



B e t w e e n t h e C o s m o s

B e t w e e n t h e

The Alberta Foundation for the Arts Travelling Exhibition Program
Curated by Ashley Slemming © 2020 Alberta Society of Artists

C o s m o s



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Left image

Along the Path #1 (detail)
Rocio Graham
2019–2020
Cyanotype made with seeds, gold leaf
43.8 x 33.6 cm
Courtesy of the artist

Front and back cover image

Future Memories (detail)
Rocio Graham
2019–2020
Video still
Courtesy of the artist

About

The Travelling Exhibition Program (Trex)

Since 1980, the Alberta Foundation for the Arts (AFA) has supported a provincial travelling exhibition program. The Trex program strives to ensure every Albertan is provided with an opportunity to enjoy fully developed exhibitions in schools, libraries, healthcare centres, and smaller rural institutions and galleries throughout the province.

The Trex program assists in making both the AFA's extensive art collection and the artwork of contemporary Alberta artists available to Albertans. Four regional organizations coordinate the program for the AFA:

REGION ONE — Northwest: The Art Gallery of Grande Prairie

REGION TWO — Northeast / North Central: The Art Gallery of Alberta

REGION THREE — Southwest: The Alberta Society of Artists

REGION FOUR — Southeast: The Esplanade Arts & Heritage Centre



The Alberta Foundation for the Arts (AFA)

Beginning in 1972, the Alberta Art Collection was proposed as an opportunity to support and encourage Alberta artists by purchasing original works, as well as creating a legacy collection for the people of Alberta.

As a crown agency of the Government of Alberta, the Alberta Foundation for the Arts Act was later established in 1991 with a mandate to support the arts in Alberta. This mandate is accomplished by providing persons and organizations with the opportunity to participate in the arts in Alberta; fostering and promoting the enjoyment of works of art by Alberta artists; collecting, preserving and displaying works of art by Alberta artists; and encouraging artists resident in Alberta to continue their work.

The Alberta Society of Artists (ASA)

The Alberta Society of Artists is a large part of Alberta's visual arts history, through its members, its exhibitions and other initiatives. The ASA was founded in 1931, making it the oldest society of juried professional artists in the province.

The ASA is an active membership of professional visual artists who strive for excellence. Through exhibition, education and communication the society increases public awareness of the visual arts.

The ASA is contracted by the Alberta Foundation for the Arts to develop and circulate the TREX exhibitions to communities throughout southwest Alberta.



Exhibition Statement

The celestial expanses of our universe have entranced humankind for millennia, alongside the profound complexities of biodiversity here on planet Earth. Curiosity has continuously fuelled a desire to understand the mysteries of life and our place in the cosmos. Over the centuries, exploration and investigation have brought forward many advances in science, mathematics, art and philosophy. Even with the knowledge we as a species have gathered, there is still much we cannot comprehend. It is here, within the context of a shared universal mystery, that this exhibition situates itself.

Between the Cosmos is a solo exhibition of 16 artworks by photographer and mixed media artist Rocio Graham. In this exhibition, Graham merges the natural magic of native-Alberta seeds with that of cyanotype paper to create her very own galaxies and star systems for the audience to gaze upon. With a keen eye for detail, respect for the unexpected, and a determination to bring her artistic vision to life, Graham has generated a unique series of works that spark creativity and curiosity about the unknown.

As we navigate an extremely transitory world—we must adapt to accommodate new discoveries that challenge established facts and theories—*Between the Cosmos* invites audiences to become comfortable in curiosity, over fear of the unfamiliar. Whether we are gazing into a vast prairie night sky or planting a small seed and watching it grow, there comes an acknowledgment that the absolutes of science cannot yet provide a *complete* explanation of the cosmos or the microcosms of Earth. The mysteries of the cosmos have much still to reveal.

—Ashley Slemming, Curator

Right image

Future Memories #4 (detail)
Rocio Graham
2019–2020
Cyanotype made with seeds
66 x 76.2 cm
Courtesy of the artist





Rocio Graham: Biography

Rocio Graham calls Calgary home. She emigrated to Canada from Mexico in 2002. Graham completed the Fine Arts Certificate Program at Emily Carr University of Art and Design in 2010, and she studied at the Alberta University of the Arts where she obtained a bachelor of design in photography in 2017.¹

Arriving at the intersection between art and science, her art practice is influenced by her cultural heritage, experiences as a woman and trauma survivor, interest in life cycles, and knowledge of botany. She explores the landscape from a body engagement perspective where labour, mysticism, science and temporality merge.

As a student, Graham was selected in 2017 as a finalist for the Photographer Award X in the Australian magazine, *Womankind*. She has been nominated for the BMO 1st Art! invitational competition and has received various scholarships and grants. Graham co-founded *Blindspot*, an annual juried photography exhibition at Exposure: Alberta's Photography Festival. Graham is currently a peer residency coordinator for the Alberta University of the Arts Student' Association (AUArts SA), Hear/d Residency, and she serves as a board director for the Elephant Artist Relief Society as well as SEITIES (a publication and gallery for contemporary analogue photographers). In August 2020, Graham was selected as part of the inaugural Exposure Studio collective where she secured a mentorship with UK photographer Natasha Caruana. Graham's artworks have been acquired by a number of notable collectors including Saks Fifth Avenue and the Fairmont Banff Springs hotel. Graham is represented by Christine Klassen Gallery.

¹ Emily Carr University of Art and Design, formally, Emily Carr Institute of Art and Design (changed to university status in 2008). Alberta University of the Arts, formerly, Alberta College of Art and Design (changed to university status 2019).

