Oct 21, 2023

Anthropology 245

Lavender on Fire

A Field Research Project by Tatum Grundy

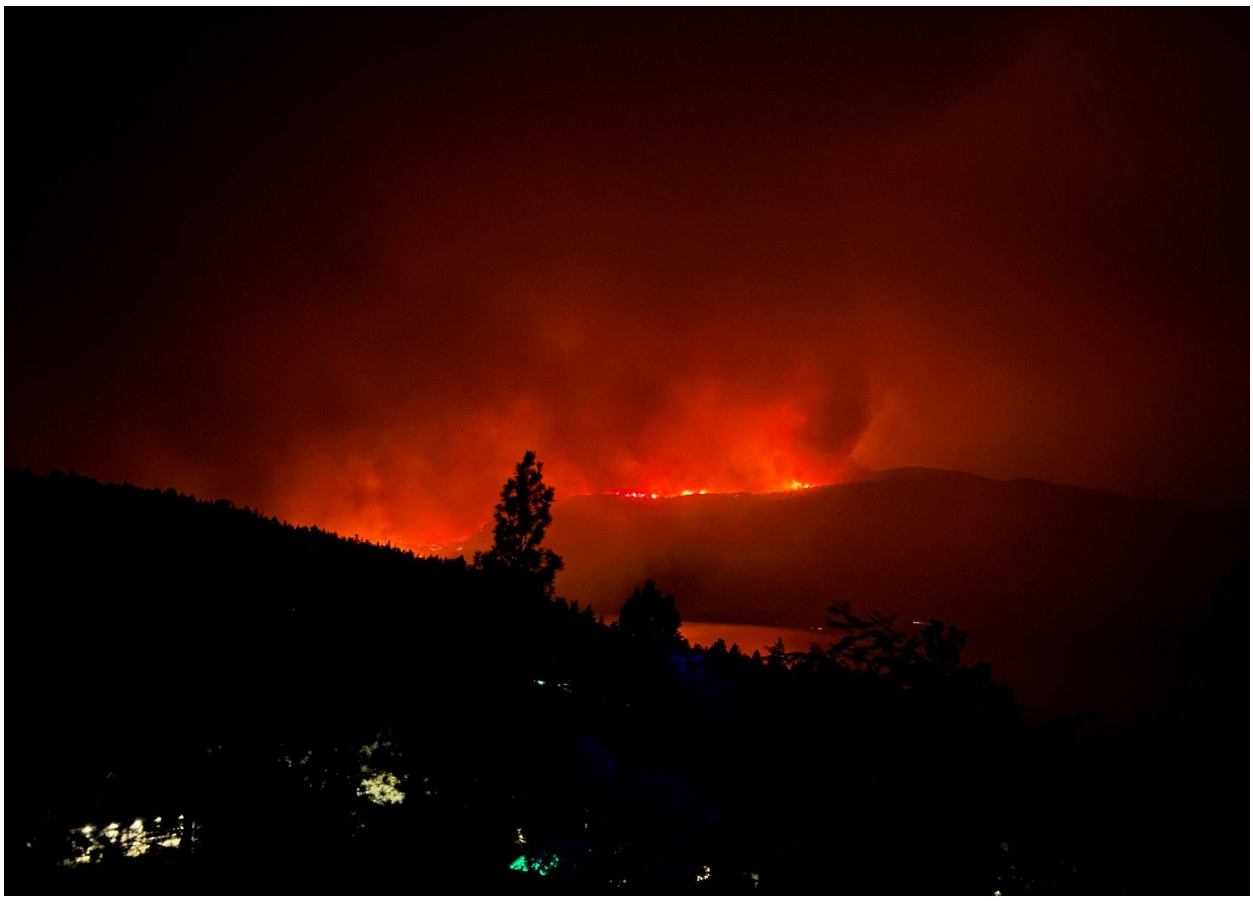


Figure 1. A view of the McDougall Creek Wildfire taken from the roof of my family's home in McKinley. August 2023. (Photograph by Kynnan McIntosh-Nelson).

