

**TOWARD DECOLONIZING FOOD LITERACY EDUCATION: CO-CREATING A
CURRICULUM AT LACH KLAN SCHOOL WITH GITXAALA NATION**

by

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Abstract

Food is and has always been at the heart of what defines *diduuls*, or a “good life,” for Gitxaala Nation. Like First Nations across Canada, Gitxaala continues to experience the lasting effects of colonization, impeding community access to traditional territories and relationships supporting hunting, gathering, fishing, cultivation and trading of Indigenous foods. The profound dietary shift as a result of colonization has contributed to disproportionately high rates of food insecurity, diet-related health issues, and barriers to the transmission of cultural knowledge around Gitxaala foods.

In response, Gitxaala Nation’s community garden program, developed out of the Remote First Nations Food Systems Project, a governmental initiative run by British Columbia’s Ministry of Agriculture from 2012-2014, is aimed at addressing these issues by providing a space for knowledge sharing, community cohesion, and serving as a local, sustainable means of producing nourishing foods outside the market. At the same time, food sovereignty has emerged as a movement and framework for Indigenous peoples in Canada that emphasizes strengthening traditional food practices, food-sharing and trading networks in order to support community health and well-being. For Indigenous peoples of Canada, food sovereignty is also about the right to feeding and teaching children about foodways rooted in community knowledge, stories, memories, and wisdoms.

This thesis, founded in Indigenous theory and the principles of food sovereignty, explores how the Gitxaala community garden and the summer reading program at Lach Klan School can be leveraged to provide a platform for learning - or, ‘food literacy’ - as a pathway through which to support Indigenous knowledge traditions and contribute to achieving the tandem goals of food security, food sovereignty, and ultimately the concept of *diduuls*, or the ‘good life’ (relationship

building to land, well-being, culture, community). By enhancing the engagement of students with their food system through hands-on learning activities that integrate local, Indigenous language and knowledge, this research suggests that food literacy activities have the potential to contribute to the goals of food sovereignty in Lach Klan by better equipping students to define, demand and make decisions that shape what their food system looks like now and into the future.

Lay Summary

Food is and has always been more than a source of physical nourishment for Gitxaala Nation; it is a way of life, a source of pride and integral to community wellness. This research explores how the Gitxaala community garden and the summer reading program at Lach Klan School can be leveraged to provide a platform for learning - or, 'food literacy' - as a pathway toward achieving the broader goals of food security and food sovereignty. By enhancing the engagement of students with their food system through hands-on learning activities that integrate local, Indigenous language and knowledge, this research suggests that food literacy activities have the potential to contribute to the goals of food sovereignty in Lach Klan by better equipping students to define, demand and make decisions that shape what their food system looks like now and into the future.

Preface

This Master's thesis is the original work based on fieldwork conducted by the author, Ada Smith, from March through August 2017. Drafts of this thesis were informed and reviewed by her supervisor, Dr. Charles Menzies, and committee members Dr. Caroline Butler and Dr. Hannah Wittman, who provided content and editorial suggestions. Ethics approval for the fieldwork reported throughout was obtained from the University of British Columbia's Behavioural Research Ethics Board, certificate number #H17-00727. The Gitxaala Health Centre approved all fieldwork occurring in partnership with the Gitxaala community garden program and Lach Klan School and all research activities within the Gitxaala community in Lach Klan were reviewed by Gitxaala Environmental Monitoring and the Gitxaala Health Centre.

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¹ The author received informed consent to share the names of people and places in this thesis; thus, no names have been changed.

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and friends for their listening ears as I've reflected on this experience -- they have all been part of this journey.

Dedication

This work is dedicated to all those who are and aspire to live in a harmonious relationship to the land around them, as a good relative, and who seek *diduuls*, in Sm'algyax meaning the “good life,” toward the benefit of themselves and all beings. Thanks, and gratitude to you all. This research project is really the beginning of a conversation – an unfinished story – that is dedicated to those who will take part now and into the future.

Chapter 1: Introduction

This research seeks to describe and share the co-creation of food literacy resources rooted in Gitxaala culture, language, land, and community, that could help acknowledge and expand the positioning of Indigenous knowledge alongside “Western” definitions of literacy and promote well-being among Gitxaala youth. This research explores how the Gitxaala community garden and the summer reading program at Lach Klan School were leveraged to provide a platform for learning, or for ‘food literacy,’ that can support broader goals of food security and food sovereignty. This project is an example of a specific, local action that addresses global concerns around how Indigenous food sovereignty can be ‘operationalized’ in practice, how Indigenous knowledge is used in food systems education, and the role/relationship of education or ‘food literacy’ to achieving the goals of food sovereignty.

This research recognizes the influence schools have had and continue to have on redefining relationships between people and food within First Nations communities. Today, schools have the opportunity to provide hands-on opportunities for students and staff to engage with the food system at all levels, to learn about the connections between food, health, and the environment in a way that is rooted in local history and traditions, and to harnesses community values and desires. The resources and activities developed out of this research promote an educational process that focuses on schools as important spaces for learning and shaping children’s relationship to food. The research process made clear that any attempt at transformative education must strengthen relations between people and place – between teachers, students, community, and everyone to the land on which they live. Moreover, the revitalization and resurgence of Indigenous knowledge and its intellectual traditions often involves a diverse range of people working together; this project engaged members of Gitxaala community, both

Indigenous and non-Indigenous, to develop contemporary resources and materials/curriculum built on reciprocal respect for strengthening this system while supporting Euro-Western knowledge systems that are also of value to the Gitxaala community. By enhancing the engagement of Gitxaala students with their food system through hands-on learning activities as well as food literacy activities that integrate local, Indigenous language and knowledge, the hope is that these students will be better equipped to define, demand and make decisions that shape what their food system looks like now and into the future.

In Chapter 1, I begin by introducing Gitxaala, people and place, the context in which this research takes place, with particular emphasis on the concern this research emerges from around the contributions of colonization to the erasure of Indigenous foodways. I introduce the Gitxaala community garden program, its history, organizational structure, and the strengths and challenges of this program to achieve community goals and concerns around improving food security and community health.

I introduce the Lach Klan summer reading program, its purpose to improve literacy in reading/writing among Gitxaala students ages 4-7 and present a rationale for this program as an avenue for expanding the definition of literacy to include food literacy, that honors both Western and Indigenous knowledges. I present the rationale for the partnership between these two programs as a potentially fruitful venue for food systems initiatives to reflect the goals of the Gitxaala community.

In this Chapter 2, I begin by outlining the research questions and objectives that evolved and emerged throughout my research journey and that guide this thesis. I then situate myself in this research, addressing my positionality and the transformative process through which I came to be involved in this research. I discuss my methodology, rooted in Indigenous methods, that

prioritizes an emergent process of relationship-building above all else. I go on to describe the theoretical framework of this research, based in Indigenous theory, Indigenous knowledge in education, and Indigenous food sovereignty. I define food security, food sovereignty, and food literacy as they combine to form the conceptual framework for the project.

In Chapter 3, I explore how community garden programs might serve as a proposed pathway for institutions (BC government, health clinics, schools etc.) to address the aforementioned three concepts for “remote”² First Nations communities. I explore how this type of project has manifested at the local level using the Gitxaala community garden as a case study, suggesting that one of its strengths lies in the opportunity for the garden space to facilitate educational opportunities around food.

I begin by describing my main role in the village during my research, which involved developing food literacy resources and activities at Lach Klan School. The process of developing these resources illuminates some of the challenges of putting the idea or theory of decolonized, place-specific, and culturally relevant resources into action at the community level. This insight offers grounded evidence for what food literacy, an otherwise somewhat nebulous concept, can look like and what its strengths and limitations are as a mechanism toward realizing food sovereignty for Gitxaala. Given that scholarly discourse around food literacy has focused primarily on public school districts/systems in urban areas, this study, in the context of Indigenous research with an Indigenous community, offers a clear example of the need for food literacy and food sovereignty programs to manifest with great attention to local context. With the

² Remoteness is a relative term. For the Canadian government, difficulty of access via roads, infrequent flights, and/or phone and radio disruptions is what categorizes Gitxaala as a “remote” First Nations community. To Gitxaala people, their territory is not remote. Gitxaala people have been living in their *laxyuup* (territory) for millennia and remain intimately familiar with their home (Menzies, 2016).

right attention to community goals and needs, this research argues that there is opportunity for grassroots efforts to enhance institutional food system programs toward food sovereignty.

1.1 Gitxaala: People and Place

Gitxaala have lived on the northwestern coast of North America without interruption for millennia. Since then, Gitxaala people, also known as Git lax m'oon, or, people of the saltwater, have inhabited their *laxyuup* (territory), stretching from Tsibassa's oolichan grounds on the Nass River south through Prince Rupert, encompassing much of the mouth of the Skeena river and south to Aristabel Island (Menzies, 2016). The long-established tribal structure, *ayaawk* (laws) and *Sm'algyax* language of Gitxaala people have remained important aspects of what makes Gitxaala people *Gitxaala* in the face of the changing social, political, and geographical landscapes in the place they call home over the course of history.

Today, there are 1,900 members of Gitxaala Nation and around 400-450 individuals live year-round in the village of *Lach Klan* (also referred to as Kitkatla) which is situated approximately 45km southwest of Prince Rupert on what is known today as Dolphin Island on British Columbia's northern coastline. While Lach Klan has been occupied by Gitxaala people throughout their history, it became an especially important gathering place after foreign diseases brought by Europeans in the late eighteenth-century led to a significant population collapse (Menzies, 2016). The village is a 25-minute float plane ride to/from Prince Rupert (where the nearest supermarket and hospital are located) or can be accessed via a two and a half hour, twice-weekly ferry or boat ride. During the 1880s, the Canadian Government designated Lach Klan as one of 21 Gitxaala "reserves," and, due to its isolated geographic location from a Euro-Canadian centre, Gitxaala Nation is classified by the Canadian Government as a "remote Indigenous

community” and thus accesses initiatives aimed at these populations (Government of Canada, 2011).

Gitxaala Nation’s geographic location coupled with the effects of colonization has impacted Gitxaala residents’ ability to access healthy foods and generated community wide-food insecurity (Anderson, 2016). Gitxaala are first and foremost “people of the saltwater” whose relationship with the sea and the sustenance that it provides is of utmost importance to Gitxaala culture, community and livelihoods. This is evident in the current focus of community targets to protect marine resources (*Diduuls: A Good Life*, n.d.; Menzies, 2016). While plant food cultivation has taken a secondary role in the Gitxaala food system, both historically and to this day, increasing access to healthy foods other than marine food resources is also a community priority (*Diduuls: A Good Life*, n.d.). However, the transportation costs associated with getting imported fresh foods (such as cultivated fruits and vegetables) to Gitxaala’s remote location make eating fresh produce prohibitively expensive and scarce for the community, of which 75-85 percent rely on social assistance (Anderson, 2016). And while some of the healthiest foods are “traditional” foods located in the waters right around Lach Klan, these foods have been made less accessible by colonial policy as well as the adverse economic conditions with which Gitxaala Nation lives (Anderson, 2007; Lutz, 2008). Food insecurity and a shift in Gitxaala residents’ diet over the 20th century from mostly “traditional” food to predominately non-traditional food has contributed to disproportionately high rates of Type 2 diabetes and other diet-related illness (Anderson, 2007).

Despite the lasting legacy of colonization, Gitxaala food-ways, language, and traditions remain strong, and continuing to strengthen them is a top priority for the Gitxaala community. Gitxaala has fluent Sm’algyax speakers and the language is an ongoing part of education in Lach

Klan. Feasts, drumming, dancing, and the transmission of *ayaawx* (laws) continue play an important role in the community and food harvesting, hunting and traditional processing and preparation makes up a substantial part of Gitxaala diets. It is imperative that programs, policies, and people intending to support the Gitxaala community not only recognize, but also build upon and celebrate the knowledge and practices already within community that support wellness.

1.2 A Note on Gardening for Indigenous Peoples of the North Coast

Gardening is not new to Indigenous peoples of British Columbia's North Coast. Since time immemorial, northern coastal First Nations have been "gardening" or carefully managing and cultivating plant food resources (McDonald, 2003; Turner & Turner, 2008). Plant management, or a form of "gardening" of the past, was used to conserve plant resources, enhance their production and selectively improve the crop. Plant foods of particular importance "gardened" by Indigenous peoples on British Columbia's north coast included, but were not limited to; a wide range of berries, root vegetables (including springbank clover *Trifolium wormskioldii*) and camas (*Camassia* spp.), and fruit such as the Pacific crabapple (*Malus fusca*) (Turner & Turner, 2008).

More specifically, throughout the nineteenth and twentieth century Gitxaala people maintained gardens for crops like potatoes in and around fish harvesting locations. Matriarchs Agnes Shaw and Charlotte Brown described life, fishing, and gardening practices growing up in their father, William Lewis' territory, on the west coast of Banks Island. In addition to shellfish, sea mammals, seaweed, deer, and several species of berries "the people also maintained a garden out on Lax t'xal that was noted for its large white potatoes" (Menzies, 2016 p. 145). Gardens

were found at nearly all these sites. Just off the coast of Lach Klan, for example, is one entire small island that used to be gardened.

Colonization, and the establishment of property laws and the reserve system that came with it at the end of the 19th century, has undermined many of those plant management regimes. Formerly managed sites have grown over or gone unused as a result of recent social disruptions caused by settler diseases and the introduction of industrial food production systems (Baloy, 2007; McDonald, 2007; Menzies, 2016). A reduction in use of traditional plant foods and the discontinuation of traditional gardening practices coupled with increasing costs of fresh imported plant foods in the market (and the transportation associated with getting them) has led to a dietary shift to exclude both “traditional” and “non-traditional” plant foods among Indigenous peoples, particularly in remote communities (Menzies, 2016).

This shift from traditional diets to “Western diets” is a key element underlying the epidemic of diet related diseases among the Indigenous population of Canada. Among Canada’s First Nations population, over 50 per cent are either obese or have Type 2 diabetes, or both, and incidences of heart disease are 1.5 times higher and rates of type-2 diabetes are three to five times higher than for the general population (BC Ministry of Health, 2006). While there are a range of considerations that contribute to the origin of these diseases – including genetics, lifestyle, socio-economic factors, poor quality housing, a sedentary lifestyle, levels of education – the shift to Western diets due to the widespread prevalence of poverty among Indigenous people of Canada has been identified as a key cause. In Canada, the Indigenous population is the poorest sector of the general population and the most affordable and accessible fare is often that with the lowest nutritional quality (Turner & Turner, 2008).

1.3 The Gitxaala Community Garden

For Gitxaala Nation, developing a community garden program and a ‘Food of Our Own’ traditional food workshop program have been priorities for many years and currently form part of a larger community wellness plan. The community garden evolved out of efforts that began in 2007 to support individuals who were interested in having household garden beds. This project was initiated by Merle Bolton, the social development officer in community at the time (Baloy, 2007). The project grew out of desire to encourage knowledge sharing around the many aspects of gardening (planting, transplanting, seasonality, etc.) and was highly social from the beginning (Baloy, 2007).