Right image courtesy Rocio Graham





Top image

Future Memories #1

Rocio Graham

2019–2020

Cyanotype made with seeds

66 x 76.2 cm

Courtesy of the artist

Bottom image

Future Memories #2

Rocio Graham

2019–2020

Cyanotype made with seeds

66 x 76.2 cm

Courtesy of the artist

List of Images





Top image

Future Memories #3
Rocio Graham
2019–2020
Cyanotype made with seeds
66 x 76.2 cm
Courtesy of the artist



Bottom image

Future Memories #4
Rocio Graham
2019–2020
Cyanotype made with seeds
66 x 76.2 cm
Courtesy of the artist



Images left to right, top to bottom

Future Memories #5
Rocio Graham
2019–2020
Cyanotype made with seeds
66 x 76.2 cm
Courtesy of the artist

Future Memories #6
Rocio Graham
2019–2020
Cyanotype made with seeds
66 x 76.2 cm
Courtesy of the artist

Future Memories #7
Rocio Graham
2019–2020
Cyanotype made with seeds
66 x 76.2 cm
Courtesy of the artist

Future Memories #8
Rocio Graham
2019–2020
Cyanotype made with seeds
66 x 76.2 cm
Courtesy of the artist



Images left to right, top to bottom

Future Memories #9

Rocio Graham

2019–2020

Cyanotype made with seeds

66 x 76.2 cm

Courtesy of the artist

Future Memories #10

Rocio Graham

2019–2020

Cyanotype made with seeds

66 x 76.2 cm

Courtesy of the artist

Future Memories #11

Rocio Graham

2019–2020

Cyanotype made with seeds

66 x 76.2 cm

Courtesy of the artist

Future Memories #12

Rocio Graham

2019–2020

Cyanotype made with seeds

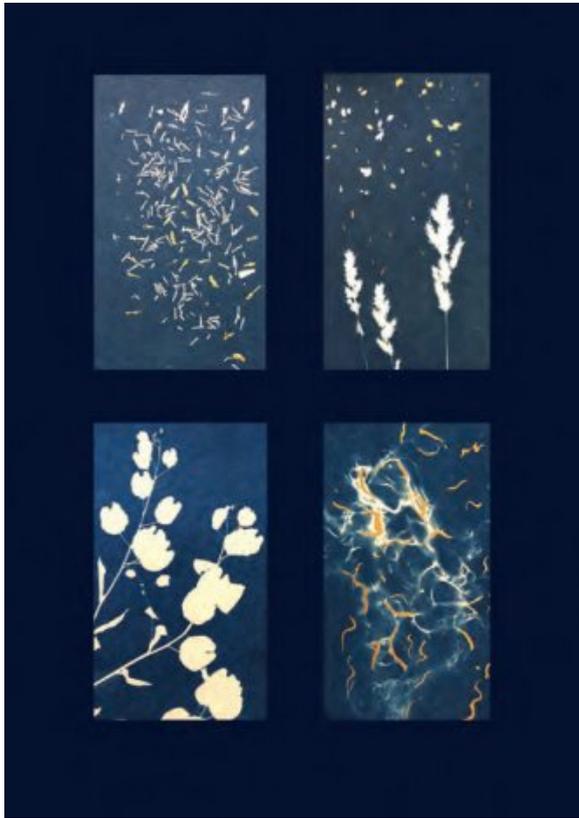
66 x 76.2 cm

Courtesy of the artist



*To see a World in a Grain of Sand
And a Heaven in a Wild Flower,
Hold Infinity in the palm of your hand
And Eternity in an hour.*

—William Blake (1757–1827) British writer and artist



Images left to right

Along the Path #1

Rocio Graham

2019–2020

Cyanotype made with seeds, gold leaf

43.8 x 33.6 cm

Courtesy of the artist

Along the Path #2

Rocio Graham

2019–2020

Cyanotype made with seeds, gold leaf

43.8 x 33.6 cm

Courtesy of the artist

Along the Path #3

Rocio Graham

2019–2020

Cyanotype made with seeds, gold leaf

43.8 x 33.6 cm

Courtesy of the artist



Future Memories
Rocio Graham
2019–2020
Video still
Courtesy of the artist



Education Guide

This education guide is comprised of activities to move the audience through the various themes presented in *Between the Cosmos*. The content of the exhibition and the following lesson plans have been carefully developed and designed to enhance the curriculum set by Alberta Education. The guide includes questions for discussion, vocabulary and activities designed for the level of ability, understanding and complexity of the participants:

Beginner – participants who are just beginning their exploration of art.

Intermediate – participants who have some experience looking at and creating art.

Advanced – participants who have much experience looking at and creating art.

Throughout the Education Guide, you will find key concepts, words and terms emphasized that can be found in the Vocabulary section.

Note: Because this educational guide has been created specifically for this exhibition, participants in this guide may sometimes be referred to as “expeditioners” and educational staff leading activities may sometimes be referred to as “expedition leaders” to create a more authentic experience of curiosity and adventure.

Right image

Along the Path #2 (detail)

Rocio Graham

2019–2020

Cyanotype made with seeds, gold leaf

43.8 x 33.6 cm

Courtesy of the artist



Discussion Questions

Below are questions that are intended to prompt meaningful discussion about the content presented in the exhibition *Between the Cosmos*. The questions can be selected, and the vocabulary altered to suit the appropriate age level.

What does the word cosmos mean? How does this word relate to the works in the exhibition?

What does an astronomer do? What does a botanist do? How is what they study similar or different?

Think about the following tools: a telescope and a microscope. How have these tools helped us learn about things, both big and small?

The study of astronomy and botany falls within the realm of science. After looking at the works in this exhibition, what do you think art has in common with science?

Historically, what have the stars taught humans? What have we been able to learn from seeds and plants?

*Can you see visual references to constellations or stars in the *Along the Path* series of botanical artworks? If so, where?*

*When watching the *Future Memories* video, how does it make you feel? How do you think astronauts feel when they travel in space?*

How can creativity and imagination help us learn more about the world we live in?

Find three kinds of plants in the wild that you do not know much about. How might you learn more about them? Here are some questions you could start with: What is the name of the plant? What kinds of seeds does it have? How long does it take to grow? What kind of light does it need to grow?

Find three constellations in the sky. What are the mythologies behind these constellations?

How do plants grow? How are stars born? How are these natural processes similar or different?