Introduction

On August 17th, 2023 at 3:23 in the afternoon, I noticed a plume of smoke billowing from the mountains behind my parents' in-home office (Figure 2). It's worth noting that our property is situated in a semi-rural neighbourhood called McKinley. My family has occupied this property for the better part of ten years, and in the latter half of this time, planted a lavender farm. We were discussing the presentation of the new lavender bud labels that my

parents were about to upload to their website when an ominous grey cloud emerged from across the lake. As a lifetime resident of Kelowna, the sight of smoke in late August is nothing short of ordinary. It might warrant a groan and a brief reshuffling of your calendar, but nothing more. It was routine.

The weather forecast for that day should have tipped us off that this would not be an ordinary Okanagan fire. In the early afternoon, Kelowna Capital News reported that strong winds and potential for thunderstorms were on their way due to a cold front sweeping the interior of B.C (Cunningham, 2023). This statement came as an addition to the heat warning that was already in effect for the majority of the Okanagan.

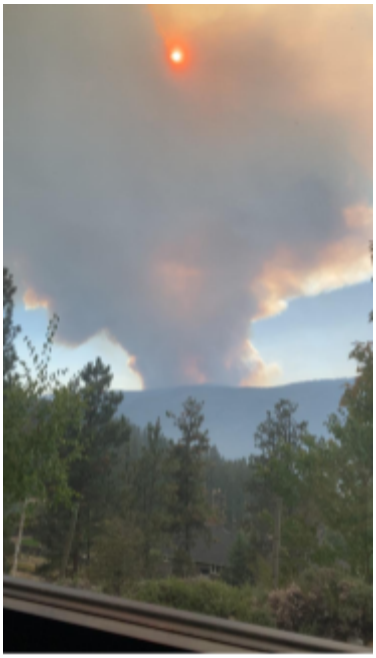


Figure 2. Smoke billowing as a result of the McDougall Creek Wildfire. (Photograph by author).

Roughly four hours after our smoke sighting (approximately 7:00 p.m.), my social media was flooded with images and videos of the fire that had begun charging down the mountains across the lake from Downtown Kelowna. At this point, the fire was hardly visible from my family's property. However, the plume of smoke we noticed earlier in the day had expanded significantly. My family remained unphased despite what may have seemed like chaos to the thousands of tourists visiting the Valley.

Watching fire is a regular pastime in the late months of the Okanagan. I've spent many nights over the last few years of my life parked at a lookout, gazing out at the flames ever so near to the city. So, naturally, when the sun finally set my family proceeded to the roof of our home to get a better glimpse at the ravenous fire. At first, the flames were just barely cresting the mountains where the smoke once swelled earlier in the day. However, the intensity of the wind pushed the fire downwards in a way reminiscent of the 2003 Okanagan Mountain Park Fire—a fire that had occurred roughly 20 years ago to the day.

As we sat there on the roof, faces adorned with respirators, while sand-dollar-sized chunks of ash stormed toward our bodies, we came to an unspoken agreement: this fire was going to be different.

At 10:00 p.m. we headed inside to bed, still optimistic that the fire would not jump the lake. Yet only an hour after turning in for the night, I was disturbed by the panic in my father's voice as he beckoned to my family to pack our things and evacuate.

What do you pack when you're not sure if you'll ever return to the place you're leaving? This is a question that many Kelowna residents were forced to answer on that momentous evening.

After jamming our pets and what we thought were our essential items into our vehicle, we left our home with an uncertain goodbye (Figure 3).

Figure 3. A view of the McDougall Creek Wildfire taken from the driveway of my family's home as we evacuated. August 2023. (Photograph by Kynnan McIntosh-Nelson).

The week following our evacuation, my family finally got the green light to go home. When we arrived back, we felt a relief that not all families had the pleasure of experiencing. After settling back in, I couldn't help but wonder about the potential impact of the nearby fires

on our family's lavender farm. It was this curiosity that catalyzed my decision to conduct a field research project in this specific area.

The Study

During my research, I made three distinct visits to the landscape, each at different times and on varying dates (Figure 4).