Funding from both the Produce Availability Initiative (2009-2011) and the Remote First Nations Food Systems Project (2012-2014), governmental initiatives run by British Columbia’s Ministry of Agriculture and Ministry of Health, helped support the development of the Gitxaala community garden that exists today. These initiatives were intended to be collaborative efforts to support First Nations communities in revitalizing their own food systems. The Remote First Nations Food Systems Project was led by the Heart & Stroke Foundation in collaboration with Ministry of Health and Ministry of Agriculture and funded by Provincial Health Services Authority of BC. Fifteen First Nations communities were involved in this project, including Gitxaala Nation (Kitkatla First Nation Community Agri-Food Plan 2014). Out of this initiative, Gitxaala formulated a “Community Agri-Food Plan” to outline the current status of food in the community and goals for the immediate and long-term future. From this plan, the vision for the community garden program was developed along with a program called “Food of Our Own.” The goal of the “Food of Our Own” program was to support and celebrate traditional food harvesting, preparation, and preservation through workshops where knowledge sharing and skill

building could take place. Together, the benefits of these programs are intended to be multifaceted, from improving access to healthy, fresh and affordable food, especially for prenatal women and Elders, to providing opportunities for youth and interested community members to grow their own food. The garden program in conjunction with “Food of Our Own” programming explicitly aims to address food security, food literacy and ultimately reclaim food sovereignty for Gitxaala Nation (Kitkatla First Nation Community Agri-Food Plan 2014). Funding for the gardening program resumed in 2017. The Heart and Stroke Foundation, under the auspices of the First Nations Health Authority started “developing a comprehensive strategy that includes heart disease research, food access etc. This shift includes guaranteed funding that will augment programs such as the Gitxaala Home and Community Care program’s work on chronic diseases such as diabetes” (Cindy Ignas, personal communication).³

Today, Gitxaala’s community garden is comprised of raised beds, a large greenhouse, a seed-starting house and a tool shed. The vision incorporates aspects of permaculture design, a model that promote holistic thinking around the concepts of “earth care, people care and fair share” (Cindy Ignas, personal communication)⁴. Community members can “adopt” a raised bed to care for and plant their own seeds, or, they can choose to help care for “community beds.” The construction of the greenhouse in 2016 was a major community effort, requiring hundreds of hours of community volunteer labor, reflecting the strengths of the community to reach their goal of increasing local food production. The Gitxaala community has tried to grow a range of vegetables and herbs with donated and purchased seeds, but the community has had the most

³ Email communication in author’s file, April 8, 2018.

⁴ Email communication in author’s file, April 8, 2018.

success with just a few crops, including strawberries, kale, potatoes, lettuce and hearty herbs such as mint. In 2016, the green bean, pea, and onion crop yields also demonstrated these vegetables are viable for the growing conditions and tomato plants grow well in the greenhouse (Cindy Ignas, personal communication).⁵ These are very different than traditional crops, which included foods such as wild crabapple and berries (Menzies, 2016). The North Coast climate with relatively cool temperatures, lots of rain, and limited sunlight, has been a big determining factor for the success of the garden. Dolphin Island does not have much topsoil, so buying and barging in enough soil for the raised beds has proven to be another key element in the success of crops.

Establishing community garden programs in First Nations communities, like Gitxaala, has great potential in addressing the multifaceted challenges of poor diets and health outcomes, food insecurity, and the transformation of Indigenous knowledge around the cultivation and consumption of traditional foods. However, it is important that more attention is given to understanding the challenges and opportunities of this program as it manifests in specific, local contexts. Recovery from the complex issues associated with the transformation of traditional plant food use and foodways will require efforts that are aimed as much at healing physically (from diabetes and other diet-related illness) as they are about healing, ultimately, from colonialism, and re-empowering communities to create their own just and sustainable food systems.

⁵ Email communication in author's file, April 8, 2018.

1.4 Language, Literacy, and Food Literacy: Lach Klan Summer Reading Program

A central goal of the Gitxaala community garden is to provide a safe learning and sharing space for community members of all ages, with a strong emphasis on engaging youth. In an effort to harness the educational potential of the garden and increase its reach to more youth, partnering with students and teachers in the Lach Klan summer reading program was a natural fit. The main objective of the reading program is to reduce the loss of reading and handwriting skills over the summer, otherwise known as the “summer slide,” among students ages 4-7 years. While the emphasis of the program is on improving literacy in its most basic definition (i.e. the ability to read and write), given the tandem educational goals in Gitxaala to teach children about healthy food and traditional foodways, incorporating garden and food related activities was an attempt to expand the definition of literacy to include food literacy in this context.

Food literacy is a relatively new term and concept that has been used as a “guiding template” of sorts for academics and practitioners, such as myself, whose work is located at the nexus of education and advocacy. Food literacy is, as Cullen et al. (2015) have defined it, “the ability of an individual to understand food in a way that they develop a positive relationship with it, including food skills and practices across the lifespan in order to navigate, engage, and participate within a complex food system. It’s the ability to make decisions to support the achievement of personal health and a sustainable food system considering environmental, social, economic, cultural, and political components” (Cullen, Hatch, Martin, Higgins, & Sheppard, 2015).

In developing scholarly discourse, food literacy has been recognized as a mechanism for individual and social change to support the goals of food sovereignty. As Cullen et al (2015) posit, food literacy encompasses more than a person being “educated” about food, but aims to

“empower people to engage in society and influence their local food systems” and “bridges the individually focused learning outcomes of food skills education with the more emancipatory and collective ideals of community food security” (Cullen et al., 2015, p.143).

Food literacy as an avenue to create a deeper level of food system engagement has been controversial. One major criticism is that food literacy programs may be too heavily focused on individual behavior change at the expense of overlooking the structural constraints and avenues of change for greater food system sustainability (Kimura, 2011; Sumner, 2015). Moreover, in this context it should be recognized that the term “food literacy” may be problematic, with roots in the Western term “literacy,” which has historically negated Indigenous language and ways of knowing. Now, there is opportunity to redefine what these terms mean in process and practice.

As Cullen et al (2015) highlight, food literacy and literacy cannot be separated from their environmental or social context. This research and the programming it supports aims to provide an example of how the theoretical concept of “food literacy” can be mobilized at Lach Klan School in Gitxaala; a context where celebrating intercultural competence, multilingualism, and culturally relevant knowledge, skills and relationships with food is a priority.

Chapter 2: Research Beginnings

2.1 Research Questions & Objectives

This research emerged out of my interests in the connections among food, culture, history, health, and education in Gitxaala Nation and their vision for the Gitxaala community garden program to provide a space for learning and building healthy relationships with food. This research is also based in an ongoing interest in exploring the bio-cultural heritage and foodways of Gitxaala Nation and how colonialism, global capitalism, and institutional/structural violence have impacted Indigenous peoples' sovereignty as it relates to food, health, and education. I aimed to explore how these histories influence the lived experiences of those involved in the community garden and summer reading program – programs aimed at achieving greater sovereignty, 'knowledge' and health in Gitxaala today. I wanted to know what role the community garden might play in influencing food security in Gitxaala and community ability to engage in food-related activities identified as important and meaningful to achieving community wellness (*Diduuls: A Good Life*, n.d.). I also wanted to know how Lach Klan School and the summer reading program in particular, as a central and important place, physically and conceptually, for hosting community gatherings and nurturing community knowledge and holistic health, engaged with the garden and/or learning around food and land, given their centrality in Gitxaala culture as the foundations for well-being. Specifically, I asked:

- How can integrating decolonized food literacy resources/activities facilitate food sovereignty goals in Gitxaala?
- How education in Lach Klan serves to better facilitate relationships with food and the land and fundamental conditions for living *diduuls*, meaning the “good life” in Gitxaala?

2.2 Diduuls: A Good Life

This research is significant given the importance of *diduuls*, translated loosely as “a good life” from Sm’algyax, to well-being for Gitxaala. For Gitxaala, “wellness implies wholeness” – it implies that physical, mental and spiritual needs are met among individuals and the entire community (*Diduuls: A Good Life*, n.d.). Well-being for Gitxaala stems from the concept of *Sayt Goolm Goot*, translated in English as “Of One Heart” that is an approach to health which prioritizes community relations and entails a sense of solidarity among individuals. These relationships position food as more than a commodity, but rather as medicine, as a powerful source of community knowledge, story, and ceremony, and as a pathway for connecting community. This perspective on food as a vehicle toward total wellness is increasingly important against the ongoing global capitalism, reliance on wage labour, the increased consumption of processed foods, and the transformation of Indigenous knowledges across First Nations communities in British Columbia.

2.3 Situating the Author: The place from which I speak

This research grew, first and foremost, from my experiences and interaction with the Gitxaala community and their rich history and knowledge of food and the land in their *laxyuup*. But the lens through which my research journey took place includes my own history and relationship with food and the environment. In all research, but especially settler research with Indigenous communities, it is critical for researchers to locate themselves - to answer the question, from what “place” do you speak? (Absolon & Willett, 2005).

My parents always had their own, unique definition of the “good life.” I grew up in rural Wisconsin where my parents, both artists, decided to set up shop on an old farmstead on three and a half acres. There they transformed the old “hog house” and “milk house” into their studios, built a wood-fired, anagama kiln to fire their ceramic art, and tended a garden large enough to sustain our family with fresh produce almost year-round.

Life growing up was rich, but not luxurious. Harsh Wisconsin winters necessitated plastic-wrap on the old farmhouse windows for extra insulation - and on hot summer nights, my sisters and I would migrate downstairs for a slumber party in the living room. Needless to say, we were “in tune” with the seasons. The seasons also brought real riches; raspberry bushes loaded down with ruby colored gems, apples ready to be pressed into liquid gold in fall, potatoes equivalent to buried treasure, and the unwavering nightly ritual of sharing our garden fare around a candlelit dinner table.

My parents chose to live this way out of a value system - one that prioritizes protecting the integrity of the land on which we called “home” and cultivating an intimate knowledge of it. This provided me a kind of “education” that has come from the roots up. For my sisters and me, our home and backyard was fertile ground for learning: learning that was self-driven, from simple curiosity and a desire to know.

It was only here in Vancouver that I learned that my childhood home is the land of the Ho-Chunk (Winnebago) peoples and I still only have a vague idea of where my own family roots come from (France, Scotland, and perhaps other parts of Europe). That is to say that my ancestry was never the lens through which I understood my values. However, this research has prompted me to dig deeper into understanding my own personal history and the way my parents’ way of

life has contributed to my current interest in land-based education, sense of place, and exploring what constitutes the ‘good life’ for myself and others.

In a rapidly globalizing world, I am not alone in feeling disconnected from my ancestry and from a cohesive community that shares similar values to my own. Today we are experiencing what writer Wendell Berry has called a “crisis of culture”;

We now have more people using the land (that is, living from it) and fewer thinking about it than ever before. We are eating thoughtlessly, as no other entire society ever has been able to do. We are eating -- drawing our lives out of our land -- thoughtlessly. If we study carefully the implications of that, we will see that the agricultural crisis is not merely a matter of supply and demand to be remedied by some change of government policy or some technological ‘breakthrough.’ It is a crisis of culture. (Berry, 1977, p. 38)

It is from this lens of wanting to understand how we can go from using the land and eating food “thoughtlessly” toward recreating healthy relationships with between land, food, and community. Given the centrality of relationality and reciprocity in many Indigenous ontologies around food and the land and a desire to understand how colonialism has impacted how these values are able to be expressed “on the ground” or in practice, I found my way toward this research.

2.4 Research Methodology: Reflections & Reflexivity

My research began as a conversation. In the spring before my summer “fieldwork” was to take place, an exploratory research trip to Lach Klan was arranged where the objective was mainly to talk to community members about what they envisioned for the garden project and other food-related programs for the summer season and where they might want support. This research project builds upon more than two decades of collaborative research projects between Gitxaala Nation and the University of British Columbia that have actively engaged Gitxaala

community members and UBC students in community oriented research. It is through these established relationships that channels of communication were opened up to me.

Through meetings I had with Cindy Ignas, director of the Gitxaala Health Centre, and community members involved in the garden project in years past, it became clear that engaging youth in the garden and food related activities was a priority for the Gitxaala community. It was only a coincidence that on my flight up to Prince Rupert I met Keri Taylor, teacher of grades K-1 in Gitxaala. We made the connection that we would both be in Lach Klan over the summer – she was teaching a summer reading program for students (Kindergarten through 3rd grade) and I would be there doing my research. Utilizing the summer reading program as an entry point through which to engage youth with the garden seemed like a natural fit given my interest and experience working with children in an outdoor classroom setting and the positive feedback I received upon presenting the idea to community members I spoke with. This first phase was intended to set the tone of my research journey with Gitxaala, to start the conversation, ensuring that, from the outset, it was a respectful and reciprocal exchange.

The conversational approach I took from the beginning centers Indigenous Knowledge traditions and methods of gathering information that follows spiritual, communal and holistic principles (Kovach, 2010; see also, Dwyer 1982 for an early anthropologist example from Morocco). By choosing a conversational approach I am attempting to locate my method in a way that respects Gitxaala sensibilities while acknowledging my subject location as a settler researcher. The research conversations are dialogical, reflective, and relational. They position the researcher as both participant and observer.

Linda Tuhiwai-Smith writes, “The intellectual project of decolonizing has to set out ways to proceed through a colonizing world. It needs radical compassion that reaches out, that seeks

collaboration, and that is open to possibilities that can only be imagined as other things fall into place” (Smith, 1999, Foreword, xii). As a settler researcher, my approach has been to attempt to subsume my sense of entitlement and privilege through quiet listening and conversation in a way that respects the decolonial program Tuhiwai-Smith describes.

It is from this perspective that I set up my intention to practice “decolonizing research” that centers collaboration and reciprocity, or the obligation to be actively supporting a community vision in return for the opportunity to engage in learning myself - where both the research process and outcome aimed to support Gitxaala’s effort toward cultivating a community garden program that will provide a more sustainable mode of food production for the community while offering fun learning opportunities for youth. During my fieldwork in July and August (2017), I worked with Gitxaala Health Services staff and teachers at Lach Klan School (K-12, specifically with Grades 1-3) to bring community garden and ‘food literacy’ activities into the summer reading program and school curriculum. Gardens offer a space where students can engage in experiential learning about a range of topics from plant growth to life cycles. During the months of July and August, I worked with Lach Klan School teachers and community members to facilitate the engagement of students in the growing, processing, harvesting, and preparation of food procured from the garden and greenhouse as a way to both complement curricular activities while working toward achieving Gitxaala Nation’s goal of engaging youth in food-related activities (Kumar, 2014)(Kitkatla First Nation Community Agri-Food Plan 2014).

2.5 Transparency, integrity, truth and relationships toward decolonizing research

In a workshop I attended on “decolonizing research methodologies,” I was reminded that methodology refers to an approach, whereas methods refer to the actual things you do. In a

decolonizing research approach, it is essential, then, to be transparent not only in the intent of our work, but also in the process and practice of it. As researchers engaging in explicitly “decolonizing research” it is essential to move beyond just the rhetoric of describing how the approach was “decolonizing” without giving equal attention to the follow through.

As Tuhiwai-Smith writes, the word itself, ‘research,’ is probably one of the dirtiest words in the Indigenous world’s vocabulary (Smith, 1999). Today, that sentiment of mistrust can still be felt. If done without careful attention to process, research has the potential to be used in an exploitive manner, using Indigenous peoples, their culture, their knowledge, and their resources to the benefit of science or the academy rather than communities they intend to serve.

This section follows an autoethnographic method which, (Ellis, 2004, p. 19) explains, can be hazardous as “not only your work but your personal life is scrutinized and critiqued.” I am willing to expose and share some of the more uncomfortable details of my research journey. With that, I am opening it up to judgement and scrutiny, but at the same time through sharing some of the intimate details it opens up possibilities for compassion, kindness, and greater levels of understanding.

During the first week of being in Lach Klan, I came to understand the lasting sensitivities around “research” and my responsibility to reflect on my position there as a “researcher.” I was sitting down with Cindy (director, Gitxaala Health Services and garden program director) and Myrna (principle garden caretaker) to ensure that every aspect of my involvement was clear; from community consent process to what the research would be used for after I left. Immediately, I could sense that this conversation about my involvement, stated explicitly as “research” (with admittedly much hesitation and fear on my part) disquieted Myrna. She said, “see I don’t like that word ‘research.’ There has been a lot of that here...people coming in and

telling us what we should be doing. And we're like, 'that's what we used to do.' *We know*. And people getting the facts wrong." My heart was pounding, realizing I was already associated with "people coming in," not knowing much about Gitxaala, providing and producing un-useful and even detrimental work. Cindy explained further the dynamic Myrna was referring to. She used an example where researchers have designated Gitxaala people as Tsimshian, a group of people who share aspects of their history and culture with Gitxaala, but who are not, for important reasons, Gitxaala. As Menzies notes, "non-Indigenous observers often overlook the role of silence as an act of dissent and disagreement. Within the Euro-American cultural tradition silence is seen as passive acceptance or lack of knowledge related to a subject under discussion. However, within Gitxaala and related Tsimshian groups, silence is an active form of disagreement and is understood as such. This has several serious implications in the context of contemporary research" (2016, p. 73). Silence is a tacit expression of disapproval. Menzies goes on to write, "Gitxaala oral accounts are replete with stories of visiting twentieth-century researchers who came, visited matriarchs and house leaders, sipped tea and ate cookies, and then left with none of the real history. Yet these same researchers often go on to write and publish accounts in which they profess expertise, even when the knowledge they sought was withheld from them. From within the Gitxaala frame of reference these researchers reveal their ineptitude (even when external agencies, such as governments or university publishers, accept at face value the inept researcher's findings)" (Menzies 2016, p. 73).