Top image

Future Memories #10 (detail)
Rocio Graham
2019–2020
Cyanotype made with seeds
66 x 76.2 cm
Courtesy of the artist

Bottom image

Future Memories #4 (detail)
Rocio Graham
2019–2020
Cyanotype made with seeds
66 x 76.2 cm
Courtesy of the artist



Engagement Activity

Night sky search

Review the brief lesson below and look up known constellations online to see their star formations. Participants can then try to spot at least one constellation from their front yard on a clear night. Ideally, initiate a discussion about whether or not it was hard to find the constellations or if participants noticed any other shapes and patterns in the sky while they searched. Optional: Ask participants to draw the constellation(s) they spotted.

What is a constellation?

In 1922, astronomers divided the night sky into 88 unique constellations. Constellations are groups of stars that form recognizable patterns when viewed from Earth. These patterns may take the shape of an animal, a mythological being, a man, a woman or an inanimate object.²

Uses for Constellations

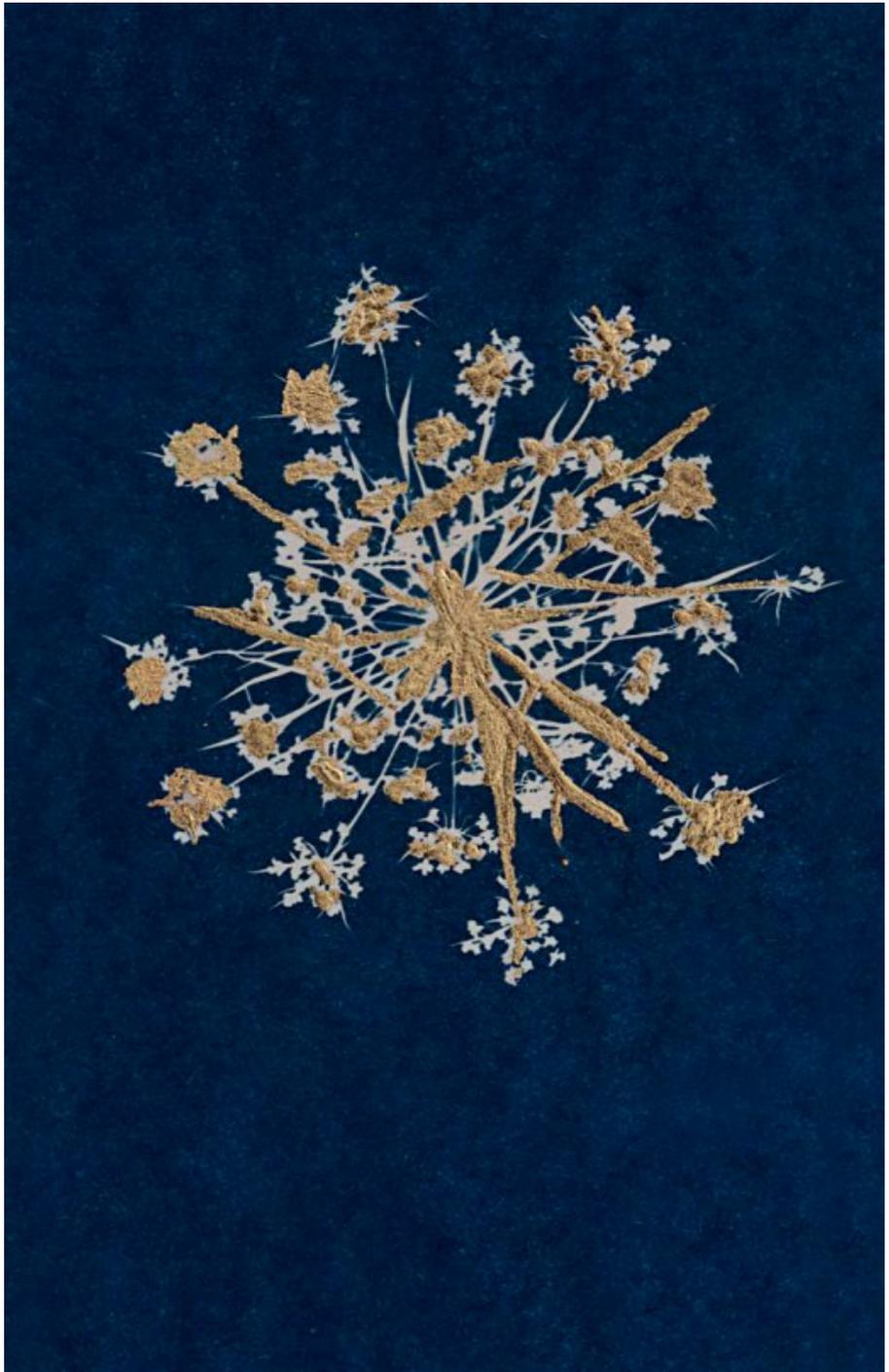
Constellations help to divide up the entire night sky into smaller parts that we can map out like a landscape. *Star maps* are made of the brightest and most visible stars, and the patterns that the stars form were used to name all 88 different constellations.

When we look for these familiar patterns in the sky, we can keep track of where they are located from different vantage points on the globe, and see how the night sky appears to shift during different seasons. In ancient times, the different constellations were used to help people keep track of the calendar. This was very important so that people knew when to plant and harvest crops.

Another important use of constellations was navigation. Using the constellations, navigators on ancient ships could figure out their geographical latitude which helped them to travel and navigate across the oceans.³

² Ken Nelson, "Astronomy for Kids: Constellations," *Ducksters Education Site*, accessed July 22, 2020, <http://www.ducksters.com/science/physics/constellations.php>.

³ Ibid.



Right image

Along the Path #2 (detail)

Rocio Graham

2019–2020

Cyanotype made with seeds, gold leaf

43.8 x 33.6 cm

Courtesy of the artist

Beginner Lesson | Collagraph Galaxy Expedition

A collagraph is making a print of a collage. The process is quite simple and inexpensive and can be enjoyed by any age group. The primary components of an effective collagraph print are colour, texture and composition.