Visit:	Date:	Duration:	Time:	Visit Summary, Observations & Notes:
1	October 8th 2023	45 minutes	8:45am–9:30am	During this visit, I walked around the property observing different species and getting a general grasp of the landscape. I tried to focus mainly on details since I have walked the property several times in the past. I took a variety of photographs of plants, features of the land, and insects. It was during this visit that I found the deer bones.
2	October 14th 2023	45 minutes	4:10pm–4:55pm	While conducting my second visit, I decided to stay in one location near the upper portion of the lavender field. As I sat, I observed the sounds around me. In my notes, I included that I heard a woodpecker in the distance, as well as, an eagle. The higher elevation allowed me to view the burnt patches on the surrounding mountains as a result of the McKinley/Clifton and McDougall Creek wildfires. Moreover, I noticed that traffic from McKinley Road (below me) was busier than in my previous visit.
3	October 15th 2023	1 hour	2:00pm–3:00pm	For my third visit, I did a sweep of the entire property and used a telephoto lens to capture images of birds and landscape features which I wasn't able to previously. I tried to spend time in areas that I hadn't focused on in my earlier visits. Similar to my second visit, I noticed a lot of traffic/noise pollution coming from McKinley Road.

Figure 4. A table recording the visit number, date, duration, time, and summary of each visit to the landscape.

The Physical Landscape

The physical characteristics of the landscape of our lavender farm are a blend of grasslands and forest, positioned on a somewhat steep slope. Firefighters characterize our neighbourhood (McKinley) as a wildland-urban interface (WUI) (City of Kelowna, 2022). A WUI is defined as a region where human development meets or intertwines with the untouched natural environment (Fire Smart Canada). Although this makes for an attractive landscape aesthetic, it puts people and their homes at greater risk in a wildfire.

Properties in WUI's are typically distinguished by the presence of grass, shrub and tree cover (Figure 5). This description accurately summarizes the landscape of our farm, where tall grass grows rampant and trees fence the property.

Figure 5. Grasslands near the upper portion of the lavender field that have not been landscaped. (Photograph by author).

Near the upper portion of the lavender field, one can observe rugged rock outcroppings which house a variety of cacti during the summer. The aridness of the landscape provides a sanctuary for numerous xerophytic flora—something one might not expect given the vibrance of the environment.

