele Wipplinger http://goo.gl/WKObK

Fabulous Resources for Dyers Chapter 4

Fabulous Resources for Dyers

Cornell Mushroom Blog-Dyeing with Lichens and Mushroom http://blog.mycology.cornell.edu/2006/12/12/dyeing-with-lichens-mushrooms/

Australian Lichens

http://www.anbg.gov.au/lichen/lichens-people-dyeing.html

Free PDF *Home Dyeing With Natural Dyes* by Furry and Viemont http://www.cs.arizona.edu/patterns/weaving/monographs/fms_dye.pdf this is a fabulous little book published in 1935. Love!

Dharma Trading Company http://www.dharmatrading.com/

Earthues http://earthues.com/natural_dyes The best dye extracts and dye booklet in the world.

Safety Chapter 5

Safety

Wear garden gloves when harvesting if there is a danger of poison ivy or thorns.

When preparing mordants and cooking plant material, work in a well-ventilated room.

Wear a respiratory mask, available at most home stores, when mixing dry ingredients. Wear gloves and an apron when preparing the dye bath.

Dispose of your spent dyestuffs in your regular trash. Alum is considered a safe additive, so no special handling is required.

Mordants Chapter 6

Mordants

For this booklet, I will limit my discussion to the use of Alum which is safe and readily available. For more adventuresome mordants, check out the books in the bibliography.

Mordants work by altering the chemical bond between the dye and fiber. If you are really interested in knowing exactly how this occurs, check the bibliography for more resources.

I subscribe to the "mordant everything at once" method. Some sources say to dye the yarn right away, but I rarely have the luxury to do so. Also, I find that a few days rest after mordanting with Alum may produce a brighter color. One dye pot may have wool, roving, cashmere or silk in it. I have also added the mordant to the dye pot when I couldn't wait to dye. It works!

Method: I use a giant dye pot of water with the mordant dissolved in it and add different wetted out yarns. It's the relaxed method. Again, this won't work for everyone. If you want to try to replicate a color, you will need everything to be exact. Exact is not the nature of natural dyeing, but you may try.

For every **pound of fiber**, I use a big pot with about **three gallons of water** into which **two level tablespoons of Alum** are dissolved. Too much alum makes wool sticky and harsh. (For more information about mordants, check out the books in my bibliography. The *Earthues* manual and *Dye Plants and Dyeing* have wonderful chapters on mordanting. I do use some heavy metals when I mordant and the way I handle the disposal of the water is to reuse it constantly. I'm sure the pan of water I'm using now has traces of tin, alum, copper and tannic acid it in. Visitors to my studio remember seeing old gallon vinegar jugs full of murky liquids; all stuff I'm waiting to take to the dump on dangerous disposal day. Everything I use in the studio except for chrome is supposedly safe to dump, but our well is right outside of my studio so I'm not taking any chances.)

Some plants may also contain mordants; rhubarb leaves are high in oxalic acid. Tannic acid from tea can also alter the shade of dye. And using a pot made of iron, or adding a piece of iron to a dye pot can dull the shade. Don't use iron with berries; I've read it can cause wool to fade dramatically.

Summary- Put 1 pound of wool fiber + 2 level TBS Alum dissolved in three gallons of water in a non-reactive pot. Bring to a simmer for one hour, cool with yarn in the liquid over night. Or drain and add to dye pot. I've forgotten yarn in a mordant pot for days and it's not a problem.

General Dye Method Chapter 7

General Dye Method

For one pound of fiber, gather approximately a gallon of dye material. To a dye pot, add enough water to immerse the dye stuff and start heating it. When it reaches a simmer with steam rising, about 180 F if using a thermometer, leave it for about an hour. Then let it cool over night or longer, and strain it through mesh. If you aren't going to use the liquid within a day or two, I would refrigerate it unless you are using berries which seem to benefit from a little fermentation

Elderberries Chapter 8

Elderberries

Betty collected the Elderberries used to dye the cashmere yarn she knitted the fabulous lace shawl that is featured here. Elderberries grow on woody, deciduous shrubs that are in the honeysuckle family . Collect the berries when the clusters are full of mature berries and purple in color. The small, unripe green berries don't yield much color. The berries can be cultivated, but I used three quarts of wild berries.