In this activity, participants will develop their very own galaxy, by placing a variety of natural materials into a composition that resembles stars, planets or other galactic matter you can imagine. Be creative!

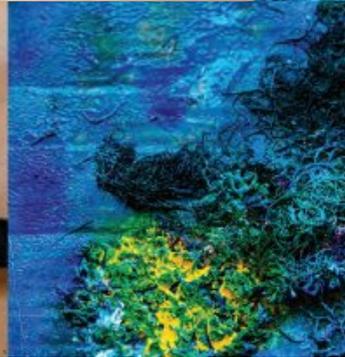
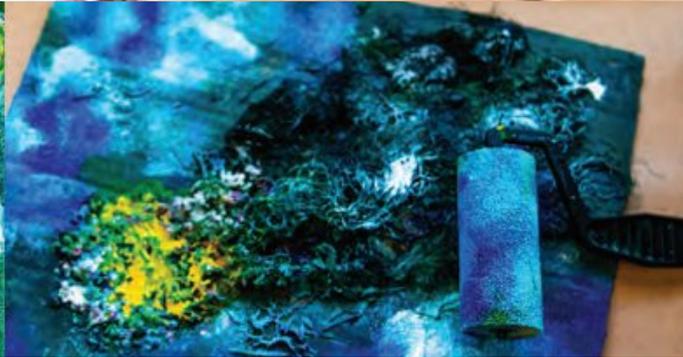
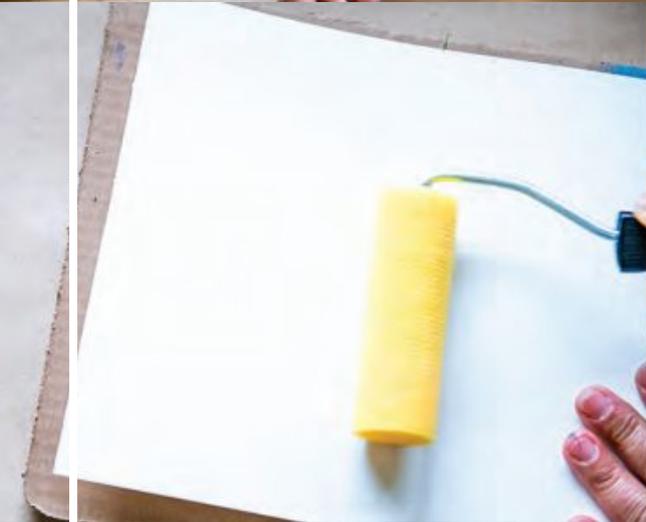
Materials

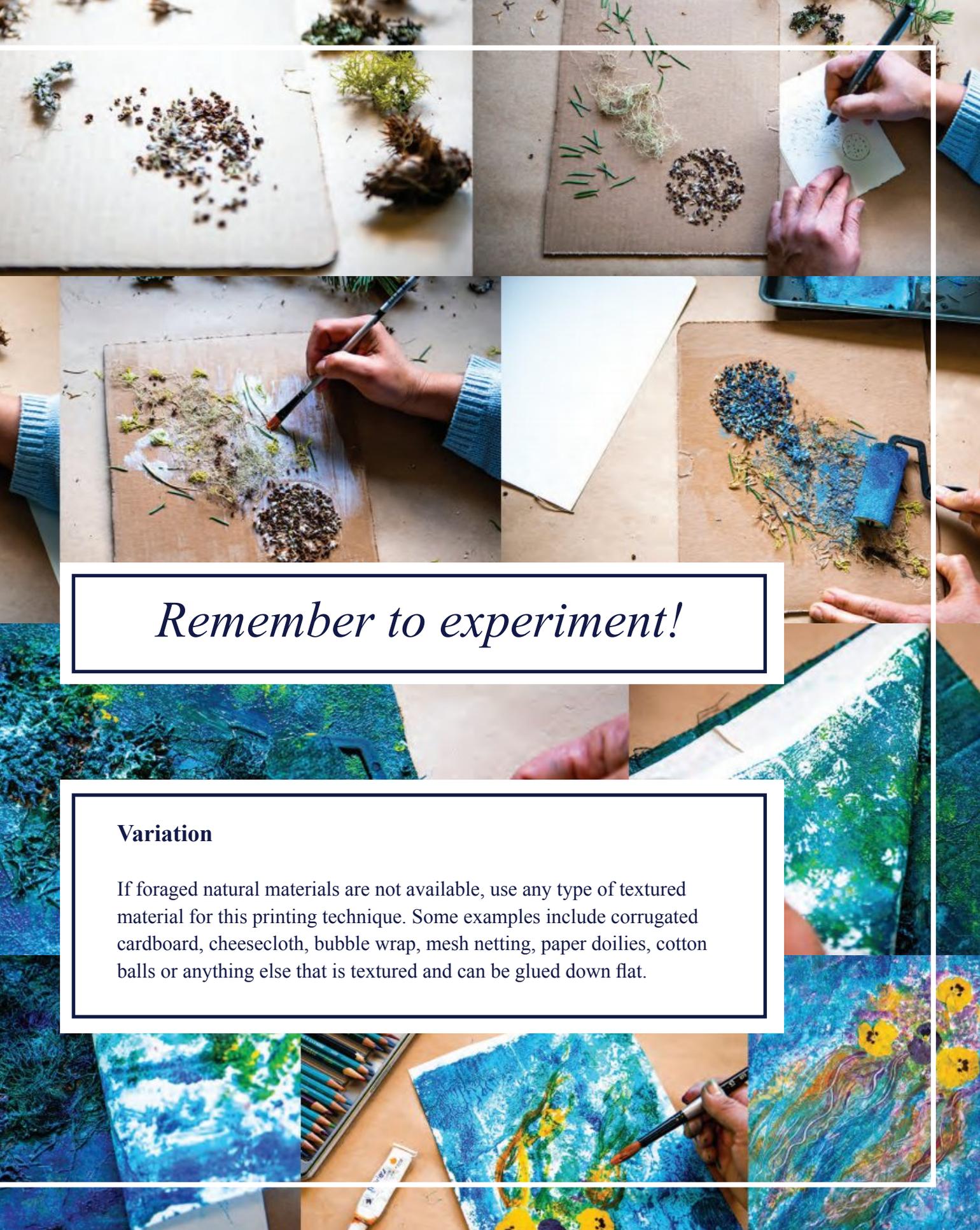
Hard illustration board or other sturdy board to glue down your composition (best if no larger than 10 inches on the longest side); foraged natural materials such as seeds, leaves, tree bark, grasses and petals (dried is best); a camera (phone camera or shared camera from an instructor); white craft glue; a variety of old paintbrushes; acrylic paints or water-based printing inks; printing brayer*, paper to print on (same size or larger than your hardboard printing plate); and rolling pin or wooden spoon*.