Species of Note

***Cervidae* (Deer)**

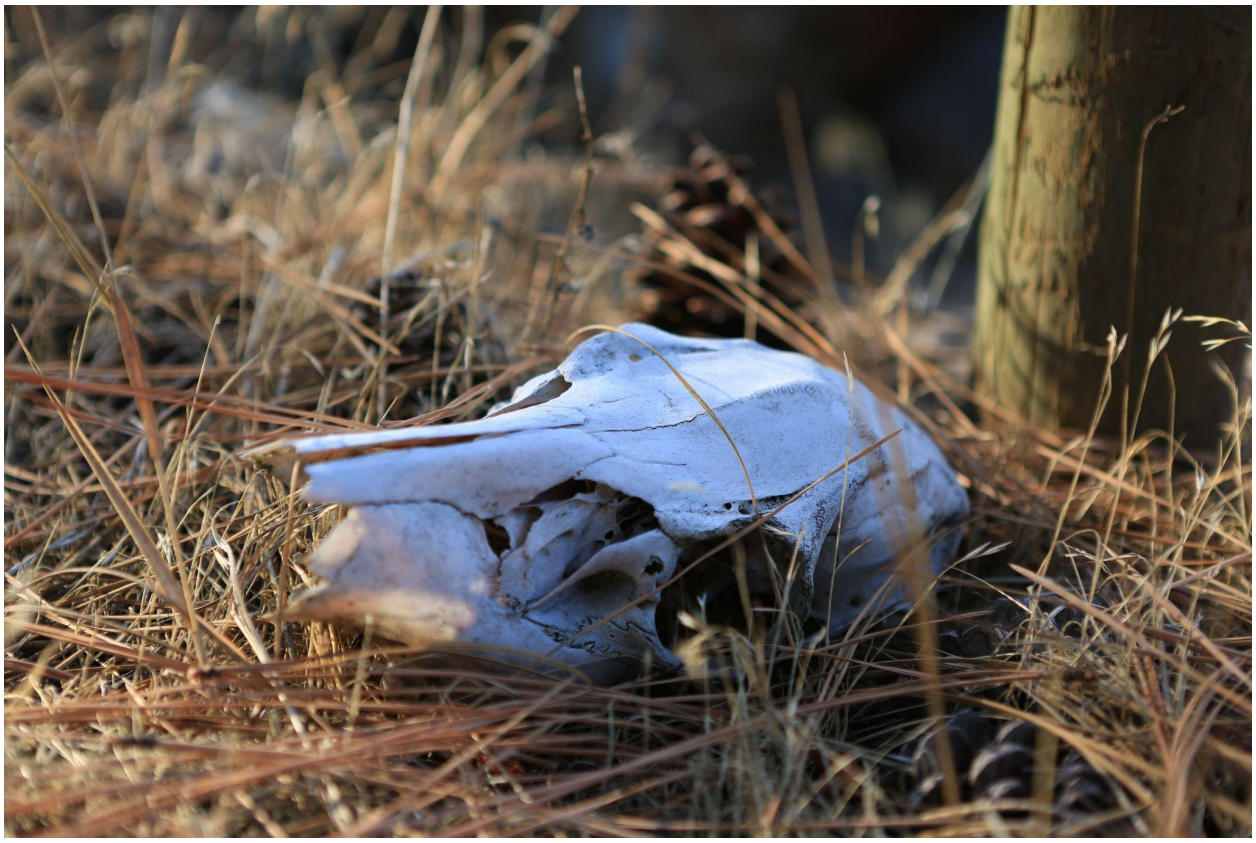


Figure 6. A deer skull found near the bottom of our lavender field. (Photograph by author).

Deer are a common sighting on our property. They can often be observed grazing in the deep grass or destroying my mother's roses. My family has tried to keep deer out of our farm so that they don't ruin our crops by putting up a fence. However, this sometimes results in them getting stuck. When deer get caught inside, we do our best to ensure that they get out unharmed. Sometimes this means cutting the fence or corralling them to an exit point. But, unfortunately, not all of them are this lucky. During my study, I found deer bones at the bottom of our lavender field which my father said was likely a yearling that got trapped without us knowing (Figure 6). According to the jaw and teeth, it can be assumed that the deer was roughly 1.5 years or older (Ivey and Ruth; Figure 7).

