Sympoetics of Squirrealism

SYMPOETICS OF SQUIRREALISM

By

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Abstract

This thesis project researches the ethology of grey squirrels and their links to human systems to speculate possible futures in hybrid human development through artistic practice. Humans living in urban spaces interact daily with nonhumans as cities spread out into the natural world and technology reshapes our existence. I began creating art and thinking with grey squirrels after an interspecies boundary was crossed when I held an injured squirrel in my hands. The intimacy of the encounter touched me and evoked a desire to document my alliance to the squirrel through artwork—thus, Squirrealism was born. Squirrealism developed into a method of art-making that channels conceptual and material connections between species to think and make, as feminist philosopher Donna Haraway says, "sympoetically."

"Existence is not an individual affair."
Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*

"This is a happy place. Little squirrels live here and play."
Bob Ross, "Crimson Oval." *The Joy of Painting,* Season 18 Episode 4

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Acknowledgements

The research-creation for this thesis occurred in two locations. One month was spent at Emily Carr University of Art + Design on the traditional, ancestral, and unceded territories of the xʷməθkwəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and Səl̓ilwətaɬ (Tsleil-Waututh) Nations. Due to the circulation of SARS-CoV-2, the rest of my work was performed at home where I work and live as an uninvited guest on the traditional, ancestral, and unceded Coast Salish territory of the Lək̓ʷəŋən speaking peoples (Songhees and Esquimalt Nations), who have lived here since time immemorial and continue to thrive. I am grateful to the Indigenous peoples on whose land I work and reside. háy̓sxʷ q̓ə! (Thank you).

To grey squirrels for helping me take notice and making me smile

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For your belief, generosity, support, wisdom, and friendship

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Pablo de Ocampo, Kimberly Phillips, and Lisa Baldisserra

For their guidance, enthusiasm, and conversation

To LG

tloml, big squirrel

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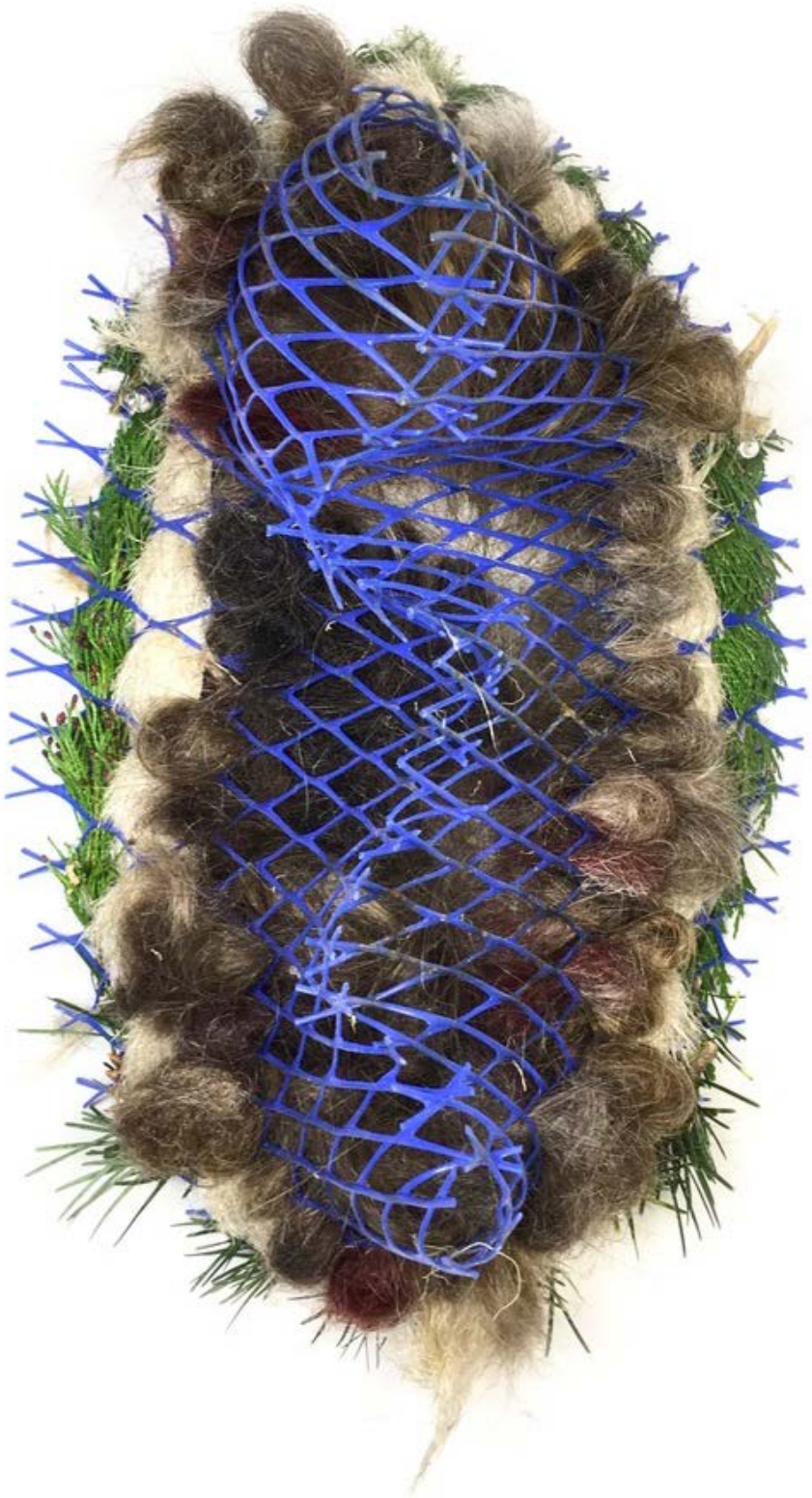

Fig. 2. Carollyne Yardley, *Molecular* (front view), from the *Symbiogenesis series*, 2020. Found and foraged cedar bough (sustainably harvested after windstorm), pampas grass, human hair, plastic mesh tree protector, 17″ x 10″ x 8″. Photograph by Carollyne Yardley.

Let me tell you a squirrel story

This thesis project researches the ethology[1] of grey squirrels and their links to human systems to speculate possible futures in hybrid human development through artistic practice. Humans living in urban spaces interact daily with nonhumans, as cities spread out into the natural world and technology reshapes our existence. I began creating art and thinking with grey squirrels after an interspecies boundary was crossed when I held an injured squirrel in my hands. The intimacy of the encounter touched me and evoked a desire to document my alliance[2] to the squirrel through artwork—thus, Squirrealism was born. Squirrealism developed into a method of art-making that channels conceptual and material connections between species to think and make, as feminist philosopher Donna Haraway says, "sympoetically."[3]

Often, my process begins by channeling squirrel behaviour and drey[4] making techniques by walking, foraging, and weaving together salvaged remnants composting in the soil around trees inhabited by grey squirrels to stimulate new thought. Intuition, touch, and chance figure into the process during foraging, and again in the studio through extrasensory perception called psychometry (using my hands to collaborate with the materials). The material-semiotic entanglements of the artworks are manifest through materials from a shared squirrel-human environment resulting as an artistic hybrid of new bodily forms.

The artworks for this thesis emerged through a series of seasonal projects and during the outbreak of the COVID-19 pandemic. Each series presents a portrait of squirrel-human sympoiesis

[1] Ethology is the scientific study of animal behaviour, usually with a focus on behaviour under natural conditions, and viewing behaviour as an evolutionarily adaptive trait ("Ethology").
[2] Jane Bennett and Donna Haraway use this term to demonstrate a certain way of thinking about alliances or assemblages and "to mod(e)ify and be modified by others" (Bennett 22). "Becoming is always of a different order than filiation. It concerns alliance" (Haraway, *When Species Meet* 41).
[3] "*Sympoiesis* is a simple word: it means 'making-with.'" Nothing is really autopoietic or self-organizing (Haraway, *Staying with the Trouble* 58).
[4] Squirrel nest.

through text and assemblages that developed as experiments unfolded. Thinking-through-doing accumulated meaning and questions leading to art writing, reading science journals and philosophy, and personal reflection which looped back into the assemblages, photography, and installation. As questions solidified, they helped to orient and chart the direction of my experimental process. The importance of artistic research weighs equally with my creational outputs. Together they create what conceptual artist, author, and educator Natalie Loveless describes in her book *How to Make Art at the End of the World*: *A Manifesto for Research-Creation* as a "chimera" of research-creation because they "unpredictably contaminate and remake each other" (56). Thus, a discussion of artistic research precedes and comingles with the artworks in this thesis support document. My artistic research also provides insight into thinking critically about biological entities temporally connected to settler colonial timelines and boundaries in urban environments.