I came to understand that the silence that we, non-Indigenous individuals, often think of as "polite" often signifies a form of disagreement for Gitxaala. For someone like me who has been conditioned to seek verbal or written approval, Myrna's calm demeanor and silence in our initial conversations made me feel guarded about my work. The lack of immediate approval

upon my arrival made me question my objectives, if and how they aligned with those of Gitxaala, and if, in the short amount of time I had to do my fieldwork, my involvement in community would be of service to Gitxaala in a meaningful way. This questioning did not stop after my first official research meeting – it has been ongoing and iterative throughout the research and writing process.

As scholar Michael Marker (2004) writes, “Research is a slippery term ... The conventional academic use of the word refers to a systematic approach to gaining knowledge” that is in contrast and contradiction to Indigenous modes of gaining knowledge that prioritize “an individual’s relationships to people, animals, the landscape and an oral tradition framing a time-space arrangement.” That is to say that performing research utilizing Indigenous theory and methods begs the researcher to consider more than the surface themes of “collaboration,” “community-based,” and “participatory” methods. They require the researcher to engage with a “deeper level of moral conduct” (Marker, 2004) that prioritizes knowledge of self within the journey for knowledge.

2.6 Place-making in Lach Klan

During the first two weeks I was in the village, there were three deaths in community. Community protocols require that many of the normal community happenings come to a halt, which included the summer reading program, activities in the garden, and at the Health Centre. In lieu of not being able to do my research in the way I had originally envisioned, I became involved in the community in ways that I hadn’t planned to be; I attended the community feasts, funeral services, and joined the community choir.

I spent much time walking ‘the loop’ from one end of Lach Klan to the other, often with Keri, my newfound friend and colleague, and her dog Hunter. Since there wasn’t school to attend and help out with, I offered to help Myrna, the garden coordinator, with the maintenance and upkeep in the garden. It had been agreed that the students would visit the garden on her terms and she would be the principle leader of activities. But when I actually began to do things in the garden as we had talked about and started to engage in discussions about garden and food-related activities with the kids, Myrna continued to express her reservations about “research” she had in our initial meeting.

Myrna told me about how, as a woman of nearly of Elder status, she has witnessed many people come and go from Gitxaala with the intention of “helping” but, according to her, not getting much done. Over the course of a number of years, Myrna has pioneered efforts to inspire others into the community to start backyard gardens and a garden at the school. After her tireless efforts, people would “talk the talk” but not follow through. In our conversation, she told me how, just the other day, a few women said they’d come by to pick up strawberry plants she prepared for them to take home, but they never came. She then questioned why, after all of her efforts, I was there to try to help support and facilitate the same things. Myrna expressed that, even with my efforts this summer, it is not me who was going to help keep the programs going. She said, “It’s our community that’s going to do it, not you.”

It was in this moment that I truly started to question what Larsen & Johnson refer to as three place-based transformations in Indigenous research; transformations in existential place, social place, and conceptual place (Larsen & Johnson, 2017).

I questioned my *existential place* – *what was I doing there? Will this work make any real difference to the community? What is the value of my work beyond a way of supporting my own*

journey of becoming a scholar at an institution that is inextricably linked to a global economy built on the expropriation of Native lands?

I began to think critically about *social place*, or the colonial-discursive divisions of ethnicity, class, and power and the way in which the legacy of research with Gitxaala and their Indigenous relatives has engendered attitudes of suspicion and mistrust. This realization made me highly aware that (re)establishing relationships and trust was indeed *the* most important aspect to my research activity and that doing so meant letting go of the output-oriented research pressure I have carried with me as a result of the colonization of my own mind.

Finally, in the first few weeks of my research, my understanding of *conceptual place* deepened. I came to understand in a more nuanced way that, for Gitxaala youth, learning about their food system would necessitate moving beyond just the Western spaces of food production and sites of learning, such as the garden and the school. Moreover, community goals weren't just about the productive capacity of a physical place but were also about continuation of relationships to Gitxaala territory which encompasses water, land, animals, and people. This relationship-building emerges from individuals and families who are intrinsically motivated to regain their own sovereignty over knowledge-sharing and these efforts must continue to be recognized, supported and celebrated.

2.7 Theoretical Perspectives

This research is based in Indigenous theory and draws on the theoretical concepts and practices of Indigenous pedagogy and food sovereignty. These foundations prioritize relationships between colonial education systems and Indigenous epistemologies and ways of

knowing, between researcher and the people participating in the project, and the relationships between people, land, food, history, and the wider global market.

It is from these two perspectives that I use ethnographic methods to explore the ways in which the Gitxaala community garden project may enable land-based learning and food sovereignty in order to achieve community wellness.

2.7.1 Indigenous Knowledge in Education

Indigenous theories and knowledge can provide a concrete pedagogical approach to learning about landscapes. Broadly speaking, Indigenous scholars have described Indigenous Knowledge as ancient knowledge about community life, holistic well-being, and shared values - and as knowledge that it is adaptable and resilient (Menzies and Butler, 2006). Indigenous Knowledge is not a static thing that accumulates over time, but a process that shifts and evolves through interactions between beings in active relationships with each other (Menzies 2006).

Many Indigenous scholars call for a resurgence based on renewed Indigenous theories and systems of knowledge (Archibald, Aquash, Kelly, & Cranmer, 2009; L. B. Simpson & Manitowabi, 2013; Young, 2015). Simpson (2014) advocates for radical break from state education systems and a reclamation of “land *as* pedagogy.” Simpson suggests that Indigenous pedagogy happens outside of the colonial education system (L. B. Simpson, 2014). In her book, *Dancing on our Turtle’s Back*, Simpson asserts that languages are an important foundation for Indigenous pedagogy – that they “house our teachings and bring the practice of those teachings to life in our daily existence.” Furthermore, she states that, as an extension of language, “Storytelling is most powerful in terms of transformation in its original cultural context” (L. Simpson, 2011).

Today, Indigenous Knowledge and ways of knowing continue to take a back seat to Western knowledge systems in the present-day education system that is the status quo for First Nations communities on and off-reserve. In light of the “colonizing knowledges” (Smith, 1999) that have prioritized particular kinds of information in schools in the past, the question now is can, or how can, that system begin to decolonize, or “indigenize,” and integrate pedagogical pathways to uphold both Western and Indigenous Knowledge that is valuable to communities. Organizations like the First Nations Education Steering Committee in BC have been leading the way toward indigenizing the K-12 curriculum.

In this research, I engage with ideas of Indigenous pedagogy and the ways in which land-based education may provide a pathway through which to revive Indigenous knowledge traditions and contribute to achieving *diduuls*, or the ‘good life’ (relationship building to land, well-being, culture, community).

2.7.2 Indigenous Food Sovereignty

The food sovereignty movement has taken hold as a response and reclamation of traditional food systems by Indigenous people in Canada and around the globe and offers a framework to understand and revitalize the increasingly ecologically unsustainable, unaffordable, unhealthy and socially unjust food systems in which Indigenous people in Canada and worldwide are living.

Food sovereignty is a set of ideas about democratizing access to resources and political power (Iles & Montenegro de Wit, 2015) and revolves around three core objectives of ecological sustainability, distributive justice and procedural justice. It is rooted in the international peasant movement La Via Campesina which defines it as, “the right of each nation to maintain and

develop its own capacity to produce its basic foods respecting cultural and productive diversity” (*Declaration of Food Sovereignty Via Campesina*, 1996). Food sovereignty emerged as a paradigm that claims to represent authentic food security (Patel, 2009). While food security is defined as existing “when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO, 1996), a current widely-accepted definition of food sovereignty is, “the right of people to healthy and culturally appropriate food produced through ecologically sound and sustainable methods and the right to define their own food and agriculture systems” (Nyéléni Forum for Food Sovereignty, 2007).

Foundational principles of food sovereignty include; 1) ensuring right to food; 2) improving opportunities for citizen engagement in food system restructuring; 3) ensuring adequate livelihoods for food providers and; 4) improving environmental sustainability (Martínez-Torres & Rosset, 2010; Nyéléni Forum for Food Sovereignty, 2007; Patel, 2009; Windfuhr & Jonsén, 2005). However, achieving food sovereignty in practice and the mechanisms for operationalizing this concept lack clarity (Desmarais & Wittman, 2014).

In Canada, the food sovereignty movement was introduced through the work of the National Farmers Union (NFU) and the Union Paysanne, two Canadian members of La Via Campesina and is articulated in different ways among the various actors – producers, consumers, urban food organizations, and Indigenous people – to name a few (Desmarais & Wittman, 2014).

Food sovereignty for Indigenous people in Canada emphasizes revitalizing traditional food practices, food-sharing and trading networks to achieve Indigenous health and well-being (Desmarais & Wittman, 2014). Based on discussions that took place at the 1st Annual Interior of B.C. Indigenous Food Sovereignty Conference (IFSC 2006), four main principles were identified

by Elders, traditional harvesters, and community members as essential tools in efforts toward food sovereignty:

- 1) The idea that “*Food is sacred*”;
- 2) *Participation* of individuals on a daily basis in maintaining traditional harvesting strategies;
- 3) *Self-determination* or the ability of people to make decisions around the quantity and quality of food they procure; and
- 4) *Legislation and Policy Reform* (Morrison, 2011).

In 2011, the People’s Food Policy Project, an initiative of Food Secure Canada, released their report, “Resetting the Table: A People’s Food Policy for Canada” which outlined the following seven principles of food sovereignty in Canada;

- 1) Focuses on Food for People
- 2) Values food providers
- 3) Localizes food systems
- 4) Puts control locally
- 5) Builds knowledge and skills
- 6) Works with nature
- 7) Recognizes that food is sacred

While current research and literature around food sovereignty explores the challenges that

Indigenous peoples face and identifies opportunities to strengthen food sovereignty efforts, less attention has been extended to documenting what these efforts look like “in action” and what their effectiveness is in specific communities (Desmarais & Wittman, 2014), particularly in British Columbia.

As the movement has grown, challenges and contradictions have emerged, especially in relation to the different and overlapping scales in the politics, strategies, and theories required to realize food sovereignty. Tensions between the interests of different participants in the movement, and multiple and competing notions of “sovereignty” have also arisen (Daigle, 2017; Iles & Montenegro de Wit, 2015; Martens, Cidro, Hart, & McLachlan, 2016; Shattuck, Schiavoni, & VanGelder, 2015). For some Indigenous scholars, “sovereignty carries the horrible stench of colonialism” (Barker, 2005). For others, sovereignty is a framework through which to resist ongoing colonization through language, narrative and the active refusal of the status quo. It is seen as a pathway for Indigenous self-determination and land advocacy and with the potential to re-appropriate concepts of power and control of ancestral lands (Grey & Patel, 2015; Kamal, Linklater, Thompson, & Dipple, 2015).

For Indigenous people of Canada, food sovereignty, then, is inextricably linked to ancestral lands and the policies, treaties, and regulations that have eroded Indigenous control over their territories. But it also goes beyond rights to food and land and extends to the right to feed and teach children about food and community in ways rooted in bio-cultural heritage, memories, and wisdoms (Desmarais & Wittman, 2014). Thus, food sovereignty issues are tightly coupled with education, ways of knowing and institutional programs that are aimed at providing information, knowledge, and skills around food.

2.7.3 Agency & Sovereignty through Food Literacy & Land Education

Food literacy and food citizenship have emerged as concepts used to describe these programs, policies, and initiatives that aim to improve individuals' knowledge, understanding, and engagement with the food system as a means toward food security and food sovereignty. Where food literacy focuses in on equipping individuals with knowledge and skills (defined in previous sections), food citizenship refers to the translation of that knowledge into action. Food citizenship has been defined as, “the practice of engaging in food-related behaviors (defined narrowly and broadly) that support, rather than threaten, the development of a democratic, socially and economically just, and environmentally sustainable food system” (Wilkins, 2005). Recent scholarly discourse engaging with these concepts asserts that we need a food literate citizenry in order to achieve sustainability, security and sovereignty in the food system (Rojas et al., 2011).

As an idea and theory, food literacy may be closely linked with achieving food sovereignty, but the current literature lacks discussions on how this connection is evident “on the ground” or in practice. While there is currently limited research around how food literacy programs are developed in alignment with goals of communities they intend to serve and how the development of programs and projects then translate into actions that support community definitions of food sovereignty, this field is gaining momentum (discussed in a later section). A recent study on “Farm-to-School” programs in British Columbia, which often manifest in school garden programs, found that food literacy activities have the potential to contribute to goals of food sovereignty by closing the discursive gap between concerns around individual food choice and broader community concerns and challenges (Powell & Wittman, 2017).

While the connection between food literacy and food sovereignty is just beginning to be explored in scholarly discourse, food sovereignty for Gitxaala is not possible without maintaining Indigenous knowledge around Gitxaala foods. One of the key objectives of the Gitxaala garden from its beginning was to provide a space for learning how to grow, process and prepare healthy foods. Specifically, the Gitxaala community has expressed a desire to teach youth about Gitxaala foods and food-ways and has emphasized focusing on providing educational opportunities and activities to maintain and reinforce connections to land and water, a key component to Gitxaala identity and wellness (*Diduuls: A Good Life*, n.d.). While the garden has run into challenges increasing local food production in a way that significantly offsets food costs and supplements diets, the potential for the garden program to help develop knowledge and skills around food is one of its strengths going forward.

The Gitxaala garden program, in partnership with programs such as the Lach Klan summer reading program, may be uniquely situated to harness the transformational power of Indigenous knowledges through food literacy activities. Together, these programs have the potential to build individual skills and knowledge while engaging students and community members in broader discussions around food security and food access challenges. Equipping school age children with knowledge and skills around food now will provide them a foundation from which to engage in broader food-related discussions and take action as they grow older and have significant economic and political power into the future (Powell & Wittman, 2017).

This research offers a discussion on how Gitxaala might re-define the Western definition of “food literacy” by developing their own ways of teaching children about Gitxaala foods, land, and culture to promote health and well-being. Using the conceptual framework of food literacy, this research explores how the community garden and at Lach Klan School could be utilized as a

platform for developing activities and curriculum for youth that celebrates the rich histories and knowledge in community of Gitxaala foods.

Chapter 3: Land, Language & Literacy: Mobilizing Education for Food

Sovereignty

Schools have been powerful places of colonization that have and continue to contribute to the undermining of Indigenous knowledges and ways of knowing, especially around food, land and language. From the 1930s to 1970s, residential schools actively deployed curriculum directed toward the eradication of language and traditional cultural practices. Learning was focused on replacing Indigenous knowledges and ontologies with versions of Christianity and modernity (Marker, 2015a). In British Columbia, the history of residential schools was a key part of what scholars have called “cognitive imperialism” (Battiste, 2000) and “culinary imperialism,” (Kelm 1999) affecting the continuity and well-being of Indigenous knowledges, foodways, and health of communities and peoples. As Indigenous education scholar Michael Marker (2004) writes:

In Canada and the US, residential schooling was deployed to replace the Aboriginal child’s actual identity, language, and connection to the land with a shadow personality that would serve the interests of mainstream economic and cultural goals toward colonial dominance. The results of this dark experiment continue to plague both Aboriginal and dominant societies. (Marker, 2004)

While the most recent curricula in BC schools aims at “decolonizing” curricula with improved goals and representation, a number of tensions remain. Now, creating more context-specific and culturally meaningful curriculum is an important piece in addressing larger goals of decolonizing/indigenizing education. Specifically, food systems education is important in light of concerns around loss of food systems knowledge, food security/sovereignty, and sustainability.

Today, many Indigenous communities, “in evaluating the assortment of difficult choices and dilemmas about education and economic development, now take the view that over the long term the loss of local knowledge and patterns of moral reciprocity essential to traditional

communities will become more significant to the world's ecological well-being" (Bowers, Vasquez, & Roaf, 2000, p. 193). As a result, food literacy and land education programs have gained momentum as pathways to achieve goals of improving curriculum to address some of the most pressing issues today of sustainability and food sovereignty while also aiming to make curricular content more culturally meaningful and relevant.

