

Introduction to Natural Ink Making

materials, processes, and helpful
resources from a sustainable and
ethical perspective





What is 'natural' ink?

- Ink/dye is made of pigment and binder- usually water, oil, or alcohol- sometimes with added substances to change the fluidity, thickness, or colour fastness (how it reacts with light over time)
- 'Natural' meaning naturally occurring (vs. synthetic), from renewable sources (vs. non-renewable oils for example)

Image: cotton dyed with plant-based dyes

Why make and use natural inks?

- Sustainable and affordable
- Helps you feel connected to the materials and where they come from
- Builds understanding and respect for other living things
- experimental/fun





Guidelines for Foraging

(Adapted from Robin Wall Kimmerer's book *Braiding Sweetgrass*)

Never take the first one you see

Plan ahead what you are looking for

Be considerate- only take what you are sure you will use

Share what you have and give back when you take- leave offering, prayer, plant seeds, continue learning

Learn about local customs- in some sacred places, it is taboo to take things

Remember the cycles! It will bloom again

Image: Buffalo Bean/ Golden Bean

What to Forage

Food scraps- peels, skins, vegetable cuttings, seeds

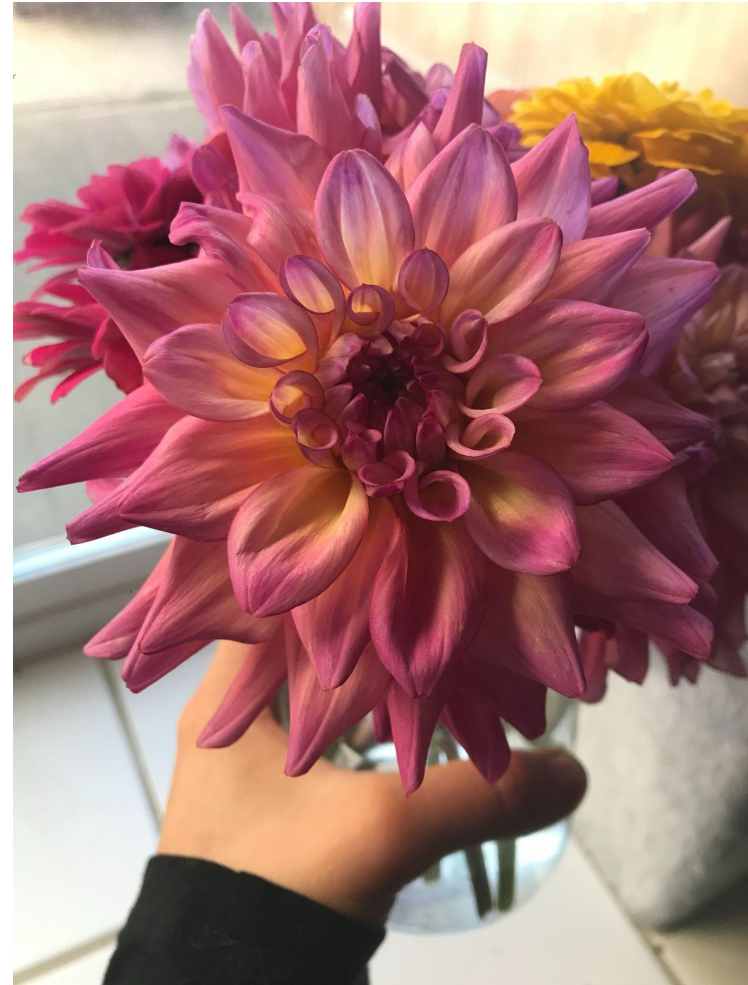
Yard waste- leaves, bark from pruned or fallen branches

Invasive species

Small amounts of live plants while following guidelines

Human made materials- iron can be used as modifier, copper is a great blue

Image: Dahlia flowers from my aunt's garden





Resources for learning about local plants:

- Nitsitapiisinni Stories and Spaces
<https://galileo.org/kainai/plant-index/>
- Naapi's garden
<https://www.naapisgardenkepa.com/>
- Galt Museum ethnobotany
<https://www.galtmuseum.com/ethnobotany>
- Local foraging/ gardening groups and clubs
- Flora Books and field guides- Plants of AB, Common Coulee Plants, many of these are accessible online as well
- Observation- your own visual research