Fig. 2. Carollyne Yardley, *A pregnant Eastern grey squirrel (Sciurus carolinensis*), 12 June 2019. Photograph.

Introducing grey squirrels

Squirrels are represented in ancient tales of becoming-with[5] humans, leaving deep scratches in political and ecological history. Often called "rats with furry tails," the Eastern grey squirrel (*Sciurus carolinensis*) is endemic to eastern and central North America and is also an essential natural forest regenerator. After their historic range was destroyed in the mid-nineteenth century due to settler colonialism and replaced by extensive logging and land clearing, grey squirrels were captured by colonists and intentionally introduced to city parks, kept as pets, and depicted alongside humans in oil paintings. In the early twentieth century, grey squirrels broke free of park confinement and were able to flourish in the heart of the city, becoming further connected to humans and their constructed landscapes. The urbanization of the grey squirrel changed the squirrels' ways of life; they adapted to living with humans in proximity, and they affected human ideas of the urban landscape, nature, and boundaries.

Fourteen years ago, I moved to a residence with a small garden that connected me to a community of urban animals. Tainting this good fortune was the introduction to a group of predominantly Western settler residents, (which largely characterizes the region), who treated grey squirrels like invaders for merely trying to exist. I was shocked to hear my human-animal neighbours speak candidly about their swift and brutal territorial battles with grey squirrels, including one gardener's penchant for capturing and drowning squirrels in a barrel of water for eating flower bulbs. Just how did a grandmotherly-type figure wearing gardening gloves decide that grey squirrels fell "below the radar of sentience" and were therefore killable (Haraway, *When*

[5] In metaphysics, becoming-with challenges delusions of separation from other species in ecological communities. Donna Haraway tells us that "[i]f we appreciate the foolishness of human exceptionalism then we know that becoming is always becoming *with,* in a contact zone where the outcome, where who is in the world, is at stake" (*When Species Meet* 244).

Species Meet 89)? What is the logic involved? And according to whose terms? As it turns out, grey squirrels are native to what is colonially known as five Canadian provinces, but by crossing provincial boundaries, either by their own agency or by human intervention, they have been incorrectly[6] associated with being an invasive species[7] (Gonzales; Gonzales et al; Hwang and Larivière). This is significant because public opinion drives provincial laws by supporting invasive species rhetoric and scapegoating, therefore making them killable[8] (Dubois). Grey squirrels are also known as synanthropes[9]—species that carve out their existence within human-modified environments and are ecologically related to humans; they literally become-with us. However, the role that Western history, colonial discourses, and racism play in creating boundaries, taxonomies, and hierarchies in pursuit of so-called civilized society has portrayed a binary between native and non-native species and presents introduced animals as something to be dealt with.[10]

Becoming unsettled

I am an interdisciplinary artist of Ukrainian Canadian settler and English-Scottish heritage. I was born in Edmonton, AB, but raised in a picturesque suburban coastal town on the southern tip of Vancouver Island, otherwise known as Victoria, BC. A search into my genealogy for squirrel stories led to researching how I came to live in what is now known as Canada, and how my ancestors (and myself) have benefited from stolen land. As a settler, I feel the basis for critical

[6] "Regional declines in native squirrels are more likely to be predicated by the alteration of native conifer habitats by humans independent of the effects of non-native squirrels" (Gonzales et al. 356).
[7] Introduced to Western Canada in the 1900's, grey squirrels have been incorrectly associated with the decline of native Red and Douglas squirrels, as well as the conflict of importing grey squirrels to Europe (Dubois).
[8] Eastern Grey Squirrels are listed under Schedule C of the Wildlife Act, which makes them killable. You do not need a permit or Provincial hunting license (www.env.gov.bc.ca/van island/wildweb/pdf/Squirrel_FAQ_ 10_July_09.pdf (Province of BC)).
[9] Synanthrope (from the Greek syn, "together with" + anthropos, "man" (sic)).
[10] There is a case of Indigenous knowledge viewing these "intruder" species as nations in their own right. According to Professor Nicholas J. Reo, and his experience with Anishnaabe teachings, responsibility "lies in the 'invasive' ideologies rather than the fault of specific animals or plants" (Reo and Ogden 1447).

work about introduced grey squirrel–human relations in an urban setting on Indigenous land requires a foundational understanding of settler colonialism. In *Research is Ceremony: Indigenous Research Methods*, author Shawn Wilson (Opaskwayak Cree) writes that it's necessary to situate oneself in the research process by giving a detailed explanation of one's background (10). As an artist with a practice that involves introduced land-based animals as a point of inquiry, it is important for me to be transparent about my relationship to this land. Wilson helped me think through my thesis project to describe how I learn from the grey squirrels I interact with, and how they shaped the artistic process and outcomes of the research. My interest in non-domesticated animals, such as grey squirrels, stems from never having had a pet or controlling another animal's food or reproduction system. Squirrels maintain their own agency in this way, and therefore interest me in how they navigate colonial constructed habitats. Connections made between introduced species and settler colonial "norms concerning access and ownership of property," as well as issues of environmental change, helped me to consider settler colonial ideologies of boundaries[11] (Reo and Ogden 1449). In the essay "Migration as Territory: Performing Domain with a Non-colonial Aesthetic Attitude," artist and scholar David Garneau (Métis) suggests alternatives for how to embody territory, co-habit space, and what it means to accommodate one's self to a territory not your own. This line of investigation underscores how complex the settler identity is, and my connection to hardworking landless Galicians (Kostash) who were also (perhaps) unwitting occupiers of Indigenous land. During settler colonization, animal agriculture and domesticated animals asserted the settlers' home and boundaries, whereas "non-domesticated animals were 'wild'"[12] and represented a conception that has yet to be tamed (Anderson 474). This

[11] The research paper "Anishnaabe Aki: an indigenous perspective on the global threat of invasive species" argues how not all introduced species become invaders and asks if there is an "alternative framework for stewarding the Earth in a time of rapid anthropogenic change" (Reo and Ogden 1444).
[12] I use quotes because "wild" is a colonial settler term (Anderson 473).

aspect of my artistic research provided insight to think critically about squirrel-human relations against the backdrop of settler-constructed habitats and boundaries, and how colonialism affects the collective consciousness of settler relations to urban wildlife today.

Sympoiesis and making-with

My time at ECUAD has resulted in a shift in artistic research as I discovered which discourses might frame and engage my art practice. Theorist and science writer Lynn Margulis "proposed that any physical association between individuals of different species for significant portions of their lifetime," or the relational origins of organisms, is a symbiosis (Haraway, *Staying with the Trouble* 189). In *Staying with the Trouble: Making Kin in the Chthulucene*, Donna Haraway takes up researcher Beth Dempster's term sympoiesis, or making-with, rather than auto-poiesis, or self-producing, to continue this thought describing how our lives and the lives of other species intersect (60). As a means of learning how to stay with the trouble, Haraway ends her book with "The Camille Stories: Children of Compost." It is a story of collaborative speculative fiction telling a tale of five generations of humans in a "symbiogenetic join" with monarch butterflies (148). This becoming-with enables a human child to feel or "see" as the butterfly can, to create kinship, empathy, and connection. The role of the nonhuman animal in symbiosis is to teach humans how the world is interconnected. "People knew it would not be simple to learn to live collectively in intimate and worldly care-taking symbiosis with another animal as a practice of repairing damaged places and making flourishing multi-species futures" (146). Haraway describes how after mostly destroying the planet, an animal-human sympoiesis was conceived by scientists as a last-ditch effort to comprehend what another species needs to flourish. Haraway first explored this fascination with species mixture when discussing transgenic research in her book *Modest_Witness@Second_Millenium. FemaleManMeets_OncoMouse*: "I find myself especially

drawn by such engaging new beings as the tomato with a gene from a cold-sea-bottom-living flounder which codes for a protein that slows freezing, and the potato with a gene from the giant silk moth, which increases disease resistance" (101). In *Staying with the Trouble*, survivors and remnants of ecological collapse develop new kinship networks through transgenic hybridity to repair a damaged world; together, they are stronger. I use Haraway's speculative tale of animal-human sympoiesis as inspiration to examine the imbrication of boundaries between human and nonhuman systems in an artistic way.