3.1 Case Study: Developing (Decolonized) Food Literacy Resources & Activities at Lach Klan School

Our approach to the design of curricular resources at Lach Klan School was founded on the philosophy that curriculum development needs to be created and designed for the unique context and circumstances of students and teachers. We ascribe to the same philosophy as other researchers and practitioners in the field of decolonizing education (Orlowski & Menzies, 2004) who draw upon the work of American educator Catherine Cornbleth (1990) who writes:

Curriculum is contextually shaped. The relevant context is both structural and sociocultural. Sociocultural refers to the environment beyond the education system/structural context. The sociocultural context includes demographic, social, political, and economic conditions, traditions, and ideologies... that actually or potentially influence curriculum. (Cornbleth 1990)

While Lach Klan School follows the provincial standard curriculum, it is a Band administrated school, meaning that Gitxaala has more direct control over the school and hiring practices. The current principle, Elmer Moody, is encouraging the development of locally relevant teaching materials that will assist students in achieving provincial standards from a Gitxaala perspective. The resources created for this research aim to reflect both the educational goals at Lach Klan School and among the broader Gitxaala community. By integrating Sm'algyax into otherwise English-only resources and by engaging students in learning around

Gitxaala foods and "healthy" food, these resources aim to both improve curriculum by making it more locally relevant while raising students' academic performance and contributing to greater wellness.

3.1.1 Land

At Lach Klan School, our approach to developing food literacy activities aimed to mobilize recent scholarly discourse around land education that suggests it has the potential to develop in alignment with Indigenous pedagogies, to center indigeneity and to confront educational forms of settler colonialism (Tuck, McKenzie, & McCoy, 2014). In land education, the concept of "land" refers to land, water, air and subterranean earth and attends to long relationships and the pedagogies and knowledges that have emerged from those relationships. Land can be in both urban or "remote" settings and can also refer not just to the materiality of land, but also its 'spiritual, emotional, and intellectual aspects' (Tuck et al., 2014).

Land education is uniquely suited to developing curriculum that is place-specific, just as the relationships of Indigenous peoples to land and place are diverse. As Lowan 2009 (in Tuck Land Education) describe:

Every cultural group established their relations to [their place] over time. Whether that place is in the desert, a mountain valley, or along a seashore, it is in the context of natural community, and through that understanding they established an educational process that was practical, ultimately ecological, and spiritual. In this way they sought and found their life. (Cajete 1994, 113, as cited in Lowan 2009, p. 47)

In Lach Klan, this means curriculum that takes place not only within garden boundaries, but also walking along the seashore and moving through the forest and brambles. Gitxaala are Git lax m'oon, or people of the saltwater. The importance of Gitxaala's relationship with the sea past, present, and future is apparent in community voices, writing, and art. Maintaining a strong

connection to land and water through educational opportunities, knowledge sharing, and by increasing access to resources that would allow community members to engage in activities that connect people with land and sea has a prominent place in Gitxaala's community wellness plan:

Our connection to the land and water is at the very heart of Gitxaala culture. It is the essence of how we have provided for ourselves in a sustainable way for thousands of years....For our youth, having a strong connection to the land and sea will provide them with the ultimate connection to our culture and will provide them with pride and understanding. (*Diduuls: A Good Life*, n.d.)

Relational pedagogies of land are not new (See L. B. Simpson, 2014, "Land as pedagogy: Nishnaabeg intelligence and rebellious transformation"). Recent trends in land-based learning only reflect an improvement on the status quo – an evolution – rather than a revolution in educational system today that harnesses knowledge and ways of knowing that have existed for centuries. It is also important to recognize that although land education may be a step in the right direction toward decolonization, it too must attend to its embedded issues of colonialism and Indigenous rights and sovereignty (Tuck et al., 2014).

3.1.2 Language

Our approach to design also attends to widespread consensus among researchers and educators around the need for multilingual education policy and practice toward "recognizing, reclaiming, and revitalizing competences based in historically outlawed and formerly unsupported bilingual and bicultural development" (Atleo & Fitznor, 2010). Pedagogy that constructively responds to Indigenous language loss has been found to be closely related to Indigenous students' academic success (Atleo & Fitznor, 2010). Moreover, Atleo & Fitznor found that for Indigenous learners, the ability to communicate both within and across ethno-

cultural communities is related significantly to their experience of well-being, both subjectively and objectively defined.

For Indigenous students, learning language and having meaningful cultural experiences early in life provides a foundation for lifelong personal development and formal educational achievement even despite continued adverse conditions (Atleo & Fitznor, 2010; Cummins, 1991, 1994; Hornberger, 2009). This points to important reasons for building upon ongoing efforts to revitalize heritage languages to produce multilingual competence in schooling. Lach Klan School was part of School District 52, which has one of the most progressive Aboriginal Education programs in British Columbia and is the only district in Canada that teaches an Indigenous language to all students. Thus, our approach to developing food literacy curriculum aimed to work toward the tandem goals of Sm'algayax language and English language-learning and competence at Lach Klan School.

3.2 Description of Food Literacy Activities

The summer reading program at Lach Klan School provided a unique opportunity to develop curricular materials that link the pressing issues of personal health, environmental sustainability, and Indigenous knowledge with experiential, land-based learning to support the educational needs of Gitxaala students. The goal of this research was to benefit all participants – community, teachers, and researcher alike. Given the specific needs and experiences of First Nations communities, it is especially critical that knowledge stays in communities in ways that leave tangible results and benefits. Ultimately, the lesson plans we designed are aimed at simultaneously meeting and exceeding the current resources and objectives of the summer reading program at Lach Klan School and are an attempt to improve upon the tacit Eurocentrism

of the current curriculum. It was our intention that the curricular materials that we have developed will have a lasting positive impact.

The initial resources and activities were designed in consultation with educators and teaching assistants at Lach Klan School, as well as from the University of British Columbia, both Indigenous and non-Indigenous. Additionally, members of the Gitxaala Band Council were involved in discussions of the objectives of the resources created before, during and after the summer reading program.

While I was in Lach Klan, I was working primarily with grade K-1 teacher Keri Taylor as well as her teaching assistants, Pam Tolmie, Nina Tolmie, two student helpers Arlene (age 16) and Isaiah (age 14), and between 12-20 students between the ages of 5 and 7 years. My role was to integrate garden and food-related activities 2-4 times a week. My role in the garden was overseen by Cindy, the director of the Gitxaala Health Centre and Community Garden Project and I was working in collaboration Myrna, the principal caretaker of the garden to coordinate and organize activities for the students.

The three resources created were; 1) Hands-On Garden & Gitxaala Food Activities; 2) Gitxaala Foods Handwriting & Reading Worksheets in English & Sm'algyax; and 3) Gitxaala Summer Foods Book in English & Sm'algyax. Together, these activities are geared toward both the literacy-building objectives of the summer reading program while also engaging students in a meaningful way with food, adding the dimension of food literacy into the program. The lessons were piloted during the months of June, July and August of 2017. It is our hope that the careful consideration we put into the design of the lessons will allow it to be used in future summer reading programs and in language and literacy units at Lach Klan School throughout the academic year.

3.2.1 “Hands-On” Garden & Gitxaala Food Activities

The objective of the hands-on learning activities was to offer the students an opportunity to play and learn about food and the land outside of the classroom. Given the desire of the Gitxaala community to engage students in both the community garden project and in activities around Gitxaala foods and food traditions, the goal was to develop a curriculum that honored both of these desires, and thus both Western and Indigenous foodways, in tandem. By encouraging Indigenous language use alongside English, sharing stories about the land, and involving students in community initiated, experiential activities, the aim was that the reading program would act as a pathway to strengthen relationships to food and the land in Lach Klan. We walked with the students from the school to the garden twice every week (approx. 400m) for a total of 10 lessons over the course of the Reading Program period. The activities we planned are as follows:

1. ***Garden Introduction: Walk, Listen & Learn:*** Myrna, the principle caretaker of the garden, lead a walk around the garden and through the greenhouse, introducing the students to the plants growing on site. Starting in the greenhouse, Myrna showed the students the tomato plants winding up the strings and the basil growing closer to the ground in between. Outside, the group wove through beds of carrots, lettuce, kale, herbs, strawberries, and a variety of fruit trees along the perimeter of the garden. Myrna asked the kids questions about the plants, about how they are cared for, and what she and other community members would do with them once harvested. Many of the students had not yet been to the garden and were excited to see what was growing.
2. ***Seaweed (fucus//paatsah) Harvest:*** During this session, we walked down to the beach at low tide to harvest a variety of seaweed, commonly known as “Bladder wrack” (*fucus vesiculosus*) in English or *paatsah* in Sm’algayax, to lay in the foundation of the four raised garden beds designated for the students to use over the summer. Myrna expressed that she always uses seaweed and fish to improve soil for gardening and recognized it important for the kids to learn. Myrna also made it clear that it was important for the

students to be involved in gardening from the very beginning – starting with preparing the soil. She emphasized the importance of the students to engage in the tasks that weren't always easy, such as hauling the seaweed up from the beach to the garden. In light of that recommendation, we spent a morning picking seaweed off rocks and the beach that was exposed and hauled it up in buckets and a wheelbarrow to lay the beginning of our garden beds. Despite it being a warm morning, working together to fill the wheelbarrow until it was heaping seemed to evoke a sense of accomplishment and excitement among the students.

3. ***Planting Seeds:*** During this activity, we planted two of the four raised beds with a variety of different seeds. The objective of this activity was for the students to learn what different seeds need to grow and why (specifically in Lach Klan, given the time of year and location) and to be able to sow them into the soil (that myself and student helpers had filled on top of the seaweed). We used seeds that we had on hand that were the most likely to sprout in the time we had left in program. These seeds included peas, beans, carrots, and squash.
4. ***Transplanting Strawberries:*** Strawberries are one of the most celebrated and sought-after plants in the Gitxaala community garden. They grow well in the conditions and are a favorite among Elders and pre-natal women who receive garden boxes and community members who volunteer in the garden. This year, Myrna was hoping to harvest and freeze enough strawberries to host a preserving workshop in the fall. Given this objective, we decided to devote the remaining two beds to strawberries. In this lesson, the objective was for the students to learn how to transplant the strawberries, an activity that engages students in a hands-on manner with all parts of a plant (roots, stems, leaves, fruit). Given the short timeline of the reading program, we were also hopeful that students would be able to witness the growth of their strawberry plants and taste the fruits of their labor.
5. ***Weeding:*** Students learned how to distinguish a “weed” from a desired plant and helped weed beds throughout the garden. This activity was really an opportunity for students to simply continue to familiarize themselves with the garden space, ask questions, and touch, feel, and taste what was growing. The loose structure of this activity was intentional, as we wanted to encourage inquiry and discovery.
6. ***Mint Harvest/ Tea-Making:*** The main objective of this activity was for the students to learn about mint and its physical and medicinal properties. We harvested different varieties of mint, which had been cropping up all over the garden and used it to make mint tea, a soothing and medicinal drink. The activity engaged all senses and was an opportunity for some students to experience a taste they hadn't before.

7. ***A Day Indoors: Strawberry Smoothie Celebration & Garden Stakes:*** Due to inclement weather, the teachers decided it would be better to spend one of our garden days inside. We made the most of it by celebrating some of the strawberries grown from our beds. The objective of this lesson was to learn how to make strawberry smoothies, a healthy, naturally sweetened snack. In addition, on this day we made garden stakes to mark the rows of seeds that we had sowed. For each variety, we made a stake in English as well as a stake in Sm'algyax for all words that the teaching team knew or could find translations for.

8. ***Spruce Tree Storytime:*** In the garden, there is a large spruce tree that has been intentionally left to continue growing (as opposed to being cleared for cultivation, a more conventional decision) for the medicinal properties of its sap and, as I came to understand from Myrna, its status as a sacred being. When Pearl, a well-known community weaver and medicine-maker, was visiting Lach Klan to host workshops in her area of expertise, she spoke about the various medicines that one can make from Spruce. As I got to know Pearl through time spent weaving a cedar basket, she offered to come to the garden and talk to the students about the Spruce tree, why it is important to Gitxaala people, and what one can use it for. In small groups that rotated, students gathered around the spruce tree with Pearl, listened to her stories, asked questions, and touched and smelled the sap that was oozing from the tree. This was an especially good day in the garden, where I sensed the students listening intently, learning about how to develop a respectful relationship with the tree (i.e. in the process of harvesting sap), about its history in that place, and about its benefits for long-term health and well-being.

9. ***Potato Planting:*** The objective of this lesson was to learn how potatoes grow and how to plant them. While potatoes were introduced by settlers, growing and cultivating root starches has a long history for Indigenous peoples of the Northwest Coast. Beginning in the 1770's, before permanent settlement by Europeans began in earnest, many Indigenous peoples of the Northwest Coast actively incorporated the potato into their traditional food systems, so much so that these actively cultivated potato gardens made survival for the newcomers possible (Thrush, 2007). For Gitxaala, potatoes were planted on islands in their *laxyuup* (territory) that had the most fertile ground, including Banks Island and Bonilla Island, using *p'aatsah*, the seaweed mentioned above to further fertilize the soil (Baloy, 2007). Although soil is less conducive to growing potatoes on Dolphin Island (where Lach Klan is) and must be brought in (via boat/ferry), potatoes have and continue to be one of the most staple and desirable crops grown in the community garden as well as backyard gardens. Due to its important place in history and foodways for Gitxaala, it made sense to devote a day to potatoes.

10. ***Jarring Salmon:*** Summer is when the salmon run up into the creeks to spawn in mass numbers and is subsequently the time when they are easiest to fish. Throughout the duration of the reading program, I witnessed all the community smoke-houses in

consistent use, salmon out to dry on every sunny day, and work of processing and canning that was happening after program was dismissed. The objective of jarring salmon together was to celebrate the important place salmon has in Gitxaala culture, food traditions and as a nourishing staple in Gitxaala diets. Unfortunately, logistics prevented the activity from coming to fruition, due to some of the challenges around scheduling and time discussed in a later section.

3.2.2 Gitxaala Foods Handwriting & Reading Worksheets in English & Sm'algyax

Initial weeks of rain in Lach Klan made us uncertain of the opportunity of being in the garden more than twice a week, if that. From this concern emerged the idea to find activities that would develop the reading and handwriting competencies for K-3 learners, but focused on words and stories around healthy and local foods and land. After an initial search using the online resources we knew of, we found very few activities that were relevant to the North Coast or could be adapted to the Sm'algyax language and would reflect important nature and land words and concepts in Lach Klan. While our search was not extensive and there are undoubtedly better resources we did not find or have access to that integrate locally relevant material, this basic search gave us insight into what kinds of teaching resources are commonly found online. In hindsight, with better preparation, we could have accessed some of the more locally relevant resources that have been developed (through the Aboriginal Education library of School District 52, for example), but in the moment we did not have access to these and felt pressed for preparation time.

The letter and word tracing activities we found were limited to using words and pictures already in the database which reflected conventional, Western agrarian life-ways. For example, “A is for Apple,” and “B is for Banana,” “I is for Ice Cream,” and image searches of “medicine,” “seaweed” and “fish” for coloring (working on fine motor skills) that displayed pharmaceutical bottles, tropical oceanscapes, and goldfish. Worksheets focused on gardening and farming were

limited to Euro-western representations of agriculture. Searching in the databases that were “go-to’s” for Keri (and apparently others) for finding worksheets on all topics from math to reading, came up with an activity that included images representing what appeared to be a white, settler famer in overalls, holding a pitchfork, who was sowing seeds for foods such as peas, corn, apples, and, inaccurately, bananas, into the ground.

While our search was limited to open-access, online resources, these tools are commonly used, amplifying how irrelevant and hollow the “stories” told through academic lessons can be for Indigenous students. Julie Cruikshank’s work on educational ethnohistory illuminates how often stories from the past serve as moral narratives that are placed in the present moment. In this case, the narrative of the “farmer” or “gardener” as a Euro-western individual planting foods that don’t grow in Gitxaala territory reinforces the “us” and “them” divide where growing food appears to be something that takes place elsewhere. Cruickshank’s work highlights how “non-transportable native knowledge is; it resides in actual places on the landscape rather than in abstract domains” (Marker, 2000). The generalized representation of gardening and food in the educational resources we were finding revealed the implicit value of transportability or a “one-size-fits-all” approach to learning that is not only irrelevant in given contexts, but can serve to undermine place-based, Indigenous knowledges.