Image: Knapweed, listed as invasive

Resources for learning about plant dye/ink making

Other artists- blogs, books, social media

Community/ art groups, textile guilds

History books, research papers, historical societies

*More links provided at end of presentation

Image: Testing plant based inks on paper





Processing Methods

Solar dyeing- using heat from the sun, usually over multiple days

Cooking- heating on stove or fire, temperature and time can vary greatly depending on plant material

Dye Vat- requires reducing agent, bit more advanced

Safety Note: Keep dye equipment separate from cooking equipment and always have good ventilation

Image: Glass jars after heating through double-boiler method. From left to right: saskatoon berries, chokecherries, and avocado skins.

Solar Dyeing Methods

Using the heat from the sun to draw the pigment out, may take multiple days to get best results. Make sure to stir mixture once or twice a day.

Image: Glass jar of butte marigold flowers after two days of the solar dye process





Cooking Methods

Varies greatly depending on plant material- some need higher temperatures or longer time cooking

Careful not to boil- for most plants this will deteriorate any colour

General rule: Bring plant material in water to a simmer and then reduce heat, let cook for 30 min to 1 hr

Try dipping a scrap piece of paper to see where the colour is at

Image: Double boil method with plant material in jars, placed in a pot of lukewarm water. Jars need to heat up with the water to not explode!

Concentrating the ink

Once you have your desired colour or plant material has clearly exhausted all its colour, strain out all the plant bits using a strainer or cheesecloth (keep in mind cheesecloth will get dyed, therefore using the same cloth for different dyes may result in cross-contamination).

You can reduce the solution on low heat to allow water to evaporate and colour to concentrate.

Image: Hollyhock flowers in water before cooking





Variables & Additives

Many things will affect the outcome- pH (basic vs. acidic) often changes colour. For example, adding vinegar (making the pH more acidic) will change the colour of red onion skins to green as it oxidizes!

Addition of metals- iron is often used to deepen and darken colour (simple recipe for an iron solution provided on the last page).