Prepare the berries by removing them from the little stems that attach the bunch together. Add just enough water to cover the berries. I cooked the berries, bringing the temperature to 180F for half an hour. The pot was steaming but not bubbling.



Then I let the liquid cool and added the cashmere yarn. I let the yarn sit in the liquid over night. After I removed the cashmere, I let the pot ferment for a week. This isn't necessary, but I discovered I got a bluer blue when I let it sit. The merino roving was mordanted ahead of time, drained, coiled in the dye pot of fermented liquid.

Vinegar added to the dye bath may shift the color toward violet red.

Place wetted out, alum mordanted skeins in the cooled dye pot. I didn't reheat the pot. I left the skeins in the pot until the liquid appeared to be clear. The skeins took a lot of squeezing and reimmersing in rinse water until the water ran clear. I have a centrifugal extractor, but I like using an old-fashioned wringer I found on ebay when there is just one skein.

Dry and use for something fabulous, like Betty's cashmere shawl.



Pokeberries Chapter 9

Pokeberries

I love dyeing with pokeberries. Like other berries they're not very lightfast, so be careful choosing what you'll make with your yarn. I found this recipe from Carol Leigh and will try it soon. http://www.hillcreekfiberstudio.com/CL-PokeberryRec.html She explains a method for extending its light-fastness. Carol Leigh is a good source for all of your natural dye supply needs.

Pokeberries are found in fields and alongside roads. They are a noxious weed, so don't ingest them, or allow livestock to eat the plants. We have pokeberries growing along our sheep's pasture, but they aren't tempted because they get enough tasty kibble and alfalfa to eat.



I used about three quarts of pokeberries to dye a generous six skeins of yarn, about twenty ounces.

Cook the pokeberries for an hour, and allow to cool overnight or longer before draining. Add the yarn and don't reheat, but let sit undisturbed for at least a day, preferably longer. Pokeberries will produce a huge range of colors. I have dyed with pokeberries in a similar manner as the elderberry. The alum gave the yarn a coral hue that quickly changed to a brighter red when I added vinegar at the end.

The pink lace shawl I made on an old knitting machine is rayon silk 50/50 mordanted in a weak alum solution and then left in a pokeberry bath I'd already used for sock yarn.

A very exciting experiment occurred serendipitously when I forgot and left six skeins of sock yarn in a pot of pokeberry liquid and went away for a two week trip. When we got back, I found the deepest most vivid violet shade of yarn. Had to scrap the mold off the top skein, but it seems fine! (I should add I thought something had died in my studio when I returned and

thank goodness the smell washed out of the yarn.)

Cosmos and Marigolds Chapter 10

Cosmos and Marigolds

Follow the general method. If after an hour on the stove the flower petals haven't bleached out, strain the dye bath and reuse the petals.

Keep cutting the flower heads off all summer and freezing them until there's enough petals for dyeing. I add the yarn to the cooled off dye pot and heat up again to a simmer for an hour. I allow it to cool over night before removing the bright yellow yarn. In the late fall I let the plant go to seed and save the seeds.





Goldenrod, Queen Anne's Lace, Horsetail and Mullein Chapter 11

Goldenrod, Queen Anne's Lace, Horsetail and Mullein

Acid yellow is what you get with Goldenrod! I've harvested it until the leaves are off the trees in late fall; a few fronds will appear along our rural driveway, and they give a brilliant yellow too.

Follow the general method. I chop up the Goldenrod stems because the flower clusters are so big. I double strain the liquid with cheesecloth lining my mesh strainer because the fine seeds will permeate the yarns and are hard to remove from the fiber.

Allowing the yarn to sit overnight in the dye bath insures you get every bit of the fabulous yellow



Queen Anne's Lace gives a soft sage green color. Harvest when the flowerets are still tight. It's essential to double strain the liquid because the little white flowers are impossible to remove from fiber. I know.....