Since we were unable to find or generate resources using images and words in the existing databases that would be relevant to Gitxaala students while attending to the same learning objectives in reading and writing, I endeavored to create resources “by hand” that would serve both needs. I worked with Keri and Pam to identify food and land related words that were seasonally, locally, and culturally relevant that could be written in both English and Sm’algyax.

These words would serve as templates for handwriting exercises where students trace the word and re-write it below. The list of words and worksheet examples below:

seeds - nawa'na
roots - huust
leaves - 'yens
plant - wa'naa

strawberry - maguul
lettuce - 'yensm k'amksiwah
carrots - galat
potatoes - sgusiit

seaweed (fucus, that we used to fertilize garden beds) - p'aatsah
bull kelp - moox
salmon (general term) - hoon
medicine (such as devils club or spruce pitch) - xaldawxk

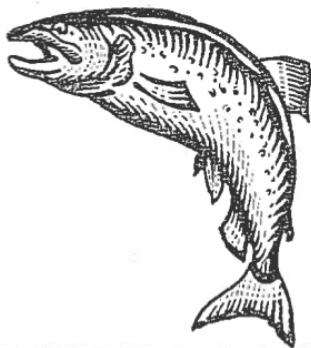
sun - gyemgm dziivs
rain - waas
soil - yuup
summer - suunt

salmonberries - mak'ooxs
berry basket - gok
berry territory - 'naxmaay
blueberry - sm'maay



seaweed

paatsan



salmon

hoon



bull kelp

moox



medicine

xaldawxk

Figure 3.1: Sample, Gitxaala Foods Handwriting & Reading Worksheet

3.2.3 Gitxaala Summer Foods Book in English & Sm'algyax

A central goal of the food literacy resources and activities we developed was to build a positive and celebratory relationship with Gitxaala foods, land, and culture. Given the educational context for these resources was the summer reading program, it seemed appropriate to create a Gitxaala Summer Foods Children's Book that would celebrate the survival and revival of Gitxaala language and knowledge around foods of importance. The intention was that this book would be fun and aesthetically beautiful – the kind of book that a child might want to page through over and over just to look at the illustration.

The book is a simple word book for children ages 4-7 years that includes a series of food and land words in both English and Sm'algyax with pen-and-ink illustrations. Although original printed copies of the book were made for teachers and students, the book also exists in pdf format so that any educator or parent who has the file can print the document on legal size paper and fold it to create their own copy. The book isn't a comprehensive compilation of relevant words, but is rather simple and short. Like children's books such as "The Very Hungry Caterpillar" or "Brown Bear, Brown Bear, What Do You See?" by author Eric Carle, there is little text as it is aimed at very young readers. More important than the text is the dialogue that parent or teacher and child have as they are reading; the questions, stories, and conversation that the words and images provoke. In addition, after seeing a copy, students are asked to color in the black and white illustrations – another way for them to spend time enjoying the pages (while also working on dexterity and fine motor skills).

While I recognize the need to balance the wisdom and integrity of oral traditions with textual documentation of Sm'algyax, this was one way I felt I could add to the development of

resources that others, perhaps new or beginning teachers, can use and learn from. For me, thinking through the choice of words to include, engaging in the process of their translation, and developing the ideas for accurate and visually pleasing illustrations was, in fact, an active and important learning process in and of itself.

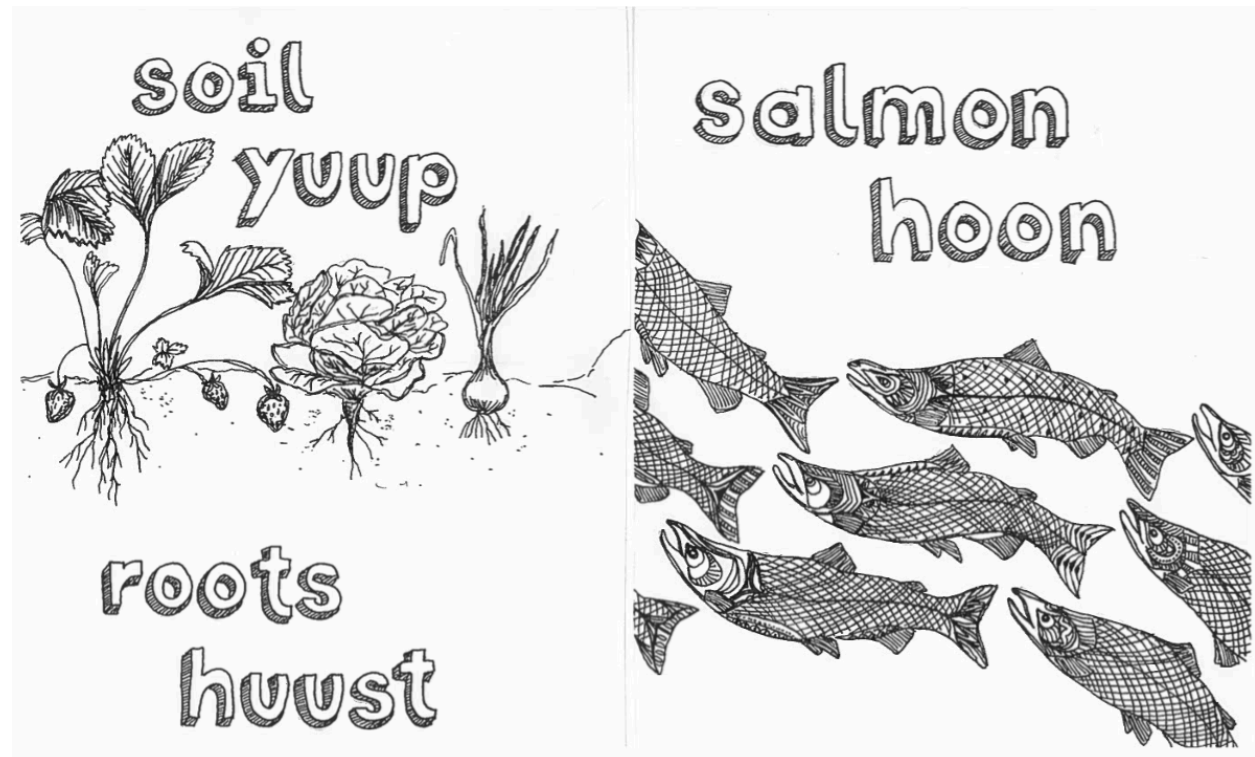


Figure 3.2: Sample Book Page: Soil/Yuup, Roots/Huust, Salmon/Hoon



Figure 3.3: Sample Book Pages: Seeds/Nawa'na, Leaves/'Yens

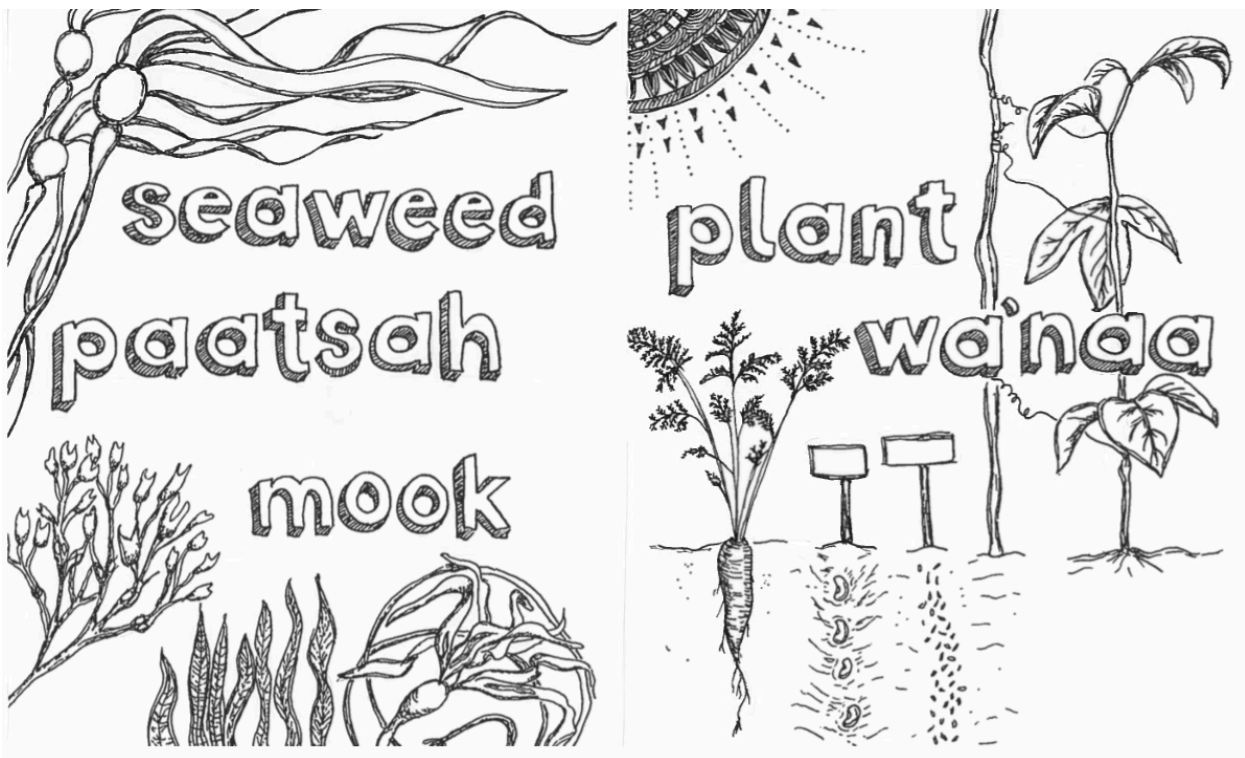


Figure 3.4: Sample Book Page, Seaweed/Paatsah/Mook, Plant/Wa'naa

3.3 Discussion: Rooting Indigenous Knowledges into Food Literacy Education in Gitxaala

The process of integrating Indigenous knowledges into food literacy education is one that is continuous, ongoing, and contextual and the desired outcomes are no doubt diverse and unique to particular contexts and places. For the Gitxaala community, continuing to integrate locally relevant curriculum and Sm'algyax language use at Lach Klan School and increasing educational opportunities, especially for youth, around Gitxaala foods in order to maintain a strong connection to food, land, and sea as a means toward achieving greater community “wellness,” are important goals. In this section, ways in which decolonized food literacy curriculum might continue to be developed as a means to work toward these goals are discussed. Specifically, four key insights emerged that suggest food literacy activities in Gitxaala might be strengthened by; 1) harnessing local knowledge of “own foods”; 2) accessing stable funding for critical garden materials and to support garden coordinators; 3) increasing flexibility in lesson plans and scheduling to accommodate for place-based and culturally relevant activities, and; 4) supporting language and cultural training for educators.

3.3.1 Harnessing Local Knowledge of “Own Foods”

In Gitxaala, there are many community members actively engaged in and seeking to cultivate, harvest, hunt, and fish for “own foods”- or food resources that Gitxaala maintain, harvest, preserve, exchange, prepare, and consume themselves. For Gitxaala Nation, producing their “own food” is important for maintaining Gitxaala food and cultural security. Gitxaala’s “own foods, like one’s own family, are building blocks of identity” (Anderson, 2016).

In Gitxaala, the consumption of own foods is understood to contribute not only to an individual's physical health, but to the health of one's identity *as Gitxaala*, and thereby to the community's health (all three being inseparable in the traditional Gitxaala holistic view of health) (Anderson, 2016).

Studies have demonstrated that simply focusing on the presence or absence of “healthy” foods is an outdated approach to studying community food security (Short, Guthman, & Raskin, 2007) . Rather, further attention must be given to foods people come to “demand” and use (how and why), what markets (formal or informal) already exist in a community to provide culturally acceptable foods at relatively low prices, and who will benefit from any interventions considered (Short et al., 2007).

Currently, there is opportunity for the garden program to harness and mobilize local knowledge of Gitxaala foods (Baloy, 2007). In interviews conducted in 2007 by researcher Natalie Baloy, community members shared rich knowledge and memories of plant cultivation. One community member spoke about planting potatoes on Bonilla Arm, an island southwest of Lach Klan, where the soil is more suitable for growing. *P'aatsah*, a type of seaweed, was used to fertilize the soil where the potatoes were planted. Roe on kelp was also rinsed and used as a fertilizer. When it was time to harvest, they would bring home fifty pound sacks of potatoes, ready to be stored and eaten. On islands throughout Gitxaala's *laxyuup* (territory), berries were planted and cultivated and clam gardens and other mariculture was tended to. In interviews conducted by Baloy 2007, Gitxaala community members talked about their attempts (and failures) at growing food (such as carrots and cabbage) in Lach Klan. The only foods one family grew in Lach Klan were blackcurrants and rhubarbs – growing all other foods where the soil was better (Baloy, 2007).

This knowledge of what foods grow best given the climate and soil in various parts of

Gitxaala's *laxyuup* is rich information that could be used to inform Gitxaala's garden program today. The community garden program has the potential to build upon and enhance already existing Gitxaala food production practices. Given that food production, harvesting and hunting of "own foods" already exists in a strong way in community, it is worth considering how the community garden can continue to support existing food production and harvesting.

3.3.2 Stable Funding

From the beginning, the Gitxaala community garden has relied on funding and the local capacity for volunteerism to deliver on its objectives from year to year. Research on community food security projects suggests that "best practices" do not use strategies based on charity because of its potential to "depoliticize hunger and poverty" and divide participants into "the donor and the recipient; the powerful and the powerless; the independent and the dependent; the altruistic and the grateful; the competent and the inadequate" (Welsh & MacRae, 1998). In light of this research, I discuss some of the specific ways in which a reliance on ongoing and inadequate funding has been a challenge to the success of the garden, but could be leveraged to support the goals of increasing participation and bolstering partnerships to engage more community members in garden activities.

The Gitxaala community garden program, which began as a project supported through major grant funding, currently lacks stable funding to purchase critical materials. At the beginning of every growing season, the garden requires new seeds and soil. Because the garden is located in Lach Klan, an area historically not used for gardening due to the lack of fertile ground, the garden will continue to depend upon soil that is barged in or excavated from elsewhere on the island -- an expensive process. Every year, materials are needed to cover and protect crops from

being eaten by wildlife (i.e. birds), and funding to repair the infrastructure from weather damage (e.g. blown over fence, holes in greenhouse roof). Today, and into the foreseeable future, purchasing supplies depends on the ability to secure stable funding.

Participation in garden programs is often contingent upon having a paid coordinator to ensure that core work in the garden is carried out. While Myrna was the paid coordinator during my field research, she explained that she can't do it all: there is a lot of work involved with gardening! While it is a romantic image to tend to seedlings and harvest strawberries, gardening on large scale requires a substantial amount of time and physical effort on a consistent basis. Some community members who were interested in being involved cited that, with a 9-5pm job and kids at home, they could not afford the time it would take to regularly tend to garden beds. From conversations with both community members and Myrna over the course of the summer, it became clear that with additional funding, hiring more staff to set, carry out, and communicate a schedule for various garden activities (such as planting, weeding, watering and harvesting) would be a priority. Hence, locating stable long-term funding for both supplies and to support program coordinators is an important goal of the community and could provide a means through which to enhance gardening opportunities.

3.3.3 Operating on Nature's Time: Flexibility in Scheduling for Food Literacy

Over the course of the summer, it became clear that flexible scheduling is necessary to integrate food literacy activities into the educational curriculum at Lach Klan, especially with regard to traditional food harvesting outside of the garden space. The reading program, which took place from 9am-12pm, Monday through Thursday, posed barriers to pursuing food-related

activities in Lach Klan when it made intuitive sense based on “nature’s time” and the readiness of the community to share skills and knowledge.

The summer reading program (only five weeks long) was not long enough for the students to witness their seeds grow until they were ready to harvest. Many of the seeds, if cared for, would grow into fully-fledged plants by late August or early September when the program was no longer running. Currently, teachers from Lach Klan School don’t typically take their classes to the community garden during the academic terms starting in September, and the students in the summer program are in different grades with different teachers who may or may not want to utilize the garden for teaching activities. There are many opportunities for children to engage in garden activities outside of the school day, but despite efforts to clearly communicate activities such as planting and harvesting (over VHF and posts via social media), engaging youth has been a challenge.