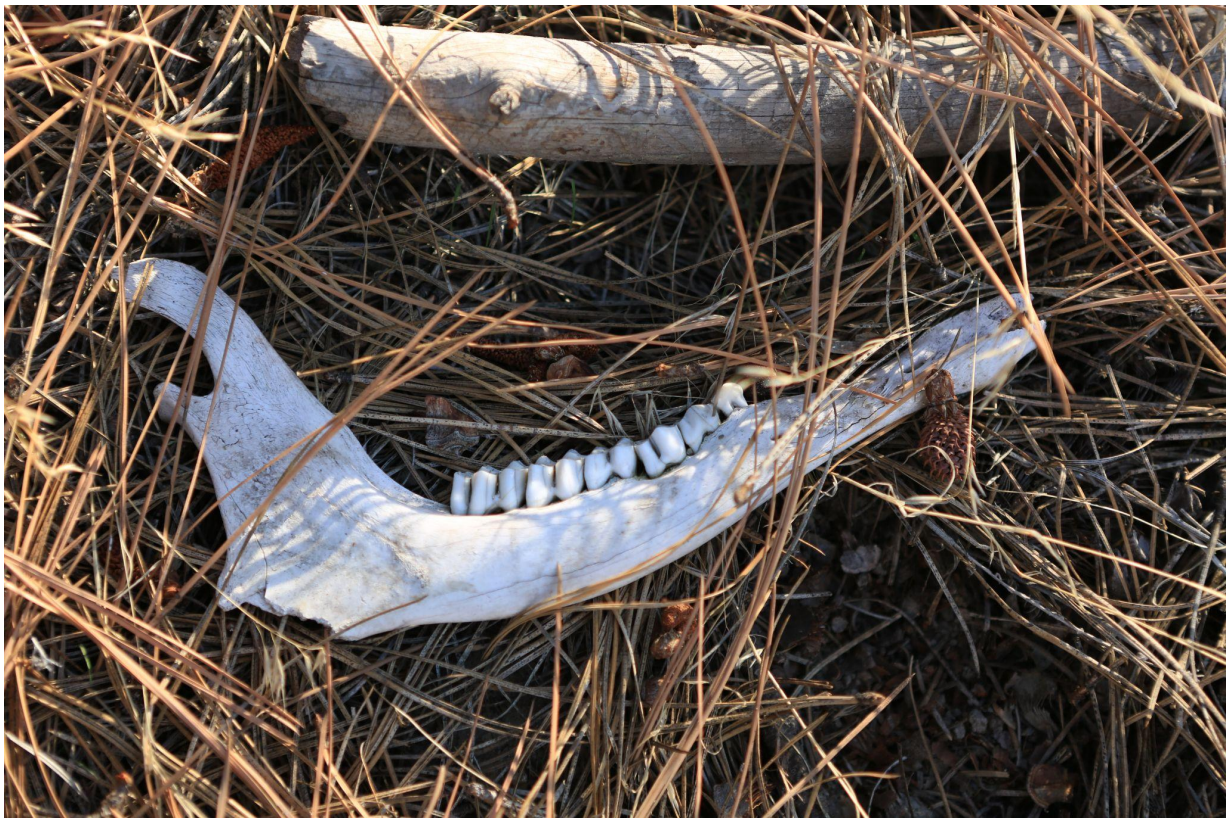
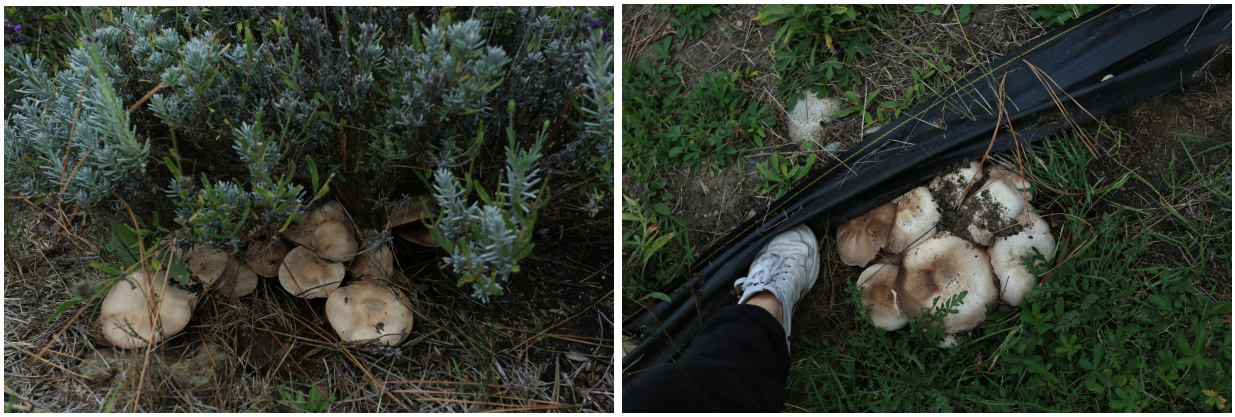


Figure 7. The jaw and teeth of a deer that were found near the bottom of our lavender field. (Photograph by author).

Agaricus campestris **(Field Mushroom)**



Figures 8 and 9. The left image is of field mushrooms under the lavender plant. The right image is of field mushrooms under landscape fabric. (Photographs by author).

While conducting my study, I noticed several field mushrooms sprouting from beneath the lavender plants (Figure 8). This reminded me of the nurse shrubs that we examined during class in the first module. Mushrooms aren't usually a common sighting in our landscape, so I probed the area to see if I could find any others. Not much further from my first sighting, I saw a glimpse of bright white flesh poking out from under the landscape fabric of one of the lavender rows. I peeled back the landscape fabric with my shoe only to uncover another giant cluster of field mushrooms (Figure 9). The mushrooms in this patch were notably large—some specimens boasted at least a few inches in diameter. The presence of these mushrooms, which we don't often see make regular appearances on our farm, calls for further investigation into the conditions that may have led to their sudden increase in numbers.

***Lavendula* (Lavender)**

Figure 10. French lavender blowing in the morning breeze. (Photograph by author).