Image: Iron tests on ink swatches

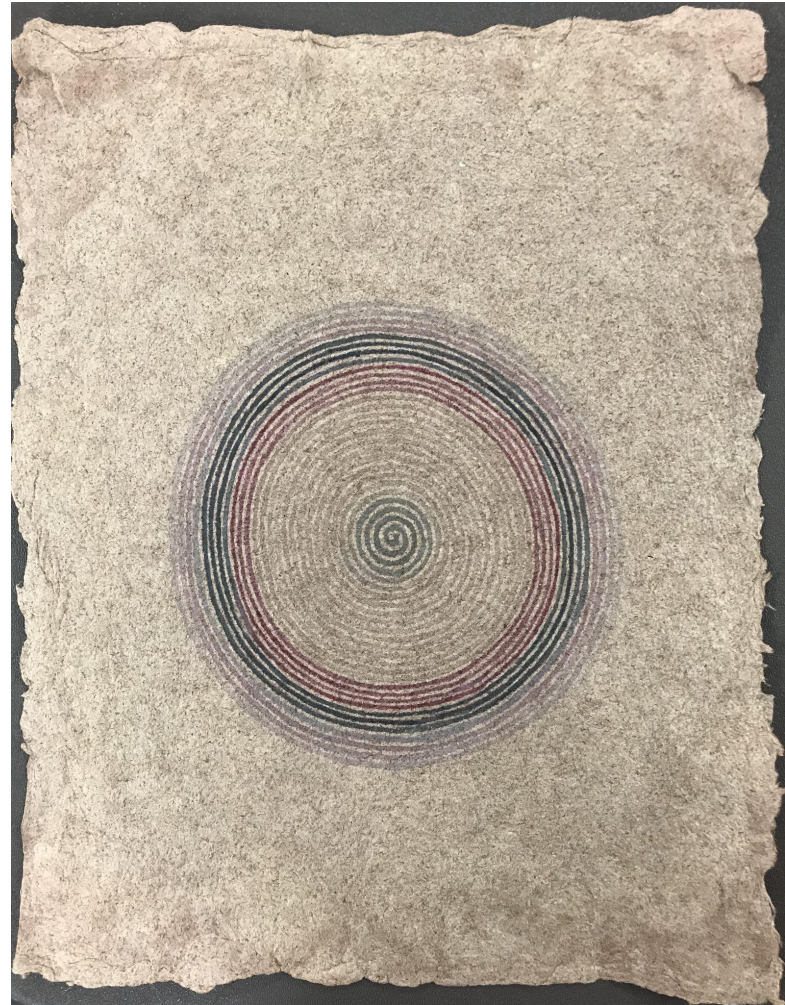
Once you have an ink

Strain ink into a sealed container once it has cooled down. I like to use glass jars (you can buy some mini jam jars from the dollar store).

Can add something antibacterial such as whole cloves (2-3 should do) or alcohol (10 drops of rubbing alcohol) to prevent mold.

Try to use soon after making; some inks will last longer than others

Image: drawing with inks on cattail paper



Yellows

Toadflax
Tansy
Marigold
Calendula
Goldenrod
Dandelion
Weld

Oranges

Calendula
Orange Cosmos
Sweet Onion
skins
Turmeric

Reds/Pinks

Madder Root
Amaranth
Chokecherry
Elderberry
Beets
Pokeberry
Avocado Skins/Pits

Browns

Dock seeds
Coreopsis
Tree Bark
Orange/Red dyes with
iron additive

Indigo
Woad
Hollyhocks

Blues

Hollyhocks
Chokecherry
Elderberry
Purple
Pincushion

Purples

Oak galls
Carbon (soot)
Brown/blue dye with
iron additive

Blacks

Indigo + yellow dye
Red onion + vinegar
(low pH)
Spinach

Greens

*This list is just a starting place.
There are many more that could be added.*

Common Plants to Forage in southern Alberta

- Yellows: Tansy (invasive), toadflax (invasive), dandelions, goldenrod, buffalo bean
- Reds: Chokecherries, beets, madder root
- Blues: Dyer's woad (invasive), chokecherries with iron solution
- Browns/Blacks: oak galls, dock seeds, rusty objects for making an iron solution
- Onion skins make great dye/ink, as well as avocado skins & pits
- Bark from pruned/fallen branches- various colour results

Image: Tall goldenrod flowering





Plants to grow

Yellows: dyer's coreopsis,
marigolds, calendula, dahlias,
sunflowers, weld

Reds: amaranth, madder root

Blues: indigo, petunias, hollyhocks

Purples: hollyhocks, petunias,
purple pincushion, elderberries

Image: Hopi red dye Amaranth flowering

Resources

- Liz Spencer at The Dogwood Dyer (<https://www.thedogwooddyer.com>)
- Slow Lane Studio (<https://www.slowlanestudio.co.uk>)
- Maiwa (<https://maiwa.com>)
- Julie Beeler (<https://www.juliebeeler.com>)
- Caroline Ross (Book: Found and Ground, <https://foundandground.com>)
- Carolyn Sweeney at Strata Ink (<https://www.strataink.com>)
- Toronto Ink Company (<https://torontoinkcompany.com>)

Resources

- The Organic Artist, book by Nick Neddo (also has Organic Artist for Kids book!)
- Make Ink, book by Jason Logan (founder of Toronto Ink Company)
- Wildcraft Dyeing, YouTube tutorials (<https://www.youtube.com/@WildcraftDyeing>). Really great tutorials for dyeing wool, but similar process for ink. Also dyes with mushrooms!

How to make an iron solution



Carefully collect some old rusty things (ex. nails)

Place items in a jar. Fill jar half with vinegar and half with water. Let jar sit (can use after a few days but best results generally take over 10 days).

You can use a dropper to add small amounts to dyes and inks (a little goes a long way), or try painting iron solution on either wet or dry ink and watch results appear!

Have questions? Feel free to email me about any dye/ ink related explorations and I will do my best to help.

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