In addition to navigating the challenges around scheduling, we were faced with the issue of where our “classroom” would and could be on food literacy days. Given the importance of “being in place” to learning about land and food, we realized that food literacy education in Gitxaala could mean moving beyond the garden to engage the students in both culturally and seasonally relevant activities. Some of the activities we wanted to include were berry-picking (salmonberries, blueberries), medicine harvesting (Devil’s club), and plant/tree/wildlife identification walks. Almost immediately, we realized these activities would be hard to “schedule in” given we were uncertain how much time they would take to complete.

Integrating hands-on learning around Gitxaala foods necessitates a shift in highly structured and organized lesson plans to allow for more emergent and flexible scheduling. While this may require a shift in the typical curriculum, there is opportunity for educators to allow for

more flexibility in lesson planning “on the ground” on a day-to-basis. While teachers have material that must be covered, benchmarks to achieve, and time allocated to various activities, there is also a reasonable amount of discretion that educators have regarding how they use their time. Thus, this shift may need to stem from a transformation in mindset and openness to flexibility on the part of the educators.

3.3.4 Supporting Language and Cultural Training for Educators

At Lach Klan School, there is a small teaching staff of between 12-15 full time teachers. Of these teachers, the demographic is predominately white, non-Indigenous, young and unmarried without families of their own. All of the teachers (not including teaching assistants) I met were from outside of Lach Klan, many from provinces further east, making me wonder how they came to teach on a small island community so far from where they had been before. One teacher expressed that the primary reasons included; 1) personal interest in working in a First Nations community on-reserve 2) interest in moving to a new and “adventurous” location in coastal BC, and 3) higher pay and low cost of living compared to positions in larger cities, making it a desirable choice for teachers who have just graduated from school and are looking to re-pay loans and save money. Generally speaking, the teaching staff was comprised of new teachers, having come to Lach Klan a couple of years or less after having received their teaching certification. In addition, teacher turn-over rates are high, with teachers staying around one to three years (academic years, not over the summer) on average. This trend seemed to ring true the summer I was in Lach Klan, as there were 6 new teachers and a new principal to be hired the following year. Keri, the lead teacher of the summer reading program, was the anomaly, having spent six years at Lach Klan School, but also planned to leave after the following year was over

due to the desire to meet a life-partner and have a family, which she felt was challenging living in such a small island community. The presence of a predominantly non-Indigenous and relatively young, inexperienced, and temporary teaching staff in Lach Klan from outside of the community poses challenges around integrating food literacy activities that draw upon local, Indigenous knowledge.

During the summer this project took place, it became clear that knowing how and where to access materials, resources, and activities around Gitxaala food-ways, language, and land is not always a straightforward process. First, developing hands-on, land-based activities requires building trusting relationships with knowledge holders, which takes time and is an ongoing process. Thus, the limited duration that teachers often stay at Lach Klan School poses challenges to developing and maintaining relationships required to build a food literacy curriculum. In addition, it became clear that it would take time to develop a nuanced understanding about what information was ok for teachers (including myself in a teaching role) to learn and share and what could not be integrated into food literacy activities. For example, over the course of the summer we discussed the idea of taking the students berry-picking. One of the teaching assistants, from Gitxaala, suggested that we look for the native blueberries which were harder to find than salmonberries and a unique and celebrated berry in *laxyuup* Gitxaala. However, in our attempt to figure out who might know where the berries were, we discovered that community members were protective of this information. Despite agreeing that it was a good idea for the kids to be able to recognize the blueberry plant and go harvesting, they were concerned that sharing the knowledge would lead to over harvesting of these choice berries. On the other hand, introducing Sm'algyax language into the garden and food activities was celebrated and encouraged. When asking community members for translations or verification of translations found using the online

Sm'algyax/English dictionary, people were eager to share what they know and also eager to learn.

For new and non-Indigenous educators - or, in my case, a researcher - navigating the terrain of integrating community knowledge into curriculum at Lach Klan School is not a straightforward process and can be uncomfortable at times. However, engaging in the process is essential for educators in Lach Klan to be active agents in decolonizing education, pushing education to be more relevant and toward achieve higher pedagogical expectations. Engaging with the Indigenous knowledge forces educators to question what knowledge is important and why. It begs educators to rethink the purpose of education from place-based and context specific viewpoints.

The challenge of addressing the clashing worldviews of Indigenous and non-Indigenous educators and learners is not unique to Gitxaala and has been a struggle in education in British Columbia (and around the globe) for decades. In 1967, UBC anthropologist Harry Hawthorn published the second of two influential reports that brought to attention the social and educational conditions of Indigenous people in British Columbia, emphasizing a need for more cross-cultural teacher training (Marker, 2015b). At Lach Klan, supporting teachers through more language and cultural training would equip them with an understanding of the importance of integrating the Sm'algyax language and food-related activities into curriculum to promote learning and wellness in Gitxaala. Research has found that, whether intentional or not, individuals from dominant cultural backgrounds unfortunately continue to dismiss the importance of Indigenous knowledges. Tuck et al 2014 assert that "the ongoing colonization of land and people are in fact embedded within educators' and researchers' practices and understandings of (environmental) education around the globe (Tuck, McKenzie, & McCoy,

2017). Not only could training provide a better understanding of the importance of food, land, and language for Gitxaala, but over time, tangible teaching resources for integrating local, land based pedagogies could be compiled to support educators in Lach Klan. This could include resources that already exist (such as the educational materials by the *Forests and Oceans for the Future*⁶ research group at UBC, developed and designed for use by north coast British Columbia communities) as well as the development of new resources from year to year. Newly developed resources might utilize elements of Alannah Young's "Cedar Pedagogy" (Young, 2015) and include; 1) a list of resources available about Gitxaala culture and stories; 2) examples of materials and information that may fit simultaneously into classroom and land-based learning; 3) identification of appropriate ways to develop relationships with resource people and ways in which to build relationships with Indigenous knowledge holders following local protocol, and; 4) a discussion on how these pedagogies could have a pivotal role in strengthening (Gitxaala) peoples' holistic health.

3.4 Food Literacy: From Knowledge to Action

There are a variety of perspectives around what food literacy means, how it is carried out, and what the broader implications are for learners and the food system as a whole. Beyond the immediate goals of these resources to improve literacy for Gitxaala students, the ultimate goal of food literacy activities is to build knowledge that can then be utilized in everyday decisions around food that will support food sovereignty goals. However, as Widener (2014) posit,

⁶ Forests and Oceans for the Future: Integrating local ecological knowledge with natural resource management. (n.d.). Retrieved April 18, 2018, from <http://www.ecoknow.ca>

"knowing one's food is a *first step* in food literacy." Being able to name and identify a variety of edible berries that grow in *laxyuup* Gitxaaala and to know how to catch, smoke, and prepare salmon is one thing; but understanding the nutritional benefits of these "own foods," being able to critically evaluate their environmental, economic, and health implications when compared to imported packaged and processed goods (salmon vs steak or berries vs candy), and then choosing to make a decision to eat what optimizes your health, the health of the environment and the social, cultural and economic health of you family and community is another.

In order to understand how learners might go from *knowing* to *utilizing* information in a meaningful way, we might consider a framework for achieving 'health' literacy, which we can extend to include food literacy, developed by Velardo (2015) that argues for the importance of achieving literacy at the functional, interactive and critical levels (Velardo, 2015). Functional food literacy is a basic understanding and ability to access information about food how food can affect personal and planetary well-being whereas interactive food literacy is a person's ability to act on that information. Lastly, critical food literacy is the ability to critically engage with and evaluate the implications of actions taken to address food system issues from a household to global scales.

Some scholars would consider this more complete and critical understanding of the food system "food system literacy" (Widener & Karides, 2014). Widener & Karides (2014) argue that the absence of food *system* literacy, is a social problem that prevents conversations and engagement with more complex issues, such as structural inequities, injustices, and links of food to sustainability, that are important, if not essential, components of achieving food sovereignty. Thus, they suggest that the food literacy in its most basic definition is simply not enough. From their study, Widener & Karides (2014) found that the informational exchanges that happen

between consumers and small-scale producers who have shared interest in good-tasting, healthy food may start a conversation, but that these conversations lack important topics such as justice and sustainability that could be addressed by more food system literacy. Their argument is not for the development of more food knowledge, but for “the acquisition and utilization of food system literacy for a more just, secure, participatory and inclusive future, which requires knowing the many interconnected parts of the food chain, long before and long after the point of consumption” (Widener & Karides, 2014). Along the same lines, *food citizenship*, or “the practice of engaging in food-related behaviours that support, rather than threaten, the development of a democratic, socially and economically just, and environmentally sustainable food system” (Wilkins, 2005), has developed as a concept that suggests we need a population that is *food systems literate* because that is how we are able translate knowledge into action and make decisions as a food citizen.

Moreover, even with food system literacy, it should be recognized that community knowledge, awareness, and action are still vulnerable to political forces. These challenges may not be able to be overcome in some circumstances by the activities of the food/education community. Even in a community that is engaged in food literacy efforts with the support of public education, there are larger forces such as political interests and the grasp of corporate food marketing that continue to undermine community goals and actions.

While food literacy certainly is not a "silver bullet" for remedying the myriad challenges of the food system on any scale - and how to employ these educational efforts remains unclear - this deliberation, I argue, is what might act as a catalyst to increase engagement with topics such as the structural constraints around food access. As we begin to imagine what food literacy looks

like in Lach Klan, Velardo's (2015) tripartite model could be used to map the development of food literacy competencies beyond the accumulation of basic food knowledge into the future.

Chapter 4: Conclusion

Food plays a vital role in Gitxaala community wellness; nourishing individuals in mind, body and spirit, strengthening connections in community and reinforcing relationships to land and sea. This research focuses on Gitxaala Nation's goal to strengthen relationships and connections with their own food-ways and explores the efficacy of the community garden and Lach Klan summer reading program as a pathway to achieve this goal.

Despite the legacy of colonialism First Nations have demonstrated an amazing resilience. Communities like Gitxaala have maintained longstanding connections to culturally meaningful foods. Just the same, the colonial settler state has worked hard to undermine community self-sufficiency and wellbeing. While there is no one solution to address these compounding challenges, institutions – such as health clinics and schools – play a central role in shaping understandings of “health” and one's relationship to food. There is a growing realization that institutional programs and interventions that aim to support a communities' self-determination and their enhanced food sovereignty must be context-specific. They must take into account local capacity, knowledges, wisdoms, and practices around food. At the same time, recent scholarly discourse suggests that educating youth in all aspects of their food system (i.e. food literacy) can contribute not only just to transforming their own food habits but also to the emergence of a new generation that is engaged and equipped with knowledge and skills to address issues of food security, sovereignty and sustainability in their community.

Combining the Lach Klan summer reading program and Gitxaala community garden program offers a unique opportunity to root Indigenous knowledges into educational curriculum while also engaging community members, especially youth, in food-related activities that support community wellness goals. In this thesis, I illustrate some of the challenges and positive

opportunities that emerged out of developing three food literacy resources with teachers and community members over the course of the 5-week summer program; 1) hands-on garden and Gitxaala food activities; 2) Gitxaala foods handwriting and reading worksheets in English and Sm'algyax, and; 3) a Gitxaala Summer Foods book in English and Sm'algyax. First, the rich knowledge of Gitxaala's "own foods" in community presents a great opportunity to incorporate more culturally meaningful curriculum into food literacy activities both in Lach Klan School and the garden program itself. Harnessing existing knowledge of the cultivation of plant foods in Lach Klan to inform the design of the garden program today may also promote a more abundant harvest of foods that are better suited to the land and climate while growing foods that are more connected to Gitxaala culture and identity. Secondly, out of this research emerged an awareness of the ongoing challenges of community participation and the reliance on continued funding to maintain infrastructure and buy materials (such as soil and seeds) for the garden program. To address this challenge, leveraging funding to hire a program coordinator emerged as a possible solution to support the ongoing partnership with Lach Klan School as well as other programming that could bring more people together in the garden, increasing the exchange of ideas, conversation, and knowledge around food. Third, attempting to integrate hands-on, outdoor-oriented food activities into the existing structure of the reading program illuminated the need for more flexibility in scheduling for food literacy activities that revolves around seasonality, weather, and the activities of Gitxaala food harvesters and producers. The wide range of possibilities for teachers to integrate activities such as berry harvesting, medicine making, and jarring salmon with science, health, language, and cultural curriculum throughout the school year would require an openness to accommodating for "Nature's time." Finally, from this work emerged the need to provide support for educators at Lach Klan School on how to appropriately

integrate Indigenous knowledge into curriculum. By providing training, resources, and materials highlighting the ongoing importance of food, land and sea to life for Gitxaala people and how this connection can be strengthened through educational opportunities, educators would be better equipped to integrate food literacy activities in their classroom. Not only could this training help teachers reach their own highest pedagogical potential, but curriculum that is developed can play a pivotal role in enhancing learning and strengthening wellness for students at Lach Klan School.

The process of familiarizing myself with integrating Indigenous knowledge into food literacy through actually attempting to integrate it into the summer reading program in Lach Klan allowed me to see problems/challenges that I wouldn't have been able to anticipate otherwise. It is my hope that this "on the ground" experience can enrich the awareness of future researchers and educators in order to develop unique solutions.

This research was emergent. The intention here was to learn from putting both settler and Indigenous ways of understanding the world into conversation. What I engaged in was a synergistic dialogue that attempted to bring settler and Indigenous knowledge traditions together to inform one another and ultimately make available additional resources in the formal educational system to support ongoing healthy relationships with Gitxaala food, land, and water. While the resources that were developed during this research alone are only one step to building food literacy knowledge, they aim to provide ideas and examples to build from that harness the power of existing programs, community knowledge and local capacity in Lach Klan to provide Gitxaala students with an understanding of their food system. Food literacy activities lay the foundation for developing food *system* literacy and food citizenship among Gitxaala youth, where knowledge is utilized in everyday actions and decision-making that supports food sovereignty goals.

This study contributes to literature addressing the connection between food literacy and food sovereignty by providing a case study that explores the potential (both strengths and limitations) of Lach Klan School and the Gitxaala community garden to mobilize pedagogical strategies and curriculum toward cultivating a healthy relationship with food, rooted in Gitxaala knowledge and skills.

Ultimately, it is my hope that my thesis, both in process and outcome will; 1) inform the ways in which government funded programs in both education and community wellness can better align with the culture, values, and visions of the First Nations communities they aim to support; 2) can show how the Gitxaala garden program can “play to its strengths” and leverage education, or food literacy programming to support broader community goals of achieving “wellness” and food sovereignty; 3) can support Gitxaala in envisioning ways to expand their own Indigenous Knowledge alongside settler definitions of literacy in the summer reading program.

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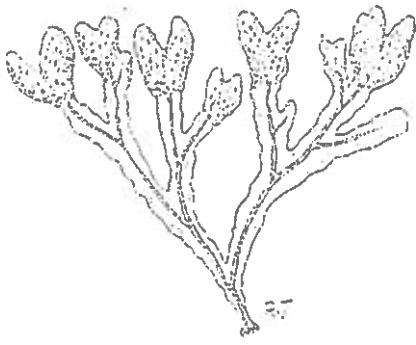
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Appendices

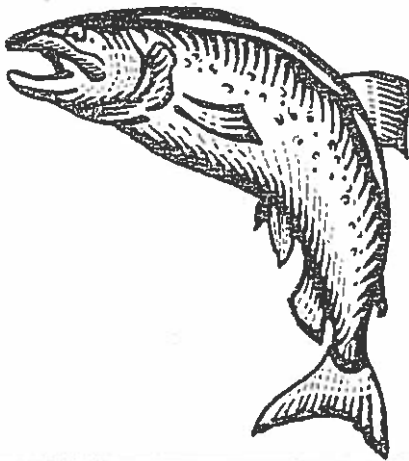
Appendix A Gitxaala Foods Handwriting & Reading Activities in English & Sm'algyax

Appendix A includes the following five pages. Pages are formatted to be able to be printed and used as an educational resource (thus, page numbers are not included).



