



Spring

Seeds & Seedlings



Seeds are such fascinating structures- their shapes, textures, and colours always fill me with wonder. How is it that some of the largest living things on earth come from such a tiny beginning?

Overview: Have you ever stopped to really look at a seed? They come in all shapes, sizes and textures- and each one tells a story about how a plant grows, survives, and spreads. Grouping similar items together is one way to help classify and understand relationships between species. Using the nature journal to illustrate groups of similar things is a great way to notice subtle details that make up differences between individuals and species. If you will be planting seeds as part of your project, this is a great opportunity to get to know the site-specific seed species a little better before you put them in the soil! Knowing your site's seeds can help you in identifying plants and seeds in the coming fall if you want to collect them for redistribution or starting indoors.

Your Goal: Observe a variety of seeds, then use your nature journal to explore how their characteristics might tell you something about their life cycle, movement, and growth. You'll experiment with how to arrange your seed observations on the page in ways that are both scientific and artistic.

Nature Journaling Strategy: Collections and Composition

Historically, natural items have often been gathered, boxed, pressed and pinned inside frames, formed private and public collections, and been sketched and illustrated in explorers' journals. Before beginning, it is important, once again, to discuss the ethical implications of collecting and gathering natural materials, how to treat gathered materials with respect, and alternative methods of gathering (working from a collection of photos you've taken, for example).

Try collecting with your eyes and pencil. Start by choosing a theme, such as seeds, cones, or pods and think about how to arrange your drawings in your nature journal. Will you place your sketches in a neat grid like a scientist? Or let them drift across the page in a more creative composition? The way you place things on the page can express ideas too!

Use white space for adding notes, questions, and observations. Colour can be used to create contrast or connect ideas, and shaded boxes can highlight information. Consider how writing and background colour becomes a part of the composition. Will you arrange your words in a neat data set, will they loop around the images, or fill the white space between illustrations?



Arranging a variety of tree seeds on the page before sketching can help to visualize and organize a composition. As the sketch takes shape, colour and text become a part of the composition.

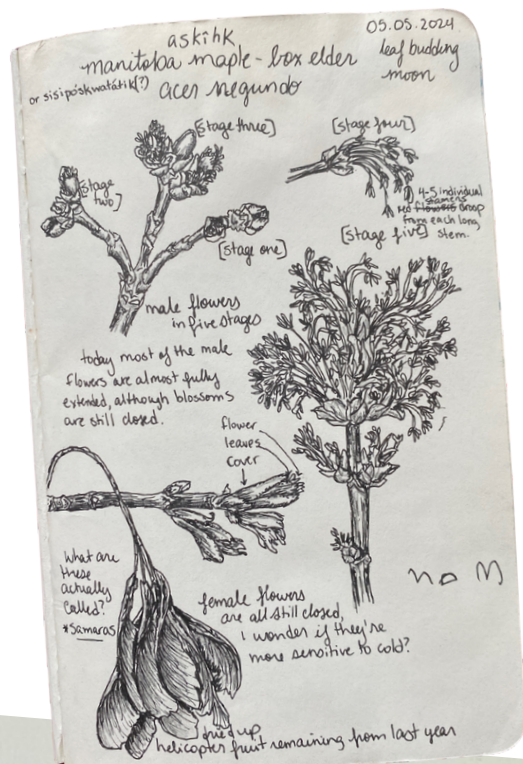
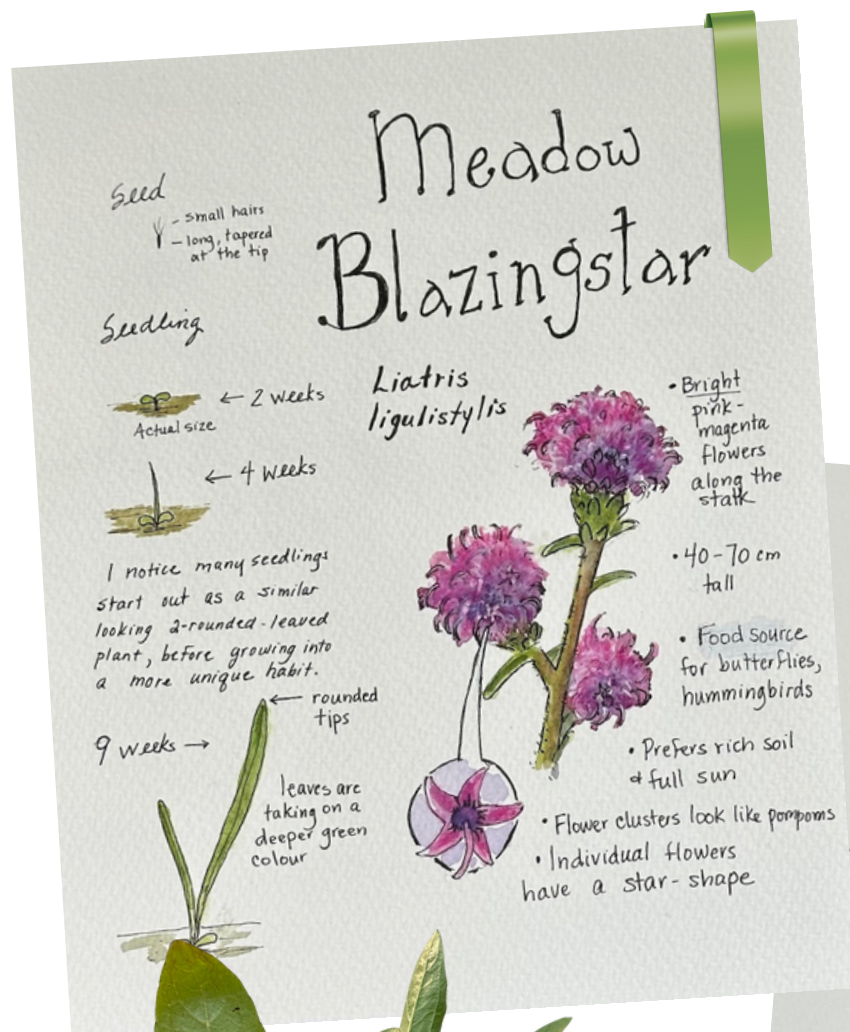