Squirrealism and emergent poetics

I teased out the building blocks for Squirrealism, a neologism I use in my practice to underscore and draw out the poetics of my artistic process and the work that manifests from it. After I rescued a dying squirrel in the yard, I felt compelled to paint portraits of hybrid-human squirrels in an effort to break down the barrier between humans and nonhumans (Yardley, *Squirrealism)*. When I first portrayed hybrid human squirrels in oil paintings they were often seen as purely visual delights. But what began as a charming motif has evolved into a mechanism that uses humour as a tool to address serious issues and concerns. Since attending the MFA program at Emily Carr University of Art + Design, I have pursued an emergent process that includes walking and foraging for organic and anthropogenic materials in an urban area. Walking produces an opportunity for movement of thought and is subject to constant revision. It helps me to "unveil the unconscious zones of the city, those parts that elude planned control …" (Careri 81). Remnants found by chance are collected from the ground around the base of trees inhabited by squirrels, thus interrupting any form of intentional aesthetics. People also gifted me human and squirrel hair, which I see as having an affiliation with human and squirrel DNA—referencing Haraway's "symbiogenetic join" in *Staying with the Trouble* (148). Historically in contemporary art, chance

was used in collage or assemblage to deliberately set up a gap "between intention and outcome" (Iversen 12). Rather than only being seen as the juxtaposition of new forms, the assemblage of materials repurposed to create art in each series can also be read as material evidence for species currently living here on Earth.

Squirrealism applies a convergence of perceptual methods, such as observing grey squirrels with intuitive field research—psychometry[13]—which moves from the yard to the studio. Psychometry involves receiving impressions or psychic vibrations from any material held in hand, using the sense of touch to read the object's history. "For Haraway, we are always already 'becoming-with' and imbricated by all that we touch and that touches us; what and how we touch and are touched by participates in constituting the stories, the worlds, within which we live" (Loveless 22). I experimented with psychometry to read the vital impressions of foraged materials and an aesthetic affect[14] occurred, generating new and surprising art forms.

In the introduction to the anthology *Arts of Living on a Damaged Planet,* its editors Anna Lowenhaupt Tsing et al. suggest that "living in a time of planetary catastrophe begins with a practice at once humble and difficult: noticing the worlds around us" (M7). The ethology of grey squirrels in an urban environment allows me to notice their customs and how they adapt to human-constructed habitats. Rather than studying squirrels as objects, I consider "the uncanny in between—the indiscernible zone between human and animal" and channel intuitive ways of knowing through my hands (C. Cox 21). By attuning with collecting, burying, and nest making

[13] Psychometry involves a type of telepathy—or feeling at a distance—and Fisher describes how "that forges a connection of palpable empathy and insight" ("Psychometry").
[14] In her book *Vibrant Matter*, Jane Bennett argues how human bodies respond to the influence of materials through an "aesthetic-affective openness to material vitality" (8).

behaviours,[15] I intend to disrupt anthropomorphic assumptions and situate my human animality in a sympoetic relationship with squirrels.

Squirrealism phonetically resembles Surrealism.[16] I draw in formal ways from Surrealist principles and their interest in walking (Careri 80-81), science, quantum theory, and an irrational use of images (Parkinson). Squirrealism invokes grey squirrels' nest making techniques with a collage of materials that blurs the boundaries between "two or more foreign realities" to create "the spark of poetry that leaps across the gap as these two realities are brought together" (Berger). My art practice, however, also sits in opposition to certain aspects of Surrealism and its Eurocentric histories.[17] In future, I aim to examine these distinctions further. Rather than identifying with one art historical movement, Squirrealism prefers to chew at the frameworks of normative epistemologies and scratch at the edifice of Western art history. Squirrealism resists domestication and taxonomy, affirming adaption and hybridity, and paw-zes to ask: What can walking, foraging, and interlocking an array of found materials tell us about possible futures in squirrel-human symbioses? What can grey squirrels teach us about Western ideas of supposed boundaries between species systems? Can using my hands to collaborate with the materials be a method to engage intuitively with unknown and unknowable futures? And how might art capture this engagement?

[15] Here, I am adapting Haraway's idea in *Staying with the Trouble*, about how the role of the nonhuman animal in a symbiosis is to teach (147).

[16] Surrealism is a twentieth-century avant-garde art and literary movement best known for its visual artwork, writings, and irrational juxtaposition of images.

[17] It is important for me not to ignore how some Surrealists engaged in the collection and exhibiting of government confiscated Northwest Coast cultural objects, and my art practice is implicit in its critique of such activities. Were Surrealists aware of how the forces of colonialism affected the lives of Indigenous people? Or does the collection and display of ceremonial masks and regalia call attention to the violent histories of colonialism and "aspects of Indigenous life to which they were blind" (Butler-Palmer 99)? André Breton, for example, collected several of these objects in Paris and New York, where they were completely detached from the violence that had made them available for purchase (Butler-Palmer 100).

Series 1 – Holobionts

Fig. 3. Carollyne Yardley, *Holobionts* (series—details), 2019. Squirrel hair, human hair and leaf skeleton, magnolia petals, cloth, seagull feather, wax. Twenty-four pieces, dimensions range from 15″ x 8″ x 2″ to 2″ x 2″ x 2″. Exhibited in the First Year Thesis Group Show, Emily Carr University, 2019. Photograph by Carollyne Yardley.

During the summer of 2019 at Emily Carr University, I activated Squirrealism by looking for local grey squirrels and their known symbionts—mature nut and seed-bearing trees. While walking, I located squirrels sitting high up in the tree branches. Using intuition, I started collecting the organic and symbiotic remnants composting next to one another from around the tree's base: Magnolia petals, squirrel hair, leaf skeletons, seagull feathers, tree branches, and acorns. In the studio, I used psychometry to receive impressions about each of these species' material history. Holding the materials in my hands along with squirrel and human hair, I began to weave them together. I was curious how intuitive methods of touch could visualize hybrid relations. While thinking about each remnant's molecular structure, a series of steps followed. I began a process called "writing through the material," which references artist Erika DeFreitas's "writing through the object," which curator Jennifer Fisher remarks on in her interview with the artist (DeFreitas). DeFreitas's process of psychometry in her art aids her attunement towards "objects that glow," to understand things, their energies, histories, and potential futures (DeFreitas). Using drop spindle and needle felting techniques, I spun and interlocked the multi-species hair fibres together. As the suspended spindle dropped down, the spiral formation of hair thread was reminiscent of DNA molecules' double helix structure. While holding the spun hair yarn in my hands, I began to channel the DNA code of the material into creating assemblages. From a psychometric perspective, this method of attunement collapses time through space, "which is intrinsic to a kind of liminal passage through the object"[18] (Fisher 15). Fisher details the use of psychometry and collaboration with psychics in her curatorial practice to channel past events through objects. In forensic crime investigations, psychometry is used to "serve as a telescope to the past, enabling clairvoyant understanding of the historical contingencies of artifacts" (Fisher 11). For me, there is a

[18] "How psychometric knowledge is produced is not scientifically understood but was identified by the 19th-century Spiritualist James Rhodes Buchannan as an ability to read affective imprints of artifacts" (DeFreitas).

connection here between psychometry and the "quantum theory of touching" (Barad, "On Touching" 156). I see them operating on the same principles of electromagnetic energies for reading matter and handling materials.

Holobionts (2019) borrows from Haraway's idea of sympoiesis by intertwining human and nonhuman materials to create an artistic expression of animal-human sympoiesis (Fig. 3). The installation occupies two walls of twenty-four interspecies assemblages—each piece operates both as an individual holobiont[19] or cell and as a larger collection of microbes. I began thinking at the molecular level and asking: Where does one material end and another begin? Or where does one material begin and end, meaning where is the line between material and immaterial, or material and nothing? Hand, face, paw, and genitalia, made from needle-felted human-squirrel hair; an impregnated human-seagull brooch; squirrel-human-leaf skeleton; magnolia petals wrapped in human-squirrel-hair act like fingers—now become detached claws. I discovered through this process that when multispecies materials are entangled together, they become stronger. This is an interesting metaphor for thinking about the imbrication of boundaries and outcomes of transgenic research in Haraway's book *ModestWitness@SecondMillenium. FemaleMan_Meets_OncoMouse*, where the new entity becomes more durable to environmental conditions (101). Much like a fractal, or a collage, the structural boundaries have been blurred, and the joining of unexpected materials creates a surreal juxtaposition of elements. The art materials for this project were all sustainably sourced, which leads back to Haraway's speculative story about animal-human sympoiesis; to save the Earth using what has materially survived.

[19] The hologenome theory of evolution recasts the individual animal or plant (and other multicellular organisms) as a community or a holobiont. The holobiont concept "undermines the classic definitions of animal individuality," including humans (Gilbert, "Holobiont by Birth" M74). According to Scott F. Gilbert, "our ecosystems are managed by symbiotic consortia" ("Holobionts can evolve"). Thus, urban animals and humans are multi-species holobionts living in transactional zones that are always moving, working, and shapeshifting in a literal becoming together.