Given the significance of lavender to this study, it would be unusual to conclude without mentioning the lavender plants that occupy the majority of our land. My family grows six different species of lavender plants across our two-acre property for a total of almost 5,000 individual plants (Figure 10). In different sections of the field, one can observe the tall, grass-like stems of the French lavender, the short stubby stalks of the English, and the starkness of the white lavender (Figure 11). These xerophytic plants are resilient to the Okanagan climate and resulting hardships. Over the years, they've endured several wildfires, tolerating not only the immediate threat of flames but also the lingering impacts of heavy smoke. The region seldom offers respite, sometimes subjecting the plants to long periods without water, extreme cold during the winter, and scorching heat during the summer. Despite these intense conditions, the plants always seem to thrive: a testament to their genetic superiority. Beyond their hardiness, the lavender plants on our farm serve as a key food source for a variety of pollinators. From hummingbirds and butterflies to several species of bees, the sweet fragrance of the lavender plants attracts a thriving ecosystem.

Figure 11. Remnants of the white lavender on our farm. (Photograph by author).

***Apis Mellifera* (Western Honey Bee)**

The Western Honey Bee is one of the many species of bee that we encounter on our lavender farm. In the early summer, near the time of our first harvest, the field is alive with a constant, melodious buzz. The bees flit from one flower to the next transferring pollen and ensuring the success of both our crop and their hive (Figure 12). Even as the early fall rolls in, and we've finished our second harvest, there remains an audible presence of bees. As I was walking through the field for this study, I couldn't help but observe the numerous

bees still hard at work in the lavender blooms that remained. The relationship between our lavender and the work of the bees is symbiotic. Their labour translates into bountiful harvests on our end, and, for them, something akin to an all-you-can-eat buffet.

Figure 12. Bee hard at work pollinating the lavender that is left in our field. (Photograph by author).

Cultural Characteristics

As with any human-occupied property, the cultural effects of the surrounding area are impossible to overlook. The most notable cultural feature is undeniably our lavender farm. While the lavender species create a thriving ecosystem for numerous species, they are not native to the landscape. Thousands of holes were dug, pathways were carved out, and landscaping was done to ensure a solid agricultural foundation. These practices, while necessary from a capitalist perspective to sustain our farm, disrupted the natural harmony of the landscape.

Near the upper reaches of the lavender field, there is evidence of where my family undertook the task of blasting into the side of the mountain to expand the available space

on our sloping terrain. While observing these details I could not ignore the ever-present hum-drum of cars going up and down McKinley Road—a busyness that was particularly obvious in the afternoon.

Figure 13. View of the burnt trees on the peak of Coyote Ridge. (Photograph by author).

As mentioned in the introduction of this paper, I'd like to recognize the cultural impacts that the wildfires have had on our property and the surrounding landscape. I will begin by first stating that as of writing this paper there is little consensus about what sparked the McDougall Creek Wildfire. However, it is known that the McKinley-Clifton fire was ignited as a result of embers being carried in the wind across the lake. Despite the unknown cause, I consider the fire's resulting intensity a cultural consequence. The lack of landscape management and widespread development in WUI's was beckoning disaster.

The aftermath of the fire in McKinley leaves unmistakable visual cues in its wake (Figure 13). On the peak of Coyote Ridge, a popular hiking spot diagonal from our property, are splats of red fire retardant. While I recognize that fire crews did everything in their power to curb the flames, I can only imagine the impact of such a harsh chemical on the wildlife and

surrounding water bodies. One of which happens to be the McKinley Reservoir; where many residents get their drinking water. In addition to fire retardant, make-shift access roads were carved in several locations, tearing up the natural environment. From our property, the view across the lake spotlights charcoal trees and an absence of homes (Figure 14). Under my feet, I notice the palm-sized chunks of ash littered across the ground, a silent reminder of the chaos that ensued only a few months ago.