*optional material

Instructions

- Step 1 Cut out a printing plate (hard illustration board) to the desired print size.
- Step 2 Brainstorm ideas for an imagined galaxy *composition* by placing different foraged natural materials onto a board (no glue yet) and see how they look in different formations. Technical note: When brainstorming composition ideas keep in mind that the print will come out in reverse to the plate, which is especially important if choosing to use words or text.
- Step 3 Decide on a composition and take a photograph, then gently slide the materials off of the board onto a work surface to prep the board as a printing plate.
- Step 4 With a paintbrush, paint a thin layer of white glue across the whole surface of the board and then start placing materials on the glued surface. Allow ten minutes for the composition to dry.
- Step 5 “Seal” the printing plate (so it can be used multiple times) by painting another final layer of white glue over the whole surface. Let the printing plate dry for one day before proceeding to print.
- Step 6 Once it is completely dry, apply “ink” to the printing plate (acrylic paint or water-based printing inks work best) using old paintbrushes or a printing brayer.
- Step 7 After the ink is applied to the whole surface of the printing plate, place one sheet of printing paper onto the printing plate ink side up, then press down firmly and evenly using a rolling pin. (Alternatively, you may use your fists to press your plate down and rub them over the back surface of your printing plate to ensure that all areas print.)
- Step 8 Lift your paper to reveal your print, and repeat steps 6 to 7 to create additional prints. This can be repeated as many times as you would like. Technical note: Use the same colours each time you print, or your colours will become muddy.





Remember to experiment!

Variation

If foraged natural materials are not available, use any type of textured material for this printing technique. Some examples include corrugated cardboard, cheesecloth, bubble wrap, mesh netting, paper doilies, cotton balls or anything else that is textured and can be glued down flat.

Intermediate Lesson | Botanical Planets Expedition

The connection between the universe and the earth is embedded in the elements that form every single organism, rock and metal. We are all made of stardust, and everything that lives or exists on Earth possesses the same basic structural elements that hold our universe together, stars and planets included. Humans have taken the opportunity to use the materials on Earth (that originally came from space) to create a world that fits our needs.

Based on this premise of the interconnection between the universe and Earth, participants in this “expedition” can explore their surrounding ecosystems in search of organic materials that can be used for the creation of unique botanical planets. The intention is to reflect on the connections between organic systems and cosmic bodies by unleashing our imagination to create new botanical planets in the form of sculptural art.

Areas of Inquiry

The needs of animals and plants to survive on the earth, as well as what forms an optimal ecosystem for plants and creatures to thrive are the areas of inquiry for this activity. Expedition leaders can take this time to ask questions about plant growth and how changes in an ecosystem can affect plant and animal life. A further area of inquiry could include discussion about the parallels between space systems and earthly systems.

Materials

Sketchbooks, pencils, organic and ethically foraged botanical materials (fallen leaves, flower petals, pinecones, seeds, grasses); bamboo sticks (minimum of 3 per participant); 5-inch or 10-inch Styrofoam balls; glue gun; glue gun sticks; acrylic paints of assorted colours (and medium or water to make liquid paints); brushes and surface covers like newspapers or a plastic tablecloth to protect work surfaces from paint splashes.

Preparation

As a group, spend time outdoors (at a park or a natural area) where expeditioners can spend time foraging for organic materials. Each participant should bring a bag for this collecting activity and gather multiples of natural things like pinecones, moss, lichen, dry flowers, seedpods, shells, leaves and so forth. As expeditioners observe their natural environment, invite them to draw parallels in the forms they discover with those of celestial objects. For example, seeing the similarity between the shape of a dandelion seed head to that of a planet or the similarity between the shape of a flower to that of a shooting star.

Using a sketchbook and pencil, participants can draw shapes of objects found during the nature walk. Encourage them to imagine and begin drawing how they would like to create a botanical planet with the materials found, choosing a celestial object that has a similar shape or form. Bring the foraged materials back for sorting and discussion amongst participants about the imaginary planets they plan to construct.

Instructions

- Step 1 Using the sketchbook drawings and notes from the preparation portion of this activity, have expeditioners finalize their botanical planet sculpture design ideas based on the organic material found.
- Step 2 On the covered work surface, insert 3 bamboo sticks into a Styrofoam ball so it will stand on its own.
- Step 3 Using a glue gun, start gluing the botanical materials to the Styrofoam ball making sure that the whole surface of the ball is covered.
- Step 4 Once the glue is dry and the whole ball is covered with organic material, proceed to mix an assortment of acrylic paint colours with medium or water to make a variety of liquid acrylic paints. (Some may prefer to paint their foraged objects BEFORE gluing on to the Styrofoam ball.)
- Step 5 Using brushes, paint the planet sculpture and let it dry. With any additional Styrofoam balls, participants can choose to create smaller sculptural objects that can be attached to the main planet using more glue or bamboo sticks (think about moons or satellite celestial objects).