Series 2 – Symbiogenesis

Fig. 4. Carollyne Yardley, *Levelling the Hierarchy*, from the *Symbiogenesis* series, 2020. Foraged materials collected beneath trees inhabited by squirrels on panel: seagull feather, peanut shells, Garry oak acorns, pine cone, pine frond, peafowl feathers, slate, plastic gems, Garry oak branches, pine cones and branch with red spray paint, wired earpiece, stones, lichen, nut/bolt, rock with paint and writing, ribbon, origami folded paper, bottle cap x 2, City of Victoria tree tag, shattered tempered glass, mini-LED party light, jingle bell, remnants of metal spoon and plastic fork, shotgun cartridge, broken reflective light, squirrel fur, lighter, raccoon fur, plastic rope, Ten-lined June beetle, holly leaf, plastic poppy, lint, wool thread, human hair, glass marble, cedar tree, aluminum tag, a pile of woven human hair and squirrel hair, painted rock with motivational message: Be Your Best Self, 36″ x 36″ tondo. Photograph by Carollyne Yardley.

Fig. 5. Carollyne Yardley, *Levelling the Hierarchy*, from the *Symbiogenesis* series (installation view), 2020. Photograph by Carollyne Yardley.

In the Fall of 2019, I wanted to mimic grey squirrels' seasonal behaviour and activate Squirrealism by collecting and burying Garry oak acorns.[20] A series of multi-day walks took place in an urban area, and I widened my scope, collecting anthropogenic objects as well as acorns beneath trees inhabited by grey squirrels. Scholar and author Francesco Careri writes that for the Surrealists, "walking through the city" was a type of "psychological investigation of one's relationship with urban reality" (80, 81). Upon returning to the studio, and like an urban squirrel,

[20] I have fourteen Garry oak seedlings in pots on my deck as of July 2021.

I planted the acorns in containers on my deck.[21] It will not be until spring that I discover if any seedlings will sprout. In the meantime, other artistic experiments continued. *Levelling the Hierarchy* (2020) features items I'd foraged while walking and arranged in a circle as I attempted to visually un-classify life. Inspired by Lynn Margulis's advancement of co-evolution and symbiogenesis (Haraway, *Staying with the Trouble* 60), the objects were placed without a hierarchical system because multi-species co-evolution is unpredictable (Fig. 4, 5). The tondo wood panel is reminiscent of the spherical shape of biological cells, situated on a low plinth for the viewer to circumnavigate. Items are natural and anthropogenic. There's a connection to humans as animals—hoarding and collecting—but the logic is left open in the grouping. Small interventions leave a clue about the journey of the collector; everyday items that are overlooked, both in terms of nature and human detritus. These materials don't just surround us; they incorporate us.

As this series progressed, I became inspired by artists that repurpose found organic and anthropogenic materials to explore animal-human relations. Inuvialuk artist Maureen Gruben gathers materials at hand to create artwork that forges critical links between life in the Western Arctic, global environmental and cultural concerns, and beluga whales ("About the Artist"). Her work *Consumed* (2017) resembles a clothesline or a film drying rack with multiple translucent and rectangular-shaped satchels made from Beluga whale intestine (Fig. 6). The membranes are attached with clips and evenly spaced apart, floating like scarves in a gentle breeze. The contents inside each piece contain scavenged materials such as elastic bands, earphones, a rosary, a condom, a cut-up credit card, and matches. Each pouch is expertly sewn by incorporating sewing and trapping techniques learned from her parents. Materials are sourced from scrap bins, thrift stores,

[21] Urban squirrels are renowned for using flowerpots to plant acorns.

and junk drawers to repurpose mass-manufactured materials that form a state of indigestion, as whales around the world are drowning in a plastic soup of marine debris. Researchers examined seven beluga whales harvested by Inuvialuit hunters in Canada and found plastics within the stomach and intestine of every whale (Moore et al). The Arctic region is not immune to our plastic garbage.

Fig. 6. Maureen Gruben, *Consumed*, 2017. Beluga intestine, thread, found objects, dimensions variable. Used by permission of the artist.

Grey squirrels are also affected by human waste. At the beginning of 2020, a British photographer captured images of a grey squirrel carrying blue and grey plastic material for nest making, showing the impact of human litter on urban squirrels in the UK ("Squirrel pictured"). As a result of this news story, and the myriad of anthropogenic materials I found around the base of trees inhabited by squirrels, I became curious about the material in local squirrel dreys. I hired a drone pilot to capture footage of nests, which are typically thirty to sixty feet from the ground.

Fig. 7. Carollyne Yardley, *Drone footage of squirrel drey*, 16 March 2020. Photograph.

By activating Squirrealism in this way, it led me to visually learn more about tree squirrels' symbiotic relationship with trees, and the material connections between human and nonhuman worlds. From the elevated vantage point, I could see what appeared to be small pieces of plastic in the nest and a squirrel worldview of tree branches shaped like the bronchi of lungs (Fig. 7). I collected fallen branches from around the base of these trees, a nest making material, and squirrelled them away at the studio for future use.

Towards the middle of March 2020, COVID-19 pandemic announcements began to intensify in our region. Blue nitrile gloves[22] perform as a boundary or barrier against zoonotic viruses and began appearing in recycling bins and street gutters. Stories were developing about

[22] Acrylonitrile is manufactured by combining propylene, ammonia, and air in a process called ammoxidation. Propylene is probably the oldest petrochemical feedstock. ("Propylene")

how people who develop coronavirus have trouble breathing. While reflecting on squirrels' use of plastic to build their nests, my thoughts became associated with handwashing, viruses, breathing, lungs, hospital beds, and blue plastic nitrile gloves**.** While walking, I collected the odd thing that caught my eye, such as rusty bedsprings unearthed by bulldozers in a construction zone.

Back in the studio, I laid out the tree branches, blue nitrile gloves, human hair, and rusty bedsprings on my worktable. Using my hands, I held each object to think through an animal-human sympoiesis. According to writer, editor, and researcher Heather Davis, who studies the ethology of plastic, "the work of sympoiesis is therefore vital in confronting new understandings of what it means to be human that embrace the plural, the hybrid, the incomplete and the collective" ("On Becoming Plural"). As I wrapped the blue nitrile gloves around the tree branches, I began to ask: What is the molecular material of plastic? What is the effect on animal cellularity? Wax worms, for example, can survive on polyethylene, the kind of plastic used in shopping bags and elsewhere (Cassone et al.). Scientists have dubbed these worms "plastivores," because they have adapted to the conditions of plastic in the environment. But what about other species?[23]

[23] A study published in the journal *Environmental Science and Technology* estimates an average adult human consumes about 135 tiny particles of plastic each day and inhales another 150 bits daily as well (K. Cox et al.).

Fig. 8. Carollyne Yardley, *Plastivore,* from the *Symbiogenesis* series, 2020. Gifted human hair, foraged rusty bedsprings, twigs, blue plastic surgical gloves, 37″ x 30″ x 8″. Photograph by Carollyne Yardley.

Plastivore (2020) speculates a multi-species emergence from a world drowning in plastic and future kin evolving from the composted remnants of Earth today (Fig. 8). “Plastic as kin” is described by Heather Davis and anthropologist and scholar Zoe Todd (Métis/otipemisiw) in their article “On the Importance of a Date, or Decolonizing the Anthropocene.” They explain during an

interview on Spill Radio how plastic is a biological sympoiesis—the afterlife of oil made from the fossils of dinosaurs; the "fleshy beings that once roamed Earth—plants and dinosaurs are now petrobeings … fossil kin" ("Zoe Todd and Heather Davis"). My interpretation of this process from dinosaur—oil—plastic is an example of an organism transforming and performing a new function, thus opening up to new "becomings."[24] In another instance of becoming-with plastic, geologist Patricia Corcoran and sculptor Kelly Jazvac travelled to Kamilo Beach in Hawaii in 2012. While walking, they found plastic and beach detritus combined into a single substance by bonfires which they named "plastiglomerate." Their work considers future geological forms and new taxonomies of rock records from the intra-action of melted plastic, beach sediment, basaltic lava fragments, and organic debris (Corcoran et al.). In *The Companion Species Manifesto,* Haraway describes any emergence as a genesis. "How organisms integrate environmental and genetic information at all levels, from the very small to the very large, determines what they become. There is no time or place at which genetics ends and environment begins …" (32). *Plastivore* (2020) visualizes the biological molecules of grey squirrels, trees, humans, and plastic rubbing together in sympoiesis as more-than-human flesh to contaminate and assemble new kinds of cells, tissues, organs, and species.[25]

During a second walk for this series, I channeled Squirrealism by collecting acorns and cedar boughs beneath a variety of Garry oak and coniferous trees inhabited by grey squirrels. I noticed several plastic mesh tree guards used to protect newly planted seedlings from grey squirrels

[24] In *A Thousand Plateaus: Capitalism and Schizophrenia*, Deleuze and Guattari ask us to use their collaborative book as it was conceived—as "an open system" for sparking an assemblage of new thoughts (15). Permeable boundaries between human and nonhuman systems are discussed in the chapter "Becoming-Intense, Becoming-Animal, Becoming-Imperceptible" as fractals that make up our bodies and the transferring of energy between us and all things in proximity. Thought, like sympoiesis, relates a type of assemblage or metamorphoses to zones of "doings" and "becomings."