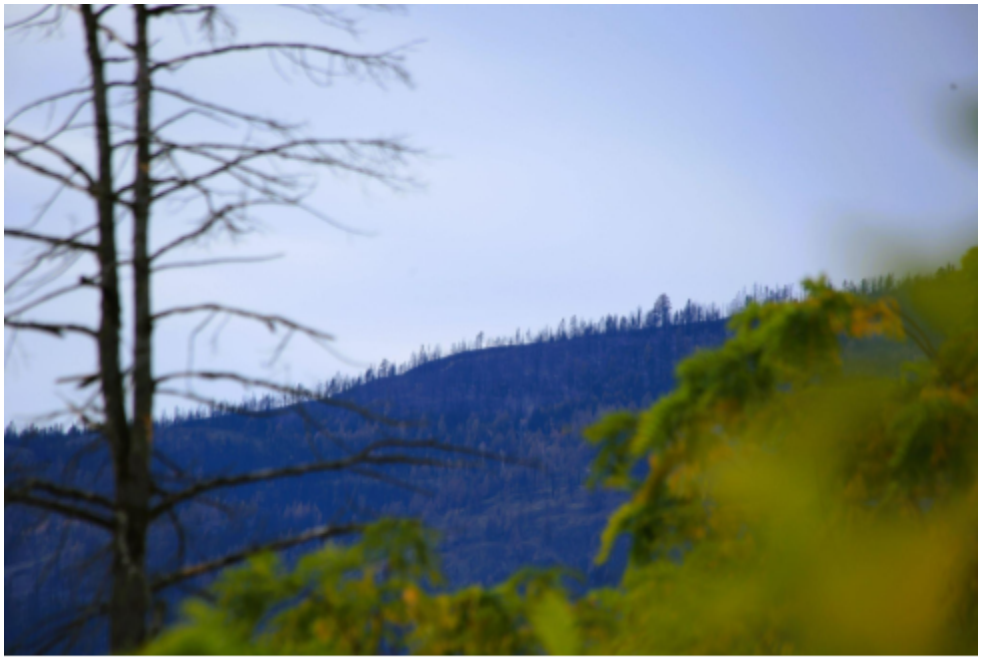


Figure 14. Charcoal trees from across the lake. (Photograph by author).

McKinley and adjacent neighbourhoods like Clifton value the presence of nature in their surroundings. However, it is precisely this Okanagan mindset that creates risk for both people and the environment. Families like mine and those on neighbouring properties care deeply about the plants and animals that inhabit the landscape around us. Yet, there exists a deep desire to live in WUI areas because they offer privacy and a closer connection to the natural environment. Living in a WUI affords the privilege of waking up to views of the untouched landscape, space, and relief from urban chaos.

The contrast between our love for the environment and our desire to be in proximity to nature emphasizes the fragility of the balance that those in WUI neighbourhoods must strike.

Reflections and Recommendations

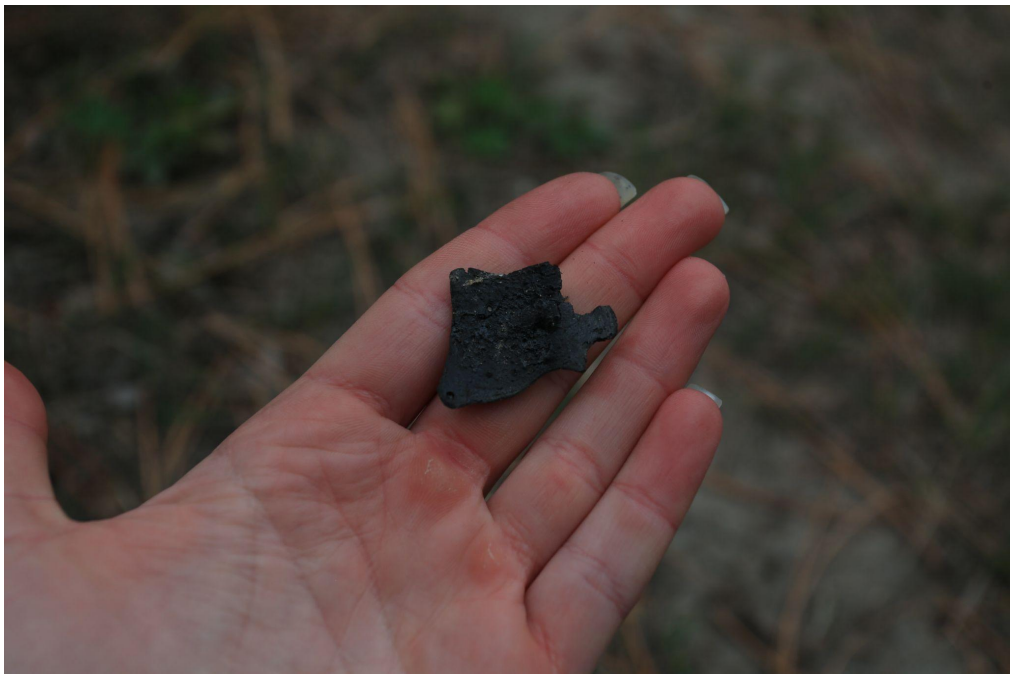
Going forward, I would like to see greater efforts aimed at mitigating risk and educating homeowners residing in WUI areas. This education should be founded upon the knowledge of the syilx Indigenous people. If we want to continue to call Kelowna home, we must grasp the impact that we have on the landscape and our shared responsibility for its care.