Variations

Community planet installation – instead of creating stand-alone sculptures, an expedition leader can opt for a community planet *installation* using a fishing line to hang botanical planets from a wood stick or perhaps the ceiling in a gallery space or library. For this variation, invite all participants to collaborate sketching an alternative universe. Discuss as a group what the characteristics are of this new universe. Ask: *What celestial objects does it have? What relationships exist within it? Would there be push and pull energies in this universe? Would opposites exist there?*

Begin imagining the atmospheres, temperatures and types of life that the planets in this universe might have. Discuss any existing earth life that has strange characteristics, and imagine it perceived from this new universe, ask: *would these strange earthly life forms appear to be alien from an alternate universe?*

Planetary moviemaking – with all the sculptures that participants make, create a recording of the planets “in orbit.” Begin by setting up a dark background using a black cloth or non-reflective black paper. Next, attach each of the botanical planets along one lengthy string of fishing line (approximately 20 feet for 10 to 12 participants) and have two participants volunteer to hold each end of the line. Lastly, record the planets moving across the black background by keeping a camera focused on one image frame starting with one end of the line in front of the backdrop, and gradually pull the line of planets across the image frame like a clothesline. Play with the exercise of completing a project in teams and have fun!

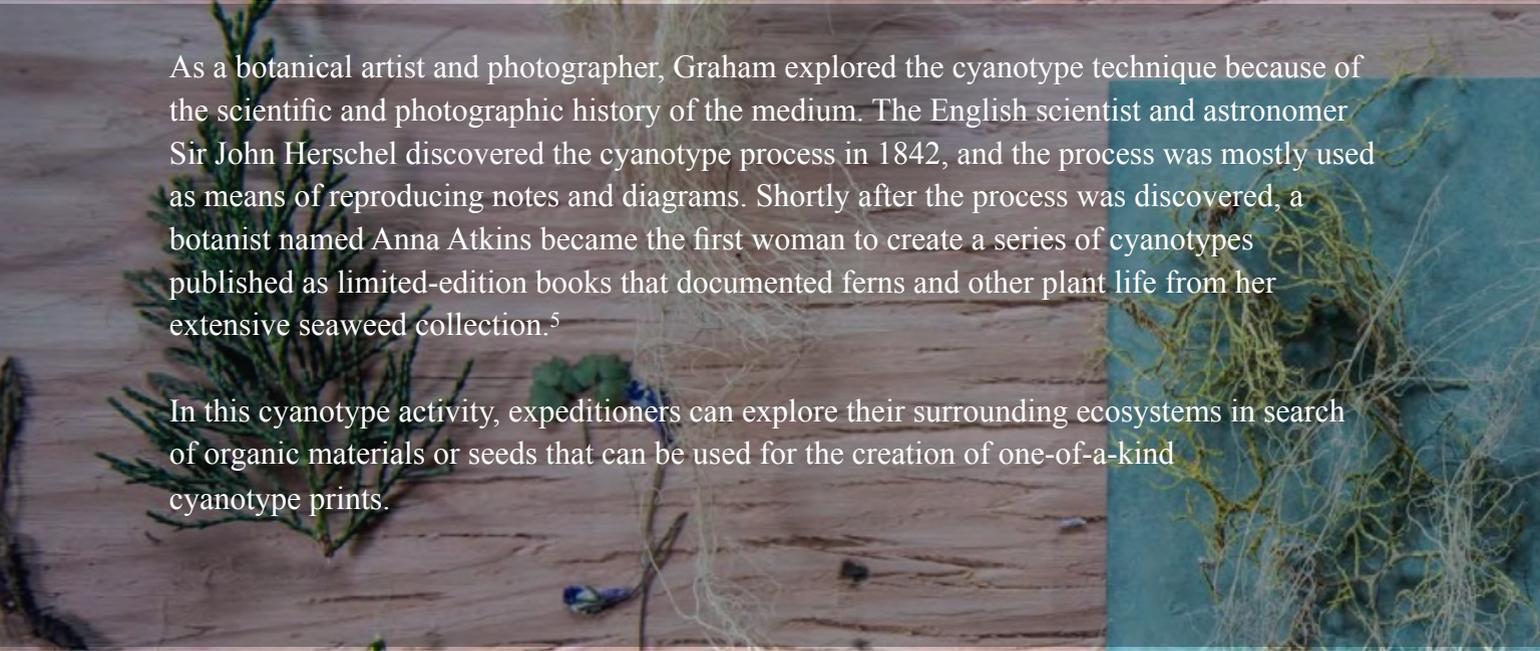
After the activity, ask: *What were the challenges in completing this activity as a group? How do you think the planets orbit in space together?*



Advanced Lesson | Cyanotypes Expedition

The series of galactic *cyanotypes* found in this exhibition are part of a body of work titled Future Memories. For Graham, this body of work emerged from a childhood memory. Growing up in a small city in Mexico where night skies tend to be clear like they are in Alberta, Graham used to climb to her house’s rooftop to contemplate the night sky and study the stars and constellations. During those nightly rooftop visits, she dreamed of faraway places and magical spaces... she was able to unleash her creativity. On one of these stargazing nights, Graham began creating her own imagined “memories of the future,” in the same way that a seed can grow to become the plants or trees of our collective future.

Graham describes this work by saying, “I wanted to create artwork that invited the viewer to feel the wonder and magic of space and the botanical world, to see that at the core, all natural systems are parallel and interconnected. The same systems that govern the universe also govern the earth’s botanical world. When we understand the profound power that one star or one seed has in our life we can understand that every star in the universe and every seed on earth matter and it has the power to create new worlds.”⁴



As a botanical artist and photographer, Graham explored the cyanotype technique because of the scientific and photographic history of the medium. The English scientist and astronomer Sir John Herschel discovered the cyanotype process in 1842, and the process was mostly used as means of reproducing notes and diagrams. Shortly after the process was discovered, a botanist named Anna Atkins became the first woman to create a series of cyanotypes published as limited-edition books that documented ferns and other plant life from her extensive seaweed collection.⁵

In this cyanotype activity, expeditioners can explore their surrounding ecosystems in search of organic materials or seeds that can be used for the creation of one-of-a-kind cyanotype prints.