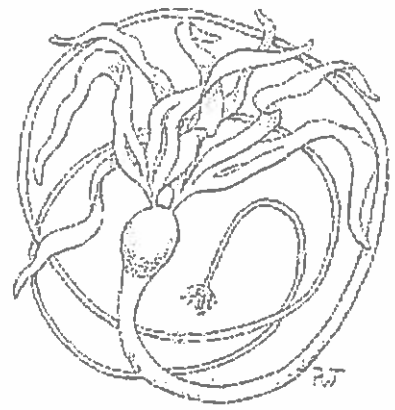
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paatsan



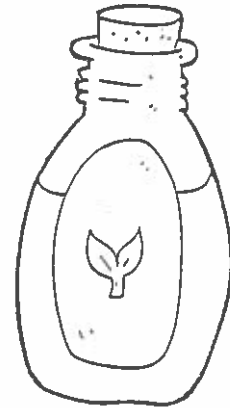
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noon



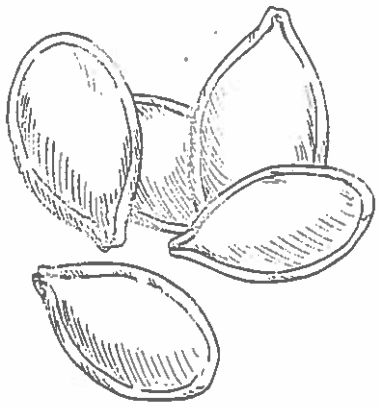
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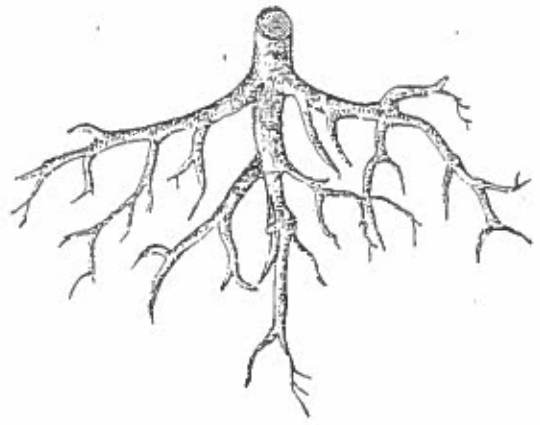
medicine

xatdawxk



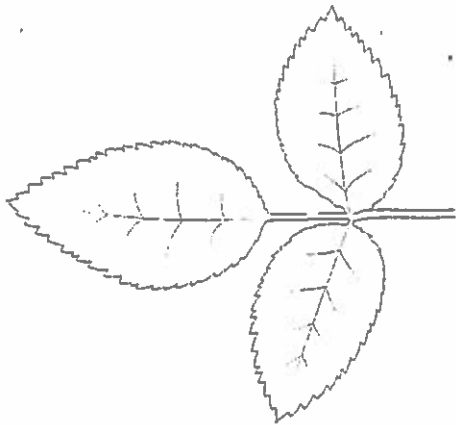
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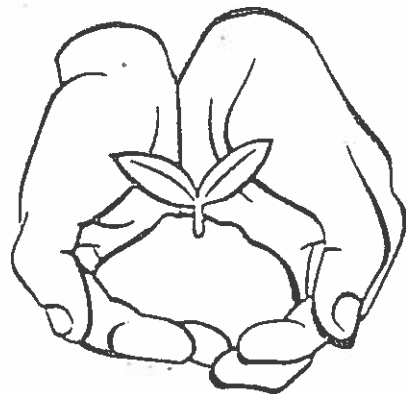
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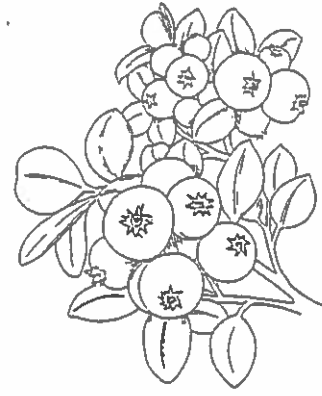
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yens



plant

wa naa

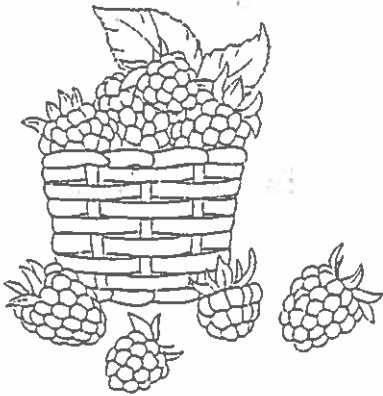


salmonberries

blueberry

makoox

sm mady

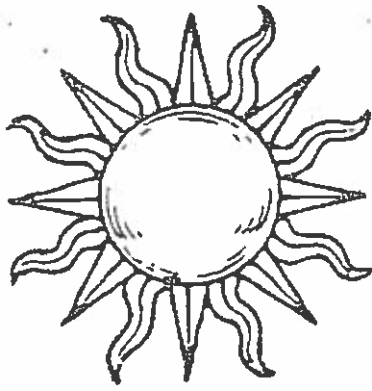


berry basket

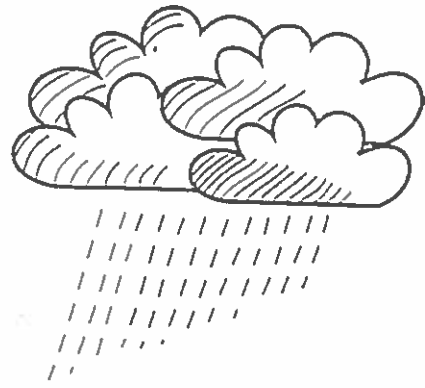
berry territory

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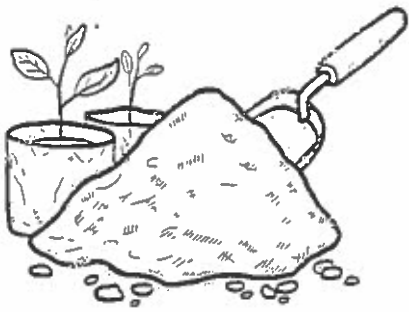
sun



rain

gyemgm dziws

woods



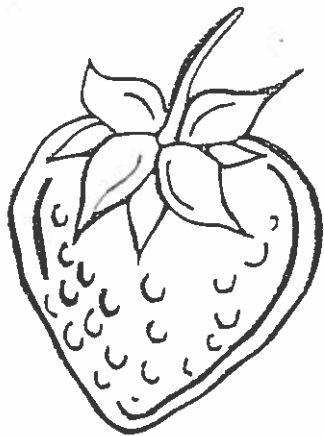
soil



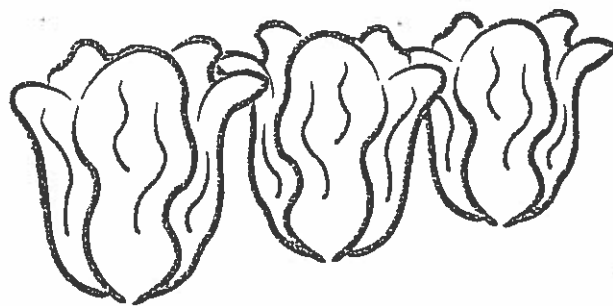
summer

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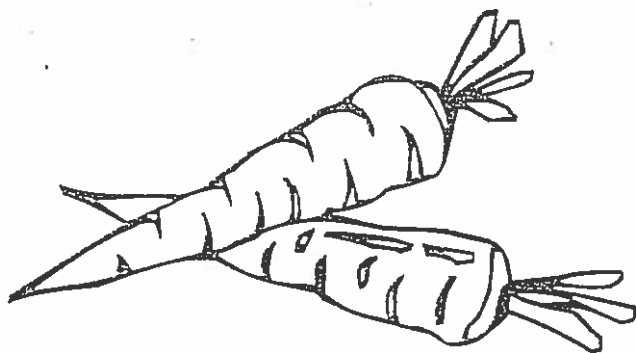
strawberry



lettuce

mogool

yenism komks



carrots



potatoes

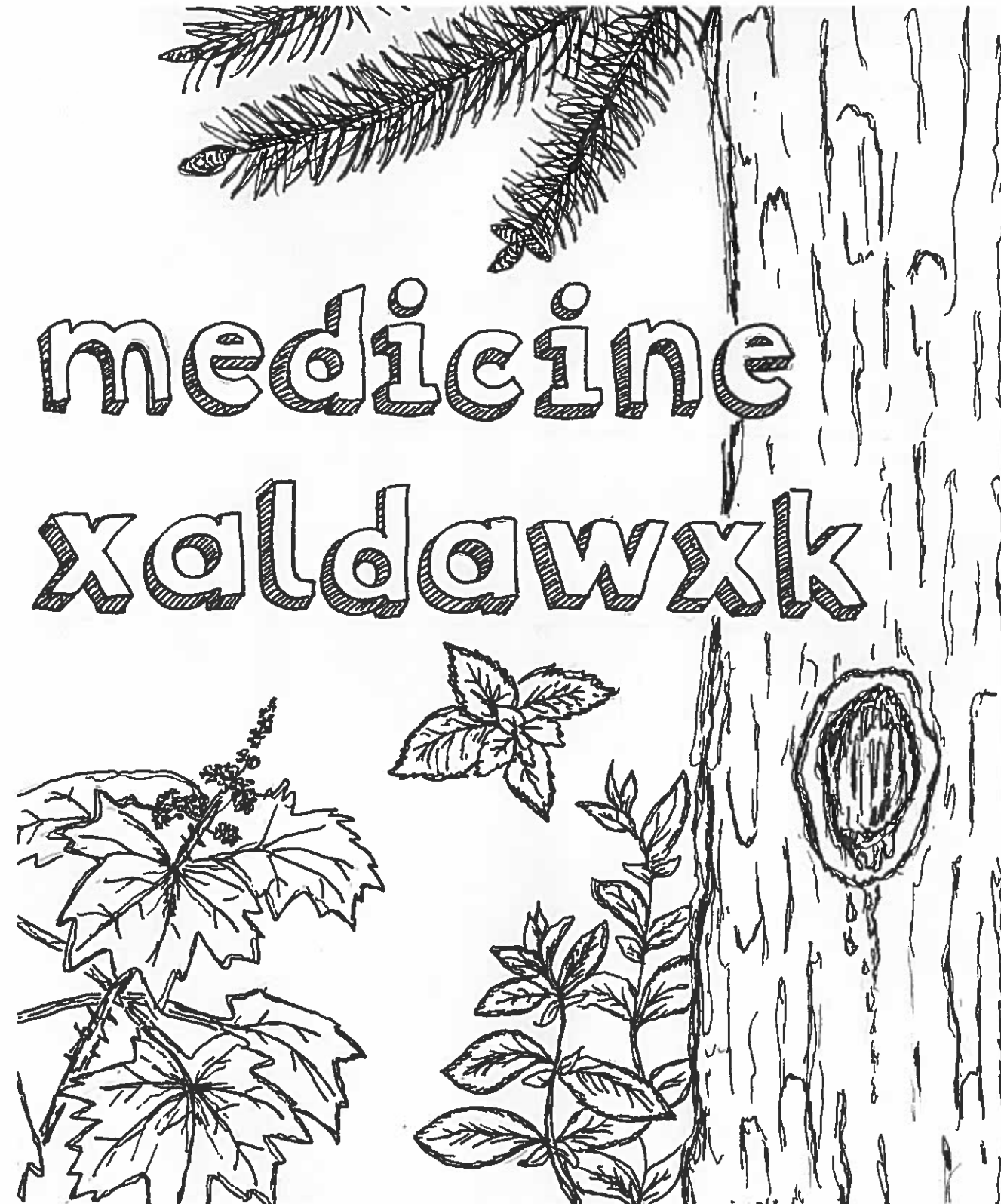
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Appendix B Gitxaala Summer Foods Book in English & Sm'algyax

Appendix B includes the following seven pages. Pages are formatted to be printed on legal-size paper, folded, and used as an educational resource (thus, page numbers are not included).



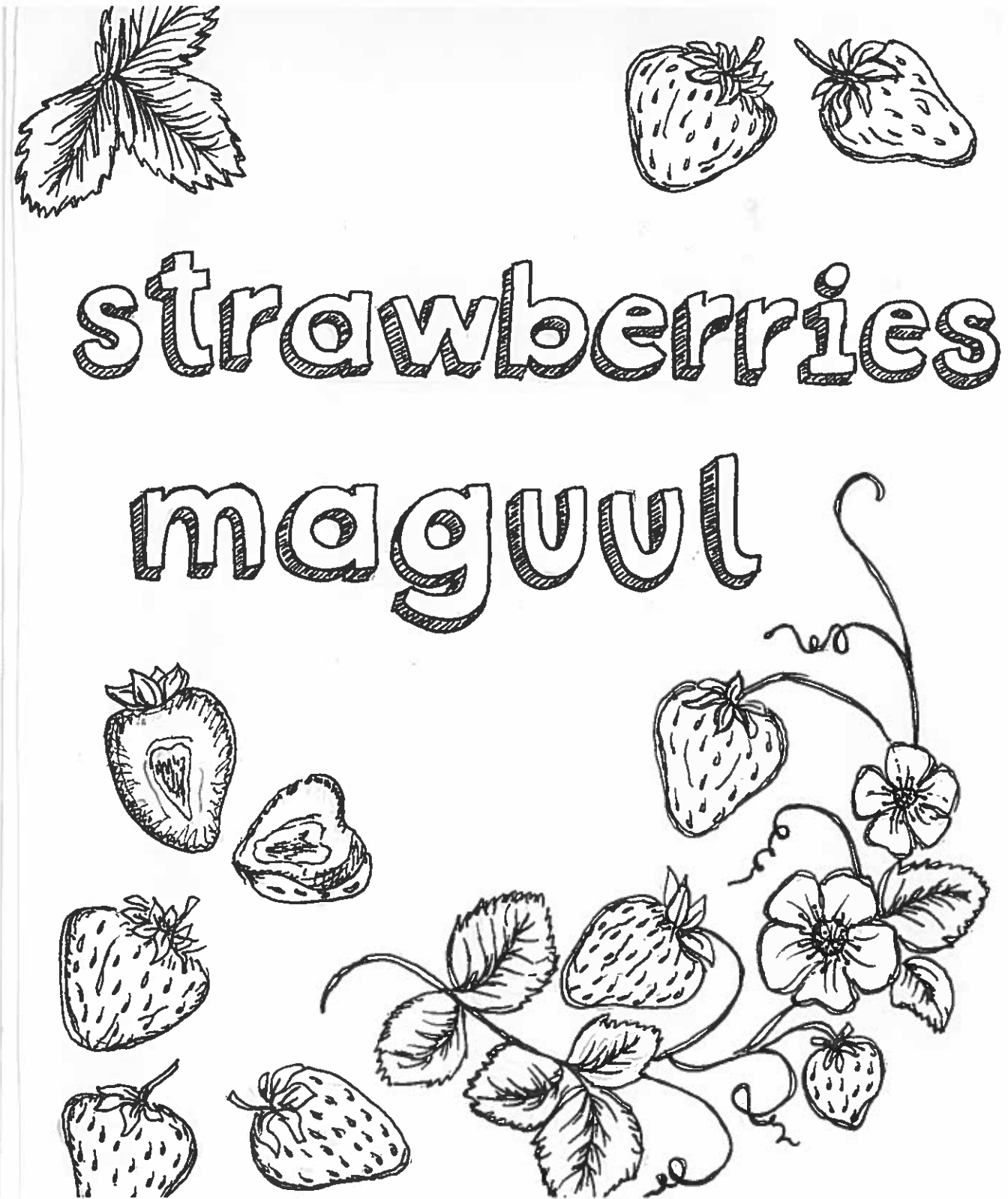


medicine
xaldawxk

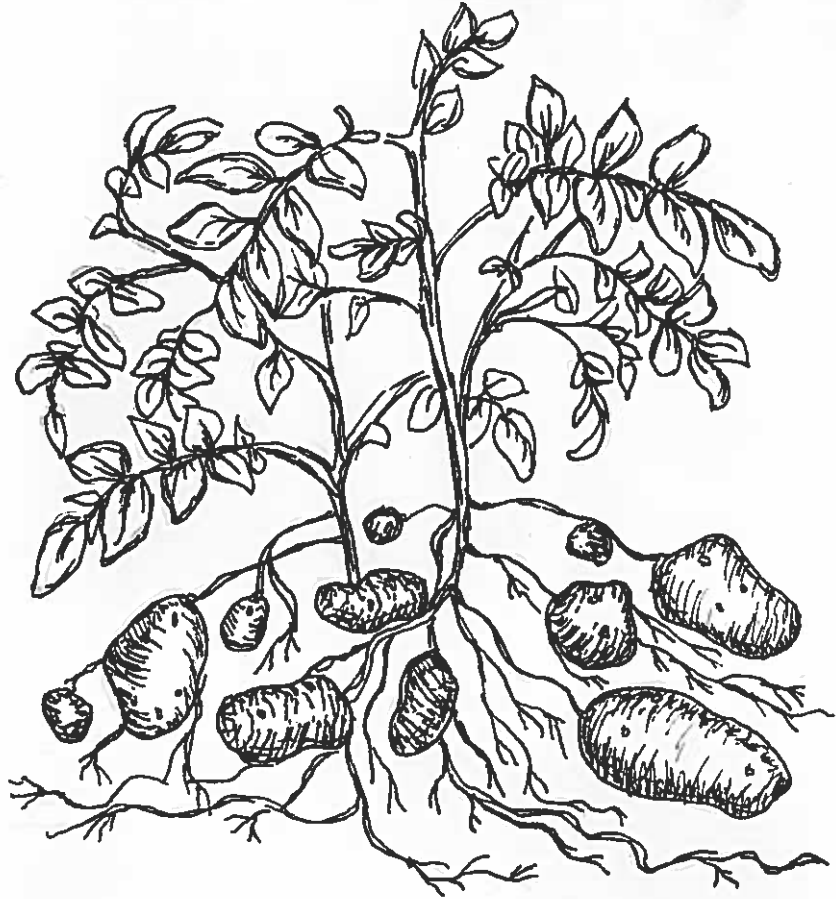


sun
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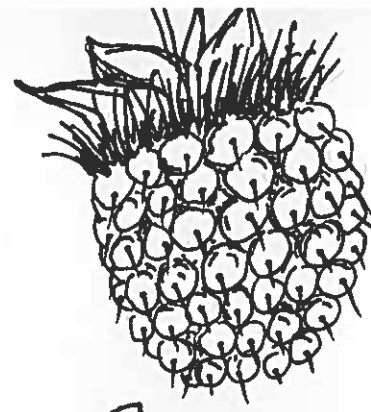
rain
waas