Roots and Shoots

- Start some seeds and record the process and progress of their growth using a sequence of diagrams or a timeline.
- You could try planting some seeds in empty transparent containers so that root growth can be observed as well.
- Observe the growth as your seeds germinate and grow into plants. Include quantitative details like dates, time, height, length, width, quantity, etc., as well as qualitative details like color, texture, shape, and even smell.

From seed to seed, observe your growing seedlings in various stages. Bookmark pages in your nature journal (you can use sticky notes or bits of removable painter's tape) as a reminder to come back and add more information to the sequence of development as your plants grow.



• BLUE GRAMMA GRASS •

- *Bouteloua gracilis* -

Seed

small, light tan colour, has little "hairs"

• Cold stratify seed for planting

• Grows throughout the Great Plains, short grass prairie

• Prefers full sun

• Can be used as forage and for erosion control

← 4 weeks

Seedlings

← 7 weeks

Young grass leaves -
feel smooth; bright green

- "Blue" colour is grey/green as it matures

• 30-50 cm tall
• Drought tolerant
• Sometimes called eyelash grass because ripening seed heads curl & resemble eyelashes

Dry stalk





The Stories in Seeds

- Sketch a variety of seeds (or cones, nuts, samaras, etc.) in your nature journal and make notes about your observations.
- What textures do you notice? Are the seeds hard or soft? Smooth or spiky?
- Think about how each seed might travel: Does it float? Fly? Stick to fur?
- Write questions/ hypotheses about what the seeds' characteristics say about the plant.

Tip: Try using a hand lens or microscope to zoom in on your seeds. What you see might surprise you and tell you more about your seed's story!

LOOKING at Wild SEEDS

Name-
Common + Latin

Scale
Drawing

Under the
Microscope

Notes

Northern Bedstraw

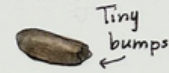
Galium Boreale →



Very small seed appears smooth but under the microscope is covered in hundreds of prickly spines; Possibly helps in spreading by attaching to animals.

Bergamot

Monarda Fistulosa →



Smooth seed with one textured end. Shape reminds me of a sunflower seed in its shell or a small grain of wheat.

Purple Prairie Clover

Dalea Purpurea →



Smooth + rounded, looks like a pea or bean seed somewhat.

Stiff Goldenrod

Oligoneuron Rigidum →



Ribbed seed, also sunflower-seed like.

Long feathery hairs Have "scales" at greater magnification

Likely spreads with help from the wind.

Blue Gramma Grass

Bouteloua Gracilis →

Pappus is the word for hairs, teeth, scales and bristles found on plants, which helps with wind dispersal.