A paler yellow-green comes from Mullein. I let Mullein go to seed first

because it's a biennial and I want it to come up every year. The Oklahoma Tinctoria is a great blog for dyers and has a wonderful post on Mullein. For both plants, I harvest the entire plant and chop up before cooking.

Horsetail yields a soft tan-green. It's similar to nettles, but just different enough. I love the range of colors all the plants





Nettles and Bramble Chapter 12

Nettles and Brambles

These yield similar soft shades that range from tan to pale sage. They need to be chopped up into little pieces; I do it as I'm harvesting with a pruning shear, taking little pieces. It's easier to transport in my basket and to prevent getting stuck with a thorn. The material needs a longer cooking to extract the color. You'll see the water change after an hour.



Sunflowers, Zinnias and other Annual Garden Flowers Chapter 13

Sunflowers, Zinnias and Other Annual Garden Flowers

These are worth a try if you want a range of soft earthtones. I found the variation in color wasn't worth ruining the sunflowers I grow for the birds, and the zinnias, which offer such a profusion of glorious color on the plant. If you look really close, you can see a woodpecker on the sunflower in my garden.



Lichen Chapter 14

Lichen

&

Betty gave me a grocery bag full of soft bark she'd picked up off the ground while walking their property in the Michigan woods. The pieces were covered in green-grey lichen. I found information about dyeing with lichens in the book by Judy Mc Grath and the Cornell University Mushroom Blog, my favorite.

It's important to remove as much of the bark and dirt from the lichens as possible. I just took my time. It was tedious, but so worth it.

There are several methods for extracting the color from Lichens. Most propose soaking the lichens in ammonia for three weeks. I soaked

them, but only for a few days. I placed two cups of lichens in a quart of clear ammonia. The ammonia turned a dark, rust color.

I strained it, and added more ammonia for another soak. I then added the rusty colored ammonia to two quarts of water. I had read of the 1.2 ratio in McGrath . I added the wetted out wool roving and loose mohair fiber and brought it to a simmer for approximately one hour. The color is so fabulous;





the mohair is a rusty auburn and the rovings were several different shades of rose and rust.



Nuts Chapter 15

Nuts

Nuts yield brilliant, rich colors from the palest taupe to almost black. I use nut husks that have fallen and left behind by critters. I use gloves for this reason...also to prevent my hands from getting stained. I don't smash the husks completely but soak them for weeks. When the liquid is ready, it will be a deep brown color. I strain it and add my skeins. I bring the temperature up to about 180 F and leave it for an hour. Leaves and bark from nut trees can also be used. Note: Walnuts do not require mordanted yarn, another fun reason to try it.

About the Author

About Suzanne Jenkins

Since 1975, Suzanne Jenkins has used plants and weeds found on her family farmstead for dyeing. Go to her Lakeshore Textile blog for more information about workshops and current works. http://goo.gl/1OKoI

During the past thirty-eight years, Suzanne has been a weaver, knitter and spinner, worked as an Operating Room Nurse, owned a successful yarn shop which is still in operation in New Jersey, and has written and published books available on Amazon. http://goo.gl/kxaFa

Her new series of introductory books for crafters will include basic indigo dyeing, setting up a study group and special techniques. For more information about Suzie, go to www.suzannejenkins.net

Books by Suzanne Jenkins
Pam of Babylon
Don't You Forget About Me
Dream Lover
Prayers for the Dying
Family Dynamics
The Greeks of Beaubien Street

End Notes

End Notes

http://www.wildflower.org/plants/result.php?id_plant=SANIC4 *A Dyer's Garden* by Rita Buchanan http://goo.gl/k1SGx http://oklahomatinctoria.blogspot.com/2010/02/great-mullein.html http://www.anbg.gov.au/lichen/lichens-people-dyeing.html http://blog.mycology.cornell.edu/2006/12/12/dyeing-with-lichens-mushrooms/



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