potatoes



sgusiit



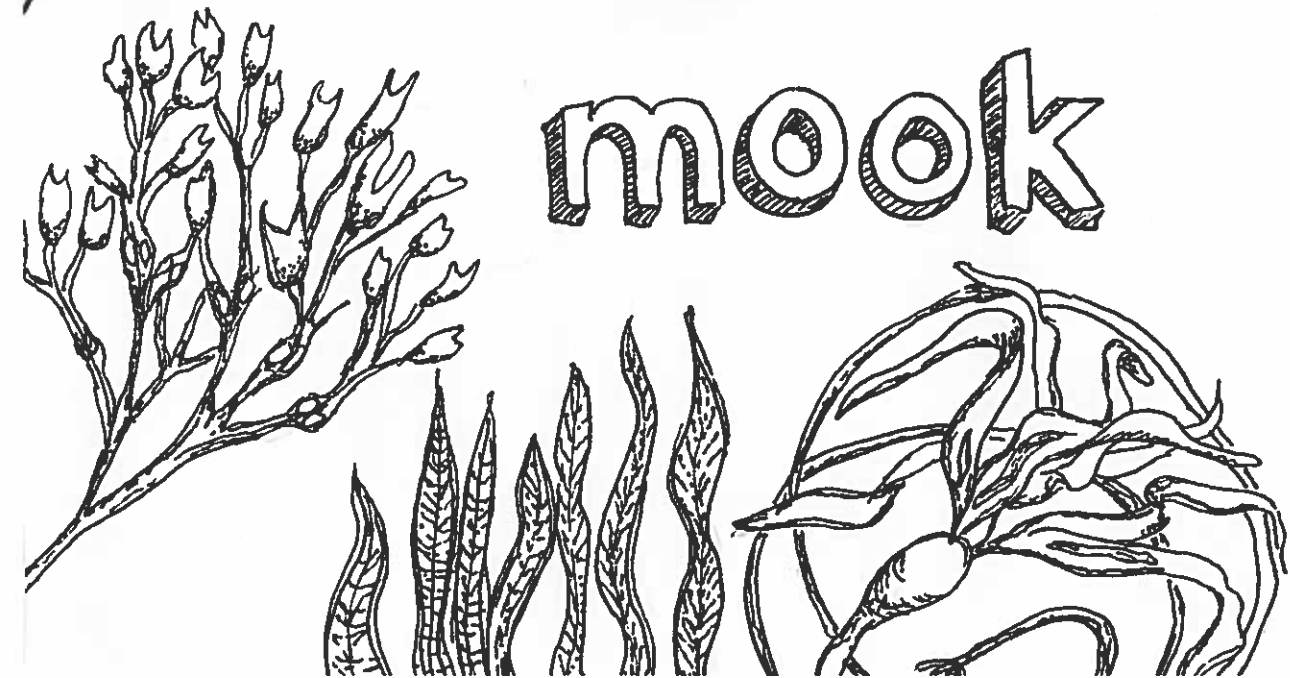
salmonberries

mak'ooxs

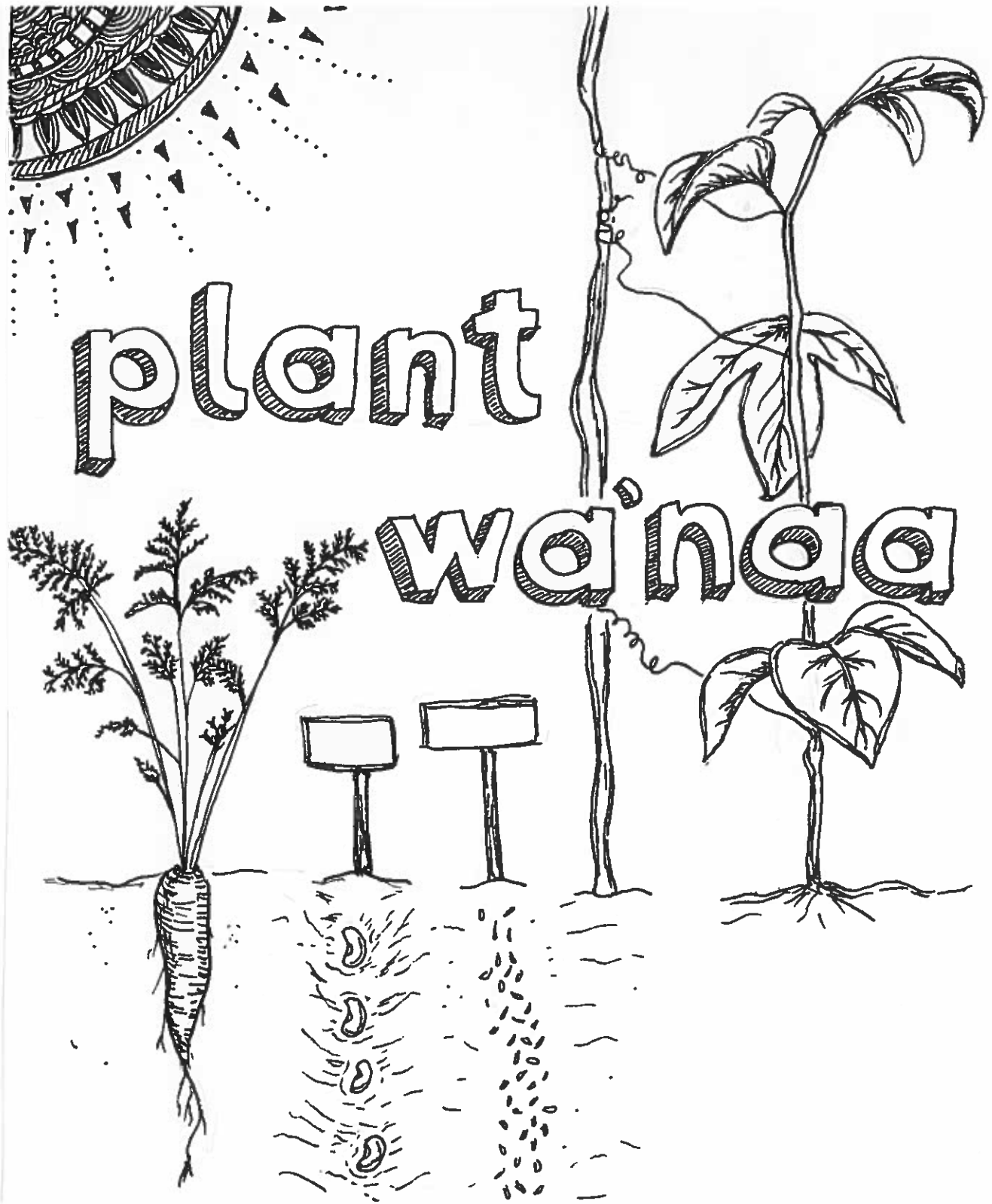




seaweed
paatsah



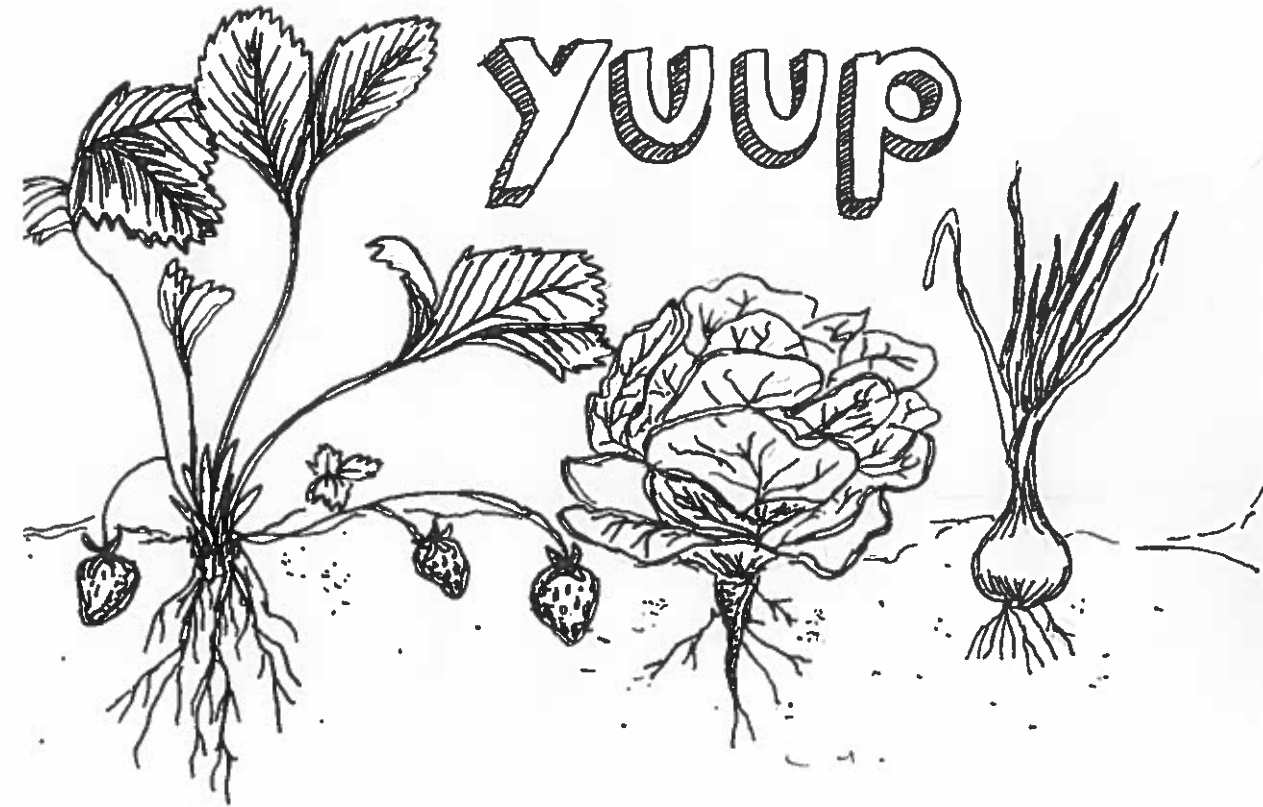
mook



plant
wa'naga

soil

yuvup

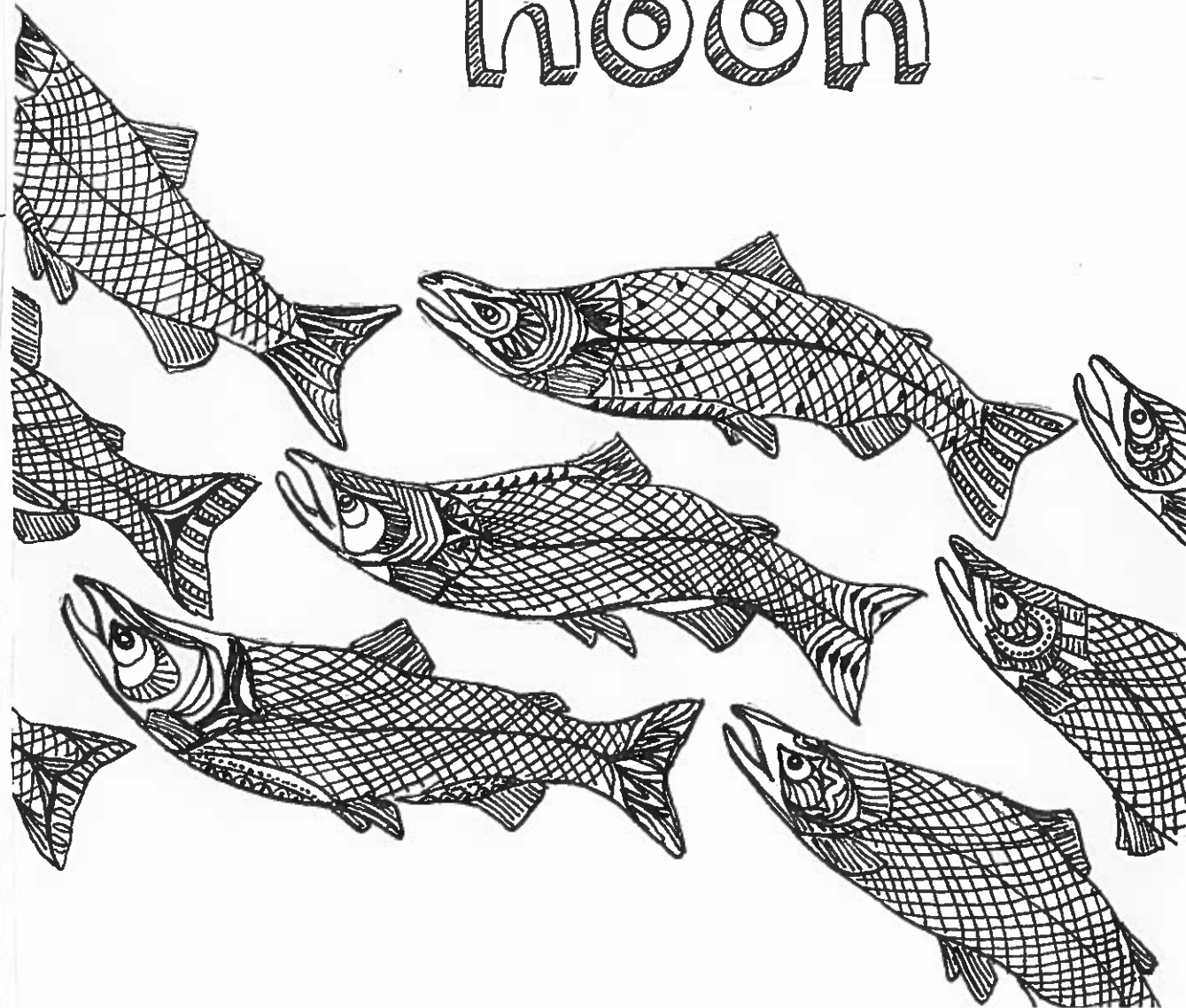


roots

huvust

salmon

hoon



seeds
nawa'na

leaves
'yens