[25] "The Greek philosopher Empedocles explained the strange cases reported by Herodotus with a novel theory of evolution. Plants and animals originally made their appearance in the world not as wholes but as detached parts" (C. Cox 21).

and stashed one away. Returning to the studio, my hands attuned to the materials while weaving cedar boughs and human hair into the warp and weft of the plastic tree protector, as images of multiple species ingesting and nesting with plastic entered my mind.

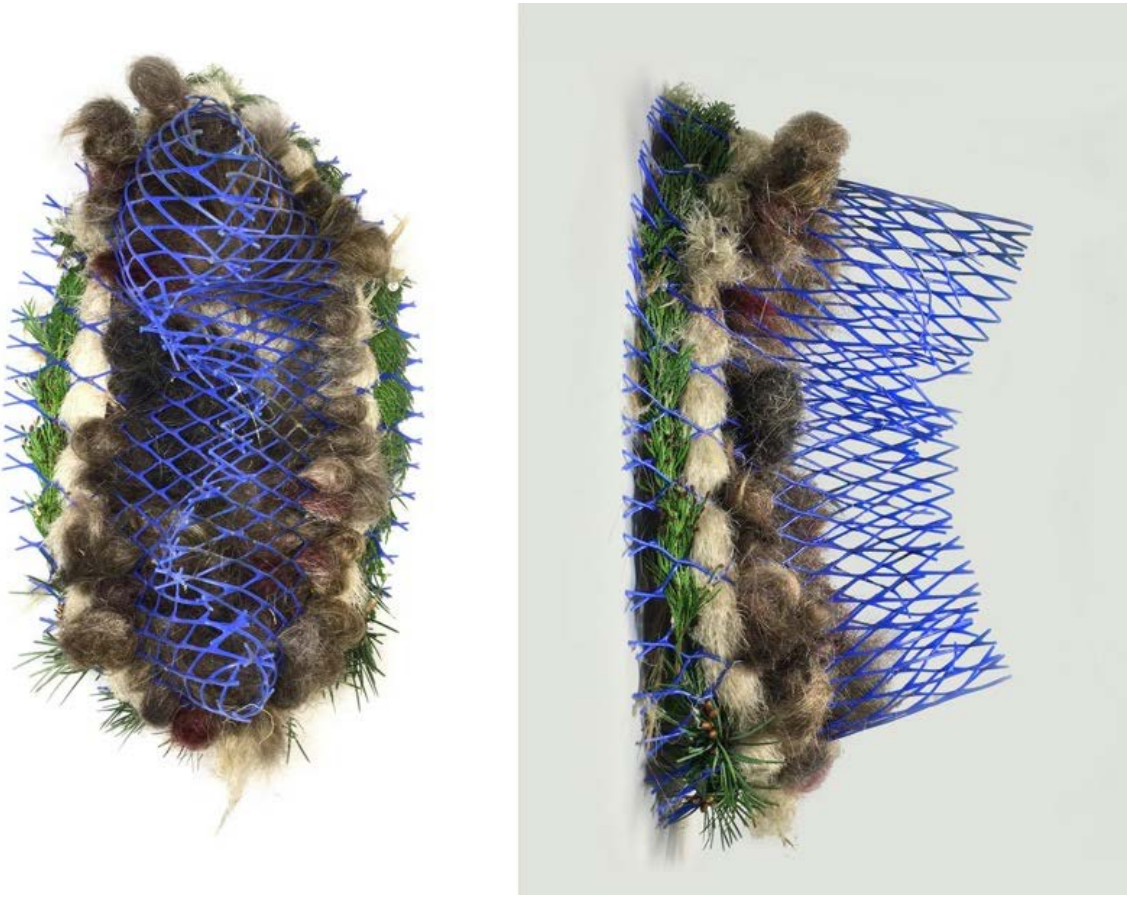

Fig. 9. Carollyne Yardley, *Molecular* (front and right view), from the *Symbiogenesis* series, 2020. Found and foraged cedar bough (sustainably harvested after windstorm), pampas grass, human hair, plastic mesh tree protector, 17″ x 10″ x 8″. Photograph by Carollyne Yardley.

Molecular (2020) is an assemblage related to mixing, breathing, microbes, cohesion, and adhesion-like early stages of cellular formation of molecules in developmental biology (Fig. 9). Additionally, it represents a theoretical becoming and the "molecular proximity between two distinct beings, micro perceptions, and their philosophy of particles in relation to becoming-animal" described by authors Deleuze and Guattari (248). Handling materials to create the assemblage *Molecular* (2020) prompted corporeal sensations and textures of new thought.

Fig. 10. Carollyne Yardley, *Victim of the property line (human boundaries),* from the *Symbiogenesis* series, 2020. Human hair, foraged pruned branch, pink flagging tape and twine, 40″ x 30″ x 8″. Photograph by Carollyne Yardley.

For the final assemblage of this series, I began my next walk and noticed an unprecedented use of pink flagging string (some attached to wooden stakes) denoting surveyor property lines in construction zones, which I collected from the ground. Humans are continuously imposing barriers on the environment; however, Western-centric boundaries and hierarchies often fail to account for the agency of urban animals who are actively shaping our mixed-species communities. "[S]uch a commitment to boundaries is embedded in colonial understandings of 'the human' as independent from others, superior to non-human animals, and as separate from and uninfluenced by nature" (Montford 277). As the spring season approached, gardeners were out in full force pruning trees and leaving debris on the boulevard for disposal, providing me with an opportunity to collect a few branches. Pruning tree branches is a mundane maintenance task, and necessary, but this act

can often destroy nests and eliminate valuable nest sites. *Victim of the property line (human boundaries)* (2020) uses pink flagging string wrapped around a pruned branch to suggest how the very commonplace of such human activities obscures regard for nonhuman animals living in sympoiesis within those transactional zones, allowing humans to feel they alone have control over boundaries (Fig. 10).

Installed for viewing, the *Symbiogenesis* series is made from organic and anthropogenic materials, visualizing the pressures and toxicity faced by multi-species in urban spaces. For example, the colour palette is dictated by the found materials; city workers and property surveyors use plastic pink flagging string to mark boundaries. Blue plastic and metal elements are non-biodegradable and act as archival remnants of this geological epoch. The materials are evidence of breached and overlapping boundaries with cut, shed, decomposed, unearthed, detached, and discarded materials from the area. In *Vibrant Matter*, political theorist Jane Bennett discusses how the "vitality" of materials can "take shape again" and "act as quasi agents or forces with trajectories, propensities, or tendencies of their own" (5). The materials from this place are repurposed, but still able to tell stories of past lives; reincarnated and resuscitated, generating new ideas. Scholar Vanessa Watts (Mohawk and Anishinaabe) describes this non-distinctive space as Place-Thought, where place and thought are never separated; it is "based upon the premise that land is alive and thinking and that humans and non-humans derive agency though the extensions of these thoughts" (41). The imbrication of organic and nonorganic materials in this experiment helped me to simulate Haraway's idea of a "symbiogenetic join" (*Staying with the Trouble* 148) as well as a trajectory of thought about seeping boundaries and toxic repercussions of squirrels and humans living with plastic. The emergence of forms resembled molecules, with pink and blue

capillaries for circulatory and respiratory systems—in other words, co-evolutionary novelties arising from symbiosis.

Series 3 – Pandemic Sculpture Garden

Fig. 11. Carollyne Yardley, *Remnants 1*, from the *Pandemic Sculpture Garden* series, 2020. Human hair, soil, wood barrel with metal, squirrel tail, blue nitrile gloves, 40″ x 30″ x 8″. Installation in *Unearthing* (Interim Thesis Show), 2020. Photograph by Carollyne Yardley.