⁴ Rocio Graham, [Notes from the artist], Documents exchanged in email correspondence, April 5, 2020.

⁵ Dusan C. Stulik and Art Kaplan, “Historical Background,” in *The Atlas of Analytical Signatures of Photographic Processes | Cyanotype*, (Los Angeles: The Getty Conservation Institute, 2013), 4–5, https://primo.getty.edu/permalink/f/mlc5om/GETTY_ALMA51151228890001551. [See full-text PDF book on permalink listing.]

Materials

Foraged organic materials (seeds, seed pods, delicate flowers, leaves, branches and so forth—also note that this process works best if the natural materials are pressed between heavy books and parchment paper); cyanotype treated paper (found at a cyanotype store or any art supplies store); cardboard or hardboard; painter’s tape; plain bond paper; camera*; peroxide 250 to 500 millilitres; sunlight, ideally at midday, or a bright full-spectrum lamp; water; 2 to 4 plastic trays for the wash baths (water trays should fit the size of paper); and paper towels, newspaper or kraft paper for print drying.

*Optional material

Preparation

If possible, this lesson should be divided into two days, with one week between to allow time to press foraged botanical materials.

Day one

Participants should do a nature-foraging field trip to a park or a natural area to spend time gathering organic materials such as small flowers, leaves, seeds, seedpods and other items that are easy to flatten. Once participants have collected enough botanical materials, use stacks of old books or magazines at home to press them between parchment paper for a minimum of one week to ensure the materials are flat and easy to use in the cyanotype process.

Day two

Have participants sort and select pressed botanicals to use in the creation of the desired cyanotype composition and prepare the chemically treated paper.

Full instructions next page

Instructions

- Step 1 In a room with fluorescent lighting (kept away from sunny windows), remove the number of cyanotype sheets needed from the light-safe packaging. Keep any unused cyanotype sheets sealed in a black garbage bag and store them for future use in a cool dark place.
- Step 2 Place a sheet of cyanotype paper on top of a hard backing like cardboard or illustration board so that it can easily be moved outside into the sun or placed underneath a bright, full-spectrum bulb. Tape down with painter's tape, if needed.
- Step 3 Plan out the cyanotype by arranging pressed botanicals collected on day 1 onto a sheet of bond paper until a desirable composition is found. The idea is to create a space scene or night sky (real or imagined) using the pressed botanicals. Use a camera to take a picture if it will help to remember the placement before moving the botanicals over to the cyanotype paper.
- Step 4 Lay and arrange the composition from step 3 onto the prepared sheet of cyanotype paper. The areas where the botanical objects are placed will block the light and will remain white while exposed areas will become blue after it is rinsed in water.
Tip: If participants want to secure their designs onto their cyanotype paper before exposure, the botanical objects can be taped down with clear tape, or a piece of Plexiglas can be placed on top of the composition to weigh the objects down and keep them from moving.
- Step 5 Expose the cyanotype print by taking the sheet of cyanotype paper with the botanical design arranged on it to expose it outside in the sun, or under a full-spectrum lamp. Outdoor exposure is best in the midday sun when the sunlight is strongest. For high-contrast results, leave in direct light for at least 45 minutes.
Tip: Making a test print is a recommended step to find out what the final print will look like and to adjust exposure times. If more contrast is desired, longer exposure periods are needed. If an ethereal and pale blue print is desired, then reduce exposure times.
- Step 6 After exposing the print, bring it inside and remove the natural materials from on top of the cyanotype paper.
- Step 7 In dim light, rinse the print in water until water runs clear (approximately 5 minutes). The goal is to rinse the areas where the botanical objects were placed to wash off any unexposed cyanotype chemicals. You will notice immediately that the print will come "alive and blue."



Step 8 Seal the final image into the print by rinsing the cyanotype paper in a peroxide bath. To do so, prepare a separate water bath with one-quarter cup water to one cup of peroxide and run the rinsed prints through it for a second colour fixing. This will trigger an amazing reaction where the print will shift into even lighter whites and darker blues. Then to remove the chemicals, rinse one more time in water only.

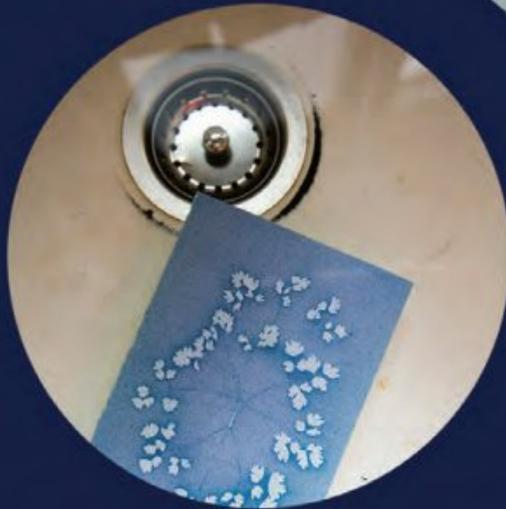
Tip: Prints can reach this rich intensity without using hydrogen peroxide. Just wait 24 hours and it will oxidize naturally.

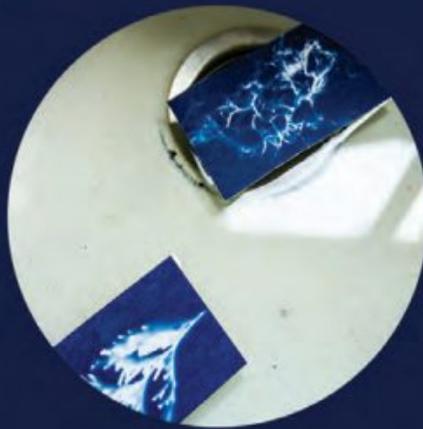
Step 9 Dry the print. Blot dry by placing the cyanotype print between two absorbent paper towels and press down on it. Remove the print and place it on a bed of kraft paper or newspaper. To ensure a flat print, it is best to cover it when it is moist with a layer of paper towel and/or kraft paper, and then place heavy books or magazines on top to ensure the corners do not curl up from the moisture. Drying times range from 24 hours to 3 to 4 days.