While the government offers several resources like Fire Smart Canada, the BC Wildfire Services, and local fire education programs, they have chiefly been developed from a settler's point of view. Therefore, it is of the utmost importance that we involve the voices of the Indigenous leaders in our community when crafting new landscape management strategies and fire reduction techniques. As descendants of European settlers, we are guests who occupy the traditional, ancestral and unceded land of the syilx people. Like any respectable guest, we must uphold our duty to care for and protect the land of which we loan.

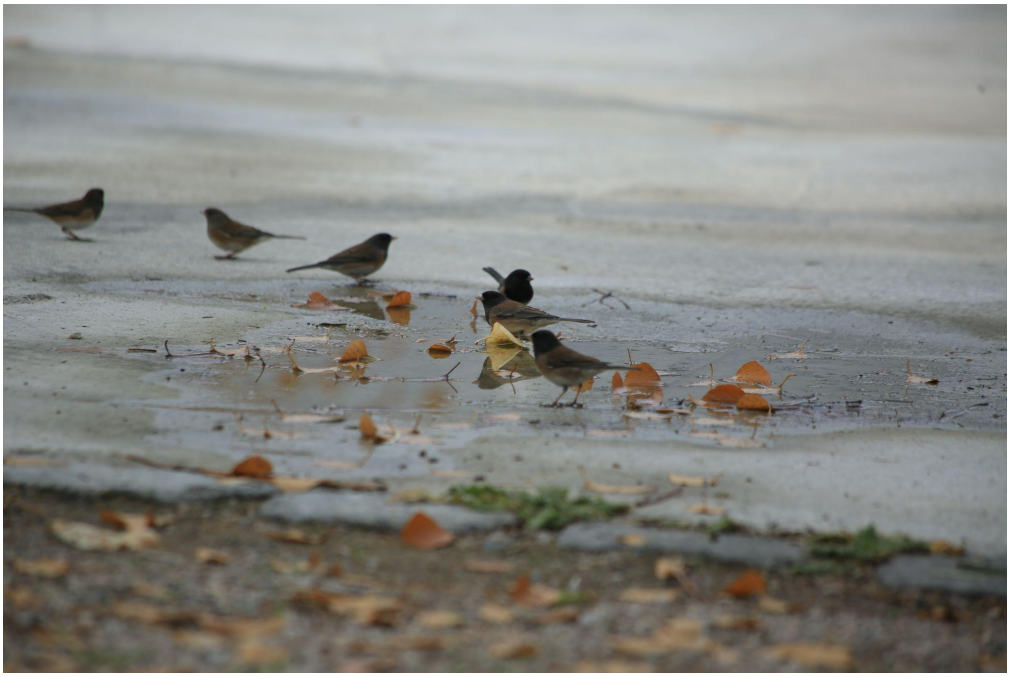
Human well-being is intimately dependent on the health and integrity of the natural environment. To sustain the species-rich, and bountiful Okanagan as we know it, there needs to be greater accountability from residents. Incorporating Indigenous practices like controlled burns, selective harvesting, and other restorative techniques is vital. In doing so, we can reduce the amount of wildland fuels present so that fires do not burn as hot for as long.

Throughout this educational process, homeowners in the Okanagan must come to terms with the fact that fire prevention is not the answer to their concerns. We must begin to recognize that Kelowna and surrounding communities are fire-maintained ecosystems. Preventing fire is not the solution. Instead, we must learn to use fire to our advantage and make sure that WUI developments are maintained in such a way that minimizes the risk of another catastrophic wildfire event. This becomes increasingly critical as the effects of climate change only become more evident in our region.

Additional Photos by Author



Chunk of ash found in the lavender field. October 2023.



Birds found playing in a puddle. October 2023.

Upper Portion of the lavender field. October 2023.

Lower Portion of the lavender field. October 2023.

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