Due to the coronavirus pandemic and bound by stay-at-home orders, I decided to channel the found and scavenged materials in the urban garden which I share with grey squirrels in sympoiesis. *Pandemic Sculpture Garden* (2020) was an adaptive response to our cancelled summer residency at Emily Carr University in Vancouver. It allowed me to create stand-alone sculptures and work outside for the first time—merging my field and studio work. As thoughts about virus transmission occupied my mind during the pandemic, it amplified how we share space with grey

squirrels, and the fears urbanites have about animal-to-human disease transmission. A zoonosis is a disease that can be transmitted from nonhuman animals to humans and occurs when species live in close physical contact. At first, this sounds alarming; however, bacteria and viruses frequently transfer genes between organisms and species boundaries through symbiosis. “Hence all larger organisms—protests, fungi, animals [humans], and plants—originated symbiogenetically” (Haraway, *When Species Meet* 44). Humans, plants, and animals are made up of cells that learned to cooperate long ago to increase their survival.

Pandemic Sculpture Garden (2020) began by exploring how species intersect by intertwining human and nonhuman materials, found in an urban garden, in unexpected ways to examine symbiogenesis further. Found chicken wire, normally used to protect plants from being eaten by grey squirrels, becomes an art material. Human hair used in composting was collected from home haircuts and exploited for its weaving properties. During the early days of the COVID-19 pandemic, recycling bins filled with blue nitrile gloves indexed fears about contagion while also shifting the landscape for urban foragers. Like a squirrel, I foraged through bins on my street, feeling keenly aware of my own animality. I was often interrupted by a curious squirrel, a welcome companion during times of isolation. Squirrels and humans are mutually constituted by these discarded materials; both species are subjected to the effect of remnants and the “doings” and “becomings” of living with symbiotic waste. The assemblages developed in a non-linear way, as did their arrangement in the garden: portions or parts were formulated over time. This thesis work soon became situated among artists who were also responding to pandemic lockdown, and concerns about hand washing and fear of touching surfaces. Artist, researcher, and educator Randy Lee Cutler created seventy individual collage images collectively titled *On the Other Hand* (2019–

2020). Working with gifted and thrifted National Geographic magazines to embrace the virus, Cutler channeled its RNA code to cast spells through hieroglyphic forms.

Fig. 12. Randy Lee Cutler, *Syntax* (first from the series *On the Other Hand*), 2019. Randyleecutler.com, 2021. Used by permission of the artist.

Each collage features a variety of arms with hands holding individual space yet folded into the curves of one another and resembles a type of sign language or games of runes (Fig. 12). I view the forms as a type of divination or oracle reading system that's used to help gain insight into situations. What interests me about the collages is the role of hands as a connector to alternative psychic states and as a biological appendage reaching out through the air. For artist Erika DeFreitas, an "outstretched hand invites a moment of focusing-inwards" to explore "the spectrum of knowledge found between what is seen, what is felt, and what is otherwise imagined" ("Erika DeFreitas"). *Remnants 5* (from the *Pandemic Sculpture Garden* series), which features a blue gloved hand reflected on a mirror while pooling the surrounding environment (Fig. 13), and Cutler's collage artworks, which inspire a type of cartomancy or divination of hands, operate in a

similar affective manner. They hint towards questions but leave the viewer to work out the details. The works then become open for the viewer to generate their own reflections in a poetic way.

Fig. 13. Carollyne Yardley, *Remnants 5*, from the *Pandemic Sculpture Garden* series, 2020. Mirror, mannequin hand, used nitrile examination glove, false nails, squirrel hair, 36.5″ *x* 32″ *x* 4″. Installation in *Unearthing* (Interim Thesis Show), 2020. Photograph by Carollyne Yardley.

The installation and arrangement of the *Pandemic Sculpture Garden* (2020) developed into five speculative hybrids at different stages of molecular development, to reflect on new forms responding to an increasingly toxic planet:

- A wooden barrel filled with composting soil (the epidermis of the Earth), human hair, squirrel tail, and used blue nitrile gloves remnants (Fig. 11).
- Moss, chicken wire, human hair, and blue nitrile glove.
- Human hair, moss, coconut coir liner, pruned branches, and used blue nitrile gloves.

- Used blue nitrile glove bipedal legged figure, dryer hose (exposed organs) and knitted human and squirrel hair with pink flagging string, and trolley.
- A human-hair hand with a blue nitrile glove and squirrel hair nails reflecting itself and the leafy environment on a mirror.

Fig. 14. Carollyne Yardley, *Pandemic Sculpture Garden*, 2020. Mixed media, 11' x 6'. Installation in *Unearthing* (Interim Thesis Show), 2020. Photograph by Carollyne Yardley.

The grey squirrels who live in the surrounding trees returned to the sculpture exhibit as spectators creating a generative engagement. I watched as the squirrel featured (Fig. 14) planted a nut in the wooden barrel. Because grey squirrels are not tethered by ownership, it's up to them whether they interact with us (and our constructed habitats) or not. Vanessa Watts details this agency when she claims that it's "not only the animals' ability to communicate with us, but their willingness to communicate with us" that should be considered (56). Grey squirrels' inclusion in the installation documentation allows the viewer to observe the presence of squirrels who have

lived on Earth for millions of years.[26] Engaging an intuitive approach to design, *Pandemic Sculpture Garden* (2020) is somewhat uncanny and poses counter-narratives to a museum setting of preservation. Where museums collect objects of art, history, and science to exhibit and study and preserve for the future, these assemblages are in flux; they are in various stages of bacteria-growth and composting waste.

Fig. 15. Carollyne Yardley, *Pandemic Sculpture Garden* (details), 2020. Installation in *Unearthing* (Interim Thesis Show), 2020. Photograph by Carollyne Yardley.

While reflecting on how to make the impermanent permanent and bring the Pandemic Sculpture Garden (2020) into a gallery space, I made glove sculptures out of human hair, glue, and resin and turned to photography and pink flagging string (Fig. 16). This series emerged as an

[26] Described as "living fossils" (Emry and Thorington 23), squirrels have lived on Earth with relatively the same morphology for 160 million years (Bi et al.).

iteration of an animal-human sympoiesis related to infectious disease, interspecies relations, cohabitation, and co-evolutionary transformation.

Fig. 16. Carollyne Yardley, *Pandemic Sculpture Garden*, 2020. Pigment on watercolour paper (20″ x 30″ (2), Astroturf, four hands made of human hair and resin, glue, blue nitrile gloves, acrylic nails (10″ x 4″ x 2″ each). Installation site 70″ x 60″ x 33″. Gallery install test (making impermanent permanent) for *Unearthing* (Interim Thesis Show), 2020. Photograph by Carollyne Yardley.

Series 4 – Sympoetics of Squirrealism

Fig. 17. Perrin Grauer. *Feeding baby squirrel wearing blue nitrile gloves*, 2020. Photograph. Used by permission of Perrin Grauer.

My final series deviated from walking and collecting materials. It began by creating an online form to bring my research to the public by asking for accounts of affinity, indifference, or aversion towards grey squirrels. I was also interested in teasing out the tangled natural and artificial material conditions and boundaries in which we live our lives. Instead of conducting the questionnaire in person (because of COVID-19), I deployed an online form to five hundred people through an email newsletter system and social media channels (Yardley, "Share"). The responses I gathered made it clear there were many contradictions and obstacles to accepting the hybrid and

constructed ecologies we live in and the blurred boundaries between the species. One of the responses articulated how we become-with grey squirrels through touch. Author and squirrel lover Perrin Grauer submitted a story titled "Ritual of Care: On Protecting Found Wildlife and Dreaming of Interspecies Friendship." Through a series of events, he had an opportunity to foster baby squirrels over the weekend. During a feeding with an eyedropper, one squirrel began to sneeze, and there was a moment, Grauer details, when paranoia kicked in. COVID-19 has made people more aware of zoonosis and interspecies infection. He says,

> At first, this was unbearably cute. But very quickly, paranoia kicked in. COVID-19 has famously been shown to be an interspecies infection, resulting from close contact between a human and one or more wild animals. I spent a day or two pretty nervous about whether I would be patient zero on some new squirrel pandemic.

Coincidently, Grauer's photo caring for baby squirrels features a human hand wearing a blue nitrile glove which demonstrates the plurality of plastic and medical supply waste in acts of protection and care between the species (Fig. 17). And while this was not a moment of viral transmission, it also illustrates the idea of becoming-with a nonhuman animal at the molecular level in proximity, and "how we are remade through all we touch and are touched by" (Loveless 22). Microscopic and imperceptible molecules are both biological and metaphysical.