Congratulations you are an alternative process photographer now!

Variation

After finishing a cyanotype print, participants can add mixed media to create a more complex original. Think watercolours, inks, gouache or colour crayons applied with delicate strokes or brushed on with a paintbrush. Do not be afraid to experiment. In this exhibition, the artist worked with gold leaf, but participants could use metallic pens as an alternative metallic medium.





Vocabulary

Astronaut - a person who is trained to travel in a spacecraft.

Astronomer - a person who is skilled in astronomy or who makes observations of celestial phenomena.

Astronomy - the branch of science which deals with celestial objects, space and the physical universe as a whole.

Biodiversity - biological diversity is an environment as indicated by numbers of different species of plants and animals.

Botanical - of or relating to plants or botany.

Botanist - an expert in or student of the scientific study of plants.

Botany - the scientific study of the physiology, structure, genetics, ecology, distribution, classification and economic importance of plants.

Celestial - of or relating to the sky or visible heavens // the sun, moon, and stars are *celestial* bodies.

Collagraph - a collagraph print is one made from a plate collaged with different textures.

Composition - the act or process of composing, *specifically* : an arrangement into specific proportion or relation and especially into artistic form // the painting's unique *composition*.

Constellation - any of 88 arbitrary configurations of stars or an area of the celestial sphere covering one of these configurations // the *constellation* Orion.

Cosmos - an orderly harmonious systematic universe.

Cyanotype - an old photographic printing process that produces prints in a distinctive dark greenish-blue. The word *cyan* comes from the Greek, meaning “dark blue substance.”

Ecosystem - a biological community of interacting organisms and their physical environment.

Exposure - the treating of sensitized material (such as film) to controlled amounts of radiant energy, *also* : the amount of such energy or length of such treatment // a *3-second exposure*.

Galaxy - any of the very large groups of stars and associated matter that are found throughout the universe.

Installation - a work of art that usually consists of multiple components often in mixed media and that is exhibited in a usually large space in an arrangement specified by the artist.

Microscope - an optical instrument used for viewing very small objects, such as mineral samples or animal or plant cells, typically magnified several hundred times.

Organic - of, relating to, or derived from living organisms.

Solar system - the collection of eight planets and their moons in orbit round the sun, together with smaller bodies in the form of asteroids, meteoroids and comets. The planets of the solar system are (in order of distance from the sun) Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.

Star maps - a map often made by photography that gives the positions and magnitudes of the stars.

Telescope - an optical instrument designed to make distant objects appear nearer, containing an arrangement of lenses, or of curved mirrors and lenses, by which rays of light are collected and focused and the resulting image magnified.

Universe - all existing matter and space considered as a whole; the cosmos. The universe is believed to be at least 10 billion light years in diameter and contains a vast number of galaxies; it has been expanding since its creation in the Big Bang about 13 billion years ago.

Vantage point - a position or standpoint from which something is viewed or considered.

[Vocabulary definitions are simplified and/or paraphrased; spelling is Canadianized for print purposes.]

Vocabulary Sources

Gergel, Ianthe. "What is a Cyanotype?" The Philips Collection: Experiment Station. May 4, 2012. [cyanotype] Accessed April 7, 2020. <http://blog.phillipscollection.org/2012/05/04/what-is-a-cyanotype/>.

Lexico Powered by Oxford (online). s.vv. [astronaut, astronomy, botany, botanist, ecosystem, microscope, solar system, telescope, universe] Accessed June 26, 2020. <https://www.lexico.com/>.

Merriam Webster Dictionary (online). s.vv. [astronomer, biodiversity, botanical, celestial, composition, constellation, cosmos, exposure, galaxy, installation, organic, star map, vantage point] Accessed June 26, 2020. <https://www.merriam-webster.com/>.

"Printing Methods." *The Print Shed*. [collagraph] Accessed July 24, 2020. http://www.theprintshed.net/printing-methods/index.php?methods_id=25.

Resources

Bentley, G.E. s.v. "William Blake: British Writer and Artist." *Encyclopedia Britannica* (online). Last modified April 8, 2020. <https://www.britannica.com/biography/William-Blake>.

Carle, Eric. *The Tiny Seed*. New York: Little Simon, 2018.

"Constellations." *DK findout!* Accessed April 7, 2020.
<https://www.dkfindout.com/us/space/constellations/>.

Graham, Rocio. Documents exchanged in email correspondence. April 1, 2020 to April 6, 2020.

GPhase. "Bean Time-Lapse - 25 days | Soil cross section." *YouTube* video, 3:09. March 7, 2018.
<https://www.youtube.com/watch?v=w77zPAtVTuI>.

Nelson, Ken. "Astronomy for Kids: Constellations." *Ducksters Education Site*, Accessed July 22, 2020. <https://www.ducksters.com/science/physics/constellations.php>.

"Plants." *DK findout!* Accessed April 7, 2020.
<https://www.dkfindout.com/us/animals-and-nature/plants/>.

Seeker. "Scientists Just Witnessed the Birth of Two Stars in Stunning Detail." *YouTube* video, 4:27. November 29, 2019. <https://www.youtube.com/watch?v=QUq1e-Sf0iE>.

"Stars and Galaxies." *DK findout!* Accessed April 7, 2020.
<https://www.dkfindout.com/us/space/stars-and-galaxies/>.

Stulik, Dusan C. and Art Kaplan. "Historical Background." *The Atlas of Analytical Signatures of Photographic Processes | Cyanotype*. Los Angeles: The Getty Conservation Institute, 2013.
https://primo.getty.edu/permalink/f/mlc5om/GETTY_ALMA51151228890001551 [See full-text PDF book on permalink listing.]

"The Solar System." *DK findout!* Accessed April 7, 2020.
<https://www.dkfindout.com/us/space/solar-system/>.

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