Seed appears wrapped in a papery husk with "hairs" of different lengths.

Interesting black markings on seed. Lines arranged like bricks.

Seed is somewhat insect-like in appearance



A Look Back In Time

- Explore old botanical illustrations, explorer's journals, or traditional art forms such as beading or stitching, that include plants.
- What do you notice about the way they're grouped or labelled? What details are included? Does anything seem to be missing? How are these similar or different from contemporary works?
- Let these examples inspire you to create a nature journal page focused on a particular species or group of similar items that interest you.



Seed Packets and Plant Portraits

- Look at some seed packets and notice what type of pictures and information they contain.
- Create a seed-packet illustration for a plant you have grown or plan to grow. Include important information on how to grow and care for the plant.

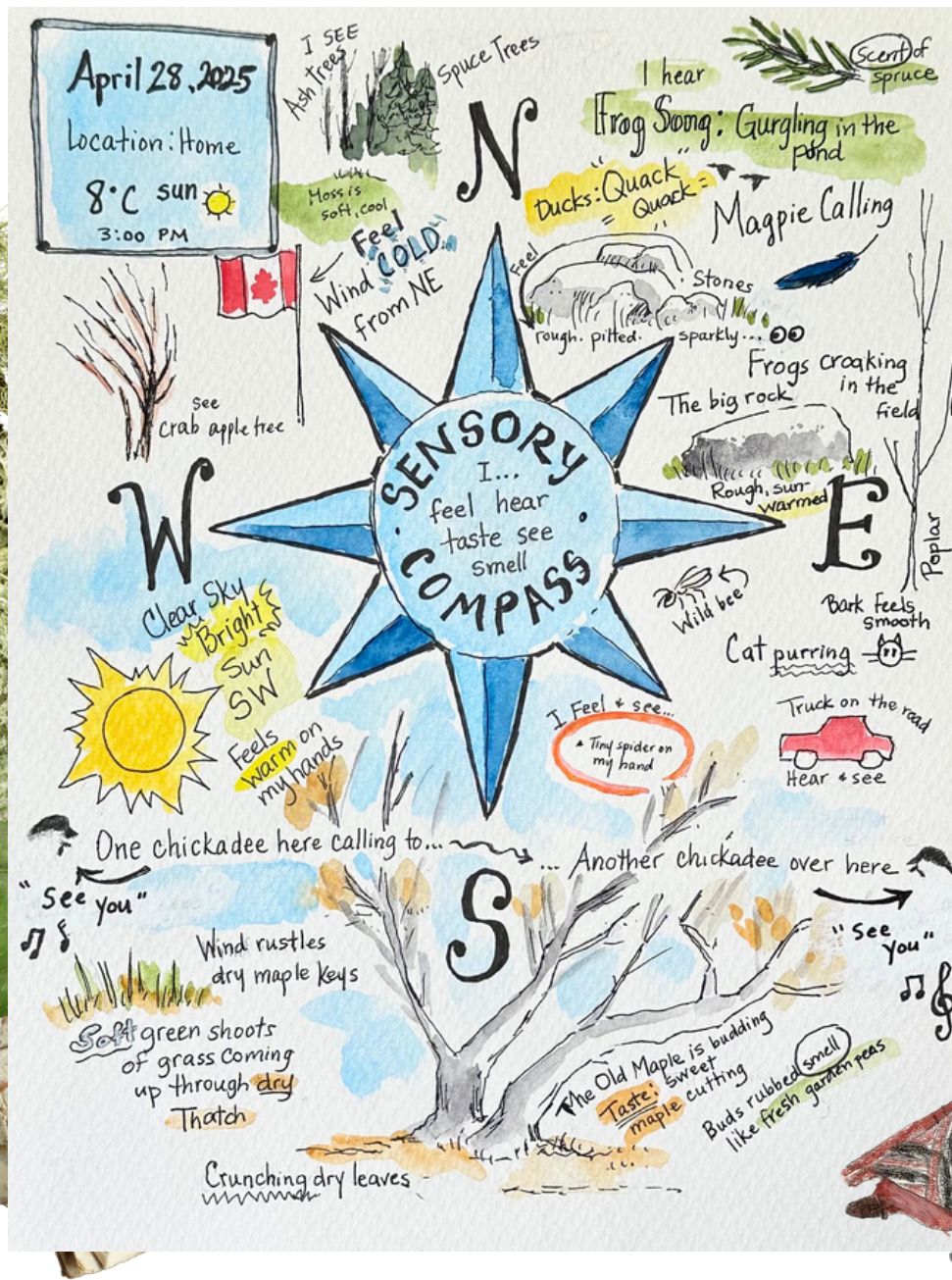




Spring

Super Senses

Overview: Our senses are constantly providing us with important information. They teach us about a place and help us to form connections. Sight, sound, smell, touch and even taste can clarify our understanding of what a place is like- and how it makes you feel. The more time you spend in observation using your senses, the more you will notice: small shifts in the wind, the texture of bark, the scent of leaves or soil, the quiet sounds behind louder ones.



Your Goal: Explore how senses are used outdoors, and consider how humans and other living species use their senses. Identify the cardinal directions, and use signs and symbols to convey location and meaning. Create a sound map or sensory compass of real-time experience of a place.

Nature Journaling Strategy: Symbols and Representational Drawing

You have probably already been using symbols and representational drawings in your nature journal. Look back and notice where you've used this technique before. (Hint: look for arrows that connect ideas; small weather icons, or simplified map images.) Representational drawing and text are ways of recording information quickly, which is a handy skill for times when detailed sketches aren't practical.

Examples of representational drawings can include stick-people and animals, 'cartoonish' plants and trees, pictogram-style weather images, and directional arrows. Colours or shapes may represent sensory experiences (blue = cold; jagged line = prickly). Body parts may represent the senses (hand=touch; nose=smell). Used in combination, a blue hand could mean cold to the touch, for example. Text can also be used creatively to convey information. Hard and soft edges, bold, underlined, or highlighted words will convey a message. Practice coming up with your own representational symbols, drawings and lettering to reflect the sensory elements in your location.



This sensory map uses simple icon-style images as a key to the 5 senses.



Sit Spot Sensory Compass

- Create a diagram on the page to represent the cardinal directions and the sensory information gathered.