By chance, and like the baby squirrels needing care, my family was struck with several health care crises simultaneously, including one member testing positive for COVID-19 while recovering from a stroke at the Intensive Rehab Unit at the Nanaimo Regional General Hospital on April 14, 2021 (Harnett). I envisioned my loved one contracting the coronavirus from another human animal in a space filled with health care workers wearing blue nitrile gloves and relate it to "the touch of entangled beings (be)coming together-apart" (Barad, "On Touching" 155). Another

family member has moved into my home where my art studio once was for the duration of their radiation treatments and until after they have recovered from surgery. Ironically, I find myself wearing blue nitrile gloves in the same space my thesis artworks manifested, during daily rituals of care attending to my loved one's needs. It feels like I've been channeling this unknowable future through creational outputs all along, and how "meaning is both social and historical" (Pauker). To comfort myself, and in seeking to become more at ease with the idea of virus and disease pathogens infecting human bodies, I remembered a journal article that discusses how the human placenta evolved from an ancient virus (Chuong). It argues how the human animal has always been entangled and becoming-with other species.[27] Now, adding to this sympoiesis is how we live and die with plastic waste.[28]

Outside on my deck I pause to reflect on grey squirrels planting acorns for future forests, and humans making art for livable futures. I am still wearing one blue nitrile glove from an earlier care-giving task while watering fourteen tiny Garry oak seedlings growing beyond their planters' confines. It is summertime, and their delicate deciduous leaves have bloomed and are reaching for the sky with new life. If by chance they survive, beginning at thirty years of age these Garry oaks will produce their first acorns for future squirrels to eat. It is here where I imagine (Fig. 18, 19, 20, 21, 22) a genesis (contamination) of COVID-19, blue nitrile gloves, and a hybrid human-squirrel emerging stronger and sympoetically from a damaged world.

[27] Researchers argue how an ancient virus is the reason why humans are not an egg-laying species today (Chuong).
[28] Scientists have found first evidence of microplastics in human placenta (Ragusa et al.).

Fig. 18. Carollyne Yardley, *Becoming-with* (detail), from the *Sympoetics of Squirrealism* series, 2021. Pigment on canvas, 78″ x 60″. Exhibited in *Becoming* (Final Thesis Exhibition), Emily Carr University, 2021. Photograph by Carollyne Yardley.

Fig. 19. Carollyne Yardley, *Rituals of Care* (detail), from the *Sympoetics of Squirrealism* series, 2021. Garry oak seedling grown from foraged acorns, soil and oak barrel from garden (14″ x 9″ x 9″), gifted human hair, foraged used blue nitrile gloves, resin, acrylic nails, armature 25″ x 36″ x 24″, (each hand 10″ x 3″ x 4″). Installation in *Becoming* (Final Thesis Exhibition), Emily Carr University, 2021. Photograph by Carollyne Yardley.

Fig. 20. Carollyne Yardley, *Rituals of Care* (detail), from the *Sympoetics of Squirrealism* series, 2021. Garry oak seedling grown from foraged acorns, soil and oak barrel from garden (14″ x 9″ x 9″), gifted human hair, foraged used blue nitrile gloves, resin, acrylic nails, armature 25″ x 36″ x 24″, (each hand 10″ x 3″ x 4″). Installation in *Becoming* (Final Thesis Exhibition), Emily Carr University, 2021. Photograph by Carollyne Yardley.

Fig. 21. Carollyne Yardley, *Contagion* (detail), from the *Sympoetics of Squirrealism* series, 2021. Gifted human hair, foraged used blue nitrile gloves, resin, acrylic nails, armature, 25″ x 32″ x 8″ (each hand 10″ x 3″ x 4″). Installation in *Becoming* (Final Thesis Exhibition), Emily Carr University, 2021. Photograph by Carollyne Yardley.

Fig. 22. Carollyne Yardley, *Sympoetics of Squirrealism* (installation view), 2021. Mixed media, 18' x 8' x 2'. Installation in *Becoming* (Final Thesis Exhibition), Emily Carr University, 2021. Photograph by Carollyne Yardley.

Staying with the trouble of squirrels

When I first began the MFA program at ECUAD, I was primarily known as an oil painter. And while I recognized my hands were integral to the molecular process of moving paint, the MFA program helped me experiment with touching new materials and being touched by new theories, thoughts, methods, and methodologies. Feminist theorist Karen Barad explains in "On Touching—The Inhuman That Therefore I Am (v1.1)" how "[t]hought experiments are material matters" (2). What began with asking what grey squirrels can teach us about supposed boundaries between species systems led to thinking about the matter of molecules which we inhabit, inhabit us, move

around and between us, and are made of us. Experiments using intuition and touch helped me situate the human-as-animal in the artworks and not the other way around. While using my hands to collaborate with the materials, I made an important discovery: the role of the hand as a connector to alternative intuitive states, the hand as a scientific appendage, and the blue nitrile glove (a hand's double) found common ground as a weird, uncanny object of my creative outputs. Squirrealism formed into a hybrid method through the act of walking, foraging for materials, weaving and psychometry, and the ethology of squirrels. A squirrel-human sympoiesis taught me how an assemblage of the physical and the metaphysical results in something new, and that the material-affective dimension is always in flux. In future work, I will continue to develop a critique of colonial dominance by working to research and reference Indigenous thinkers that have long held the metaphysical beliefs described by Western ontologies and epistemologies, such as the energies at work in psychometry and quantum field theory.

Haraway describes an animal-human sympoiesis as necessary for humans to know what another species needs to survive and to heal damaged human and nonhuman lives and places *(Staying with the Trouble* 148). Grey squirrels need mature nut or seed-bearing trees; therefore, I have become passionate about saving the remaining Garry oak trees[29] in cityscapes. The thesis artworks reveal to me how we are in a squirrelly sympoiesis with other species and everything around us, which makes me want to notice the world by staying with the trouble of squirrels.

[29] Collectively, Garry oak and associated ecosystems are among the most endangered in Canada—less than 5% of the original habitat remains in a near-natural condition ("Garry Oak").

Works Cited

Anderson, Kay. "A walk on the wild side: a critical geography of domestication." *Progress in Human Geography,* vol. 21, no. 4, 1997, pp.463-485, doi.org/10.1191/030913297673999021.

Barad, Karen. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning.* Duke UP, 2007.

—. "On Touching—The Inhuman That Therefore I Am (v1.1)." *Power of Material/Politics of Materiality*, edited by Susanne Witzgall and Kerstin Stakemeier, Diaphanes, 2018, pp. 153-164.

Bennett, Jane. *Vibrant Matter: A Political Ecology of Things.* Duke UP, 2010.

Berger, Barbara. "Collage, Frottage, Grattage…." *Moderna Museet,* www.modernamuseet.se/stockholm/en/exhibitions/maxernst/collage-frottage-grattage. Accessed 7 May 2020.

Bi, Shundong, et al. "Three new Jurassic euharamiyidan species reinforce early divergence of mammals." *Nature,* vol. 514, 2014, pp. 579-584, doi.org/10.1038/nature13718.

"Bob Ross - Crimson Oval (Season 18 Episode 4)." *Youtube*, uploaded by Bob Ross, 14 July 2016, www.youtube.com/watch?v=R7Y3izMFPbM.

Butler-Palmer, Carolyn. "Dawn Ades, ed., *The Colour of My Dreams: The Surrealist Revolution in Art*, Vancouver, Vancouver Art Gallery, exh. cat., 2011, 336 pp., 120 colour illustrations, $65, ISBN-13: 9781895442878." *Canadian Art Review*, vol. 37, no. 1, 2012, pp. 98-100, doi.org/10.7202/1066737ar.

Careri, Francesco. *Walkscapes: walking as an aesthetic practice.* Culicidae Architectural Press, 2017.

Cassone, Bryan J., et al. "Role of the intestinal microbiome in low-density polyethylene degradation by caterpillar larvae of the greater wax moth, *Galleria mellonella*." *Proceedings of the Royal Society B.,* vol. 287, no. 1922, 2020, doi.org/10.1098/rspb.2020.0112.

Chuong, Edward B. "The placenta goes viral: Retroviruses control gene expression in pregnancy." *PLoS biology*, vol. 16, no. 10, 2018, doi.org/10.1371/journal.pbio.3000028

Corcoran, Patricia, et al. "An anthropogenic marker horizon in the future rock record." *GSA Today,* vol. 24, no. 6, 2014, pp. 4-8. doi:10.1130/GSAT-G198A.1

Cox, Christoph. "Of Humans, Animals, and Monsters." *Becoming Animal: Contemporary Art in the Animal Kingdom*, edited by Nato Thomas, MIT Press, 2005, pp. 18-25.

Cox, Kieran D., et al. "Human Consumption of Microplastics." *Environmental Science & Technology,* vol 53, no. 12, 2019, pp. 7068-7074, doi: 10.1021/acs.est.9b01517.

Davis, Heather. "On Becoming Plural: Adaptions Workshop." Zooetics Symposium, 28 Apr. 2018, MIT. *zooetics.net.* Accessed 12 June 2019.