- Find a sit-spot, observe and record what you notice with your senses all around you. If more information is needed, try walking a few paces in each direction.
- Consider each sense and ask yourself prompting questions: What do I see? What do I smell? What do I feel/What can I touch and describe? See if you can record at least two (or more) different experiences in each direction.
- Challenge yourself to use as many of your senses as you can (taste is optional and only if you are certain of what you are tasting!). Use descriptive words, font, and simple representational drawings, symbols, doodles, or icons to illustrate the sensory information being gathered from each direction.





Stimuli and Survival

- A characteristic of all living things is that they react to stimuli in the environment. How do different life forms use sensory perception to survive? How do humans use senses to observe and experience the world? Are there some senses we rely on more than others?
- In your nature journal, make notes about how different species in the site react to stimuli in the environment. For example, do plants droop in the hottest part of the day? Do flowers open or close in response to daylight? When are insects more or less active? How do the activities of birds and other animals change depending on the weather?





Signs and Symbols

- Identify examples of how images and signs are used in daily life to convey messages. For example, we read road signs, traffic lights, weather icons, emojis, hand gestures, etc.
- How do these simple representations quickly communicate meaning?
- Take a look at some nature journal mentor pages and notice how symbols, signs, and icons communicate meaning on the page. Borrow some of the techniques you like and try them out in your nature journal.



Map of Memories

- Draw a map of the site in your nature journal. Use symbols and icons to represent sensory experiences, anecdotes and memories you have there over time.
- Then, create a key (perhaps on the next page) where you can quickly jot brief accompanying descriptions.
- Sometimes you don't have time to complete a full page in response to time spent on site, but small moments can be significant, and it's worth keeping track of how they are connected to the land and each other.



Touch & Texture

Nature is full of interesting textures that we can explore with our sense of touch.

- Try running your fingertips along some different kinds of leaves (tree, flower, wild or cultivated plants). What does your sense of touch tell you about them?
- Make some sketches or try some classic rubbings with pencil or other soft media to examine more closely those textures. Compare shapes, size, and vein patterns.
- Find a sit spot near a tree or fallen log. Let your hands follow the intricate pattern of the bark. Notice the direction of growth. Are there ridges, deep lines, insect holes, or knots you can touch? Is the bark papery, grooved, or smooth? Are there rough lichens, soft mosses, or fungi with interesting textures?
- Try to create lines and shapes on your journal page that reflect your sense of touch and your awareness of these textures.