Davis, Heather, and Zoe Todd. "On the Importance of a Date, or, Decolonizing the Anthropocene." *ACME: An International Journal for Critical Geographies*, vol. 16, no. 4, Dec. 2017, pp. 761-80, www.acme-journal.org/index.php/acme/article/view/1539.

DeFreitas, Erika. "Glowing Objects and the Psychometric Interstice: An Interview with Erika DeFreitas." Interview by Jennifer Fisher, Gallery TPW, 2019, www.erikadefreitas.com/uploads/6/0/3/0/6030568/gallery_tpw_erikadefreitas_2019.pdf. Accessed 20 Jan. 2019.

Deleuze, Gilles and Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia,* translated by Brian Massumi, U of Minnesota P, 1987.

Dubois, Sara. "Grey Squirrels in Canada – Invasive Species or Scapegoat?" *Island Conservation*,

9 May 2017, www.islandconservation.org/grey-squirrels-canada. Accessed 12 Feb. 2018.

Emry, Robert J., and Richard W. Thorington Jr. "The Tree Squirrel Sciurus (Sciuridae, Rodentia) as a Living Fossil." *Living Fossils: Casebooks in Earth Sciences*, edited by Niles Eldredge and Steven M. Stanley, Springer, 1984, pp. 23-31, doi.org/10.1007/978-1-4613-8271-3_3.

"Erika DeFreitas: It is now here that I have gathered and measured yes." *Akimbo.* akimbo.ca/listings/erika-defreitas-it-is-now-here-that-i-have-gathered-and-measured-yes. Accessed 1 Apr. 2021.

"Ethology, N. (2)." *Merriam-Webster*, 2020, www.merriam-webster.com/dictionary/ethology.

Fisher, Jennifer. "Psychometry and the Affective Artifact*." C Magazine: International Contemporary Art,* no. 106 (Summer)*,* 2010. pp. 10-19.

Garneau, David. "Migration as Territory: Performing Domain with a Non-colonial Aesthetic Attitude." *VOZ-À-VOZ,* www.vozavoz.ca/feature/david-garneau. Accessed 30 Nov. 2020.

"Garry Oak (*Quercus garryana*)." *Vancouver Island Tree Stories,* www.vancouverislandtreestories.ca/tree-stories/garry-oak/. Accessed 12 March 2021.

Gilbert, Scott F. "Holobiont by Birth: Multilineage Individuals as the Concretion of Cooperative Processes." *Arts of Living on a Damaged Planet: Ghosts and Monsters of the Anthropocene*, edited by Anna Tsing et al., U of Minnesota Press, 2017, pp. 73-89 ("Monsters").

—. "Holobionts can evolve by changing their symbionts and hosts." *Feral Atlas*, Stanford UP, 2021. feralatlas.supdigital.org/poster/holobionts-can-evolve-by-changing-their-symbionts-and-hosts.

Gonzales, Emily K. "The Distribution and Habitat Selection of Introduced Eastern Grey Squirrels, *Sciurus carolinensis*, in British Columbia." *The Canadian Field-Naturalist,* vol.119, no. 3, 2005, pp. 343-350, doi.org/10.22621/cfn.v119i3.143.

Gonzales, Emily K., et al. "Positive relationship between non-native and native squirrels in an urban landscape." *Canadian Journal of Zoology,* vol. 86, no. 5, 2008, pp. 356-363, doi.org/10.1139/Z08-006.

Grauer, Perrin. "Ritual of Care: On Protecting Found Wildlife and Dreaming of Interspecies Friendship." *carollyne.com*, Oct. 30, 2020, www.carollyne.com/2020/11/ritual-of-care-on-protecting-found-wildlife-and-dreaming-of-interspecies-friendship-by-perrin-grauer-oct-30-2020.

Gruben, Maureen. "About the Artist." *Maureen Gruben,* www.maureengruben.com/about. Accessed 28 Mar. 2021.

Haraway, Donna J. *Staying with the Trouble: Making Kin in the Chthulucene.* Duke UP, 2016.

—. *Modest_Witness@Second_Millennium. FemaleMan_Meets_OncoMouse: Feminism and Technoscience.* Routledge, 1997.

—. *The Companion Species Manifesto: Dogs, People, and Significant Otherness*, Prickly Paradigm Press, 2003.

—. *When Species Meet.* U of Minnesota P, 2007.

Harnett, Cindy E.. "COVID-19 outbreak declared in rehab unit at Nanaimo Regional General Hospital." *Times Colonist*, 14 Apr. 2021, www.timescolonist.com/news/local/covid-19-outbreak-declared-in-rehab-unit-at-nanaimo-regional-general-hospital-1.24307390. Accessed 14 Apr. 2021.

Hwang, Yeen Ten, and Sarge Larivière. "A Test of Interspecific Effects of Introduced

Eastern Grey Squirrels, *Sciurus carolinensis*, on Douglas's Squirrels, *Tamiasciurus douglasii*, in Vancouver, British Columbia." *The Canadian Field-Naturalist,* vol. 120, no. 1, 2006, pp. 10-14.

Iversen, Margaret, editor. *Chance: Documents of Contemporary Art.* MIT Press, 2010.

Kostash, Myrna. "Baba's Other Children: The Ukrainian-Albertan "whitewash" overlooks a richer and more varied history." *Alberta Views,* 1 Sept 2017*,* albertaviews.ca/babas-other-children.

Loveless, Natalie. *How to Make Art at the End of the World*: *A Manifesto for Research-Creation*. Duke UP, 2019.

Montford, Kelly Struthers. "Towards a theory of multi-species carcerality." *Colonialism and Animality: Anti-Colonial Perspectives in Critical Animal Studies*, edited by Kelly Struthers Montford and Chloë Taylor, Routledge, 2020. pp. 277-296.

Moore, R. C., et al. "Microplastics in beluga whales (Delphinapterus leucas) from the Eastern Beaufort Sea." *Marine Pollution Bulletin*, vol. 150, 2019, doi:10.1016/j.marpolbul.2019.110723.

Parkinson, Gavin. *Surrealism, Art, and Modern Science: Relativity, Quantum Mechanics, Epistemology.* Yale UP, 2008.

Pauker, Magnolia. "Semiotics Structuralism Signs." *GSML 505: Research II: In + After the Field*, 23 Sept. 2019, courses.ecuad.ca/pluginfile.php/210295/mod_resource/content/GSML%20505%20F090%202_Semiotics%20%2B%20Lecture%20Lecture%20Slides.pdf, Emily Carr University of Art + Design, Vancouver. Lecture Slides.

"Propylene." *Science Direct*, https://www.sciencedirect.com/topics/chemical-engineering/propylene. Accessed 17 June 2021.

"Province of British Columbia, Ministry of Environment. Alien Species Alert! Have you seen this squirrel in your area?*"* www.env.gov.bc.ca/van-island/wildweb/pdf/alien_sp_alert_brochure291009.pdf. Accessed 20 May 2019.

Ragusa, Antonio et al, "Plasticenta: First evidence of microplastics in human placenta." *Environmental International*, vol. 146, 2021, doi.org/10.1016/j.envint.2020.106274. Accessed 10 Feb. 2021.

Reo, Nicholas J., and Laura A. Ogden. "Anishnaabe Aki: an indigenous perspective on the global threat of invasive species." Sustainability Science, vol. 13, 2018, pp. 1443-1452, doi.org/10.1007/s11625-018-0571-4.

"Squirrel pictured carrying plastic bags to build nest in Haringey." *Enfield Independent,* 25 Feb. 2020. www.enfieldindependent.co.uk/news/18259760.squirrel-pictured-carrying-plastic-bags-build-nest-haringey. Accessed 26 Feb. 2020.

Tsing, Anna, et al. *Arts of Living on a Damaged Planet,* U of Minnesota Press, 2017.

Watts, Vanessa. Re-Meaning the Sacred: Colonial Damage and Indigenous Cosmologies. 2016. Queen's University, PhD dissertation. hdl.handle.net/1974/15058. Accessed 12 June 2019.

Wilson, Shawn. *Research Is Ceremony: Indigenous Research Methods.* Fernwood Publishing, 2008.

Yardley, Carollyne. "Share your Squirrel or Deer Story: questionnaire." *Carollyne.com*, www.carollyne.com/share-your-squirrel-deer-story. Accessed 19 Oct. 2020.

—. *Squirrealism: Carollyne Yardley, Artist,* Carollyne Yardley Omnimedia*,* 2013.

"Zoe Todd and Heather Davis in conversation with Tatiana Mellema." *Spill Radio* from CiTR 101.9 FM*)*, 2019, spillradio.podbean.com/e/zoe-todd-and-heather-davis-in-conversation-with-tatiana-mellema. Accessed 15 Sept. 2020.