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Somewhere In-Between: My Evolving Understanding of Wilderness

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SOMEWHERE IN-BETWEEN: MY EVOLVING UNDERSTANDING OF WILDERNESS

By: Sebastian Driver

Introduction:

My Understanding of Wilderness

Wilderness has many definitions and is a concept that means something different to everyone. Playing in my grandparents' backyard during my boyhood, discovering insects and 'roly polys' was where my encounter with wilderness began. Now, as a Davidson Honors College student pursuing a Bachelor's of Science in Wildlife Biology and a Master's in Public Administration, and earning the University of Montana's certificate in Wilderness Studies, I have encountered a range of definitions and approaches to wilderness. My studies have exposed me to legal and legislative perspectives, points of view rooted in ecological and environmental sciences, historical, political, and sociological understandings, in addition to place-based tribal perspectives from indigenous scholars. Experiential components of my experience—including field courses at the Flathead Lake Biological Station and Wilderness and Civilization, laboratory research with UM's Avian Science Center, and my own hiking adventures have further contributed to my emerging conception of wilderness. I have also read widely on the subject outside of my classes, encountering literature from authors such as Wendell Berry, Aldo Leopold, Robin Wall Kimmerer, and Sigurd Olson. Throughout these courses, readings, and experiences, I have continuously considered and worked to articulate my emergent understanding of what wilderness means to me. This capstone paper and project represent my wilderness journey in academic, experiential, and personal ways.

We use words daily to communicate with those around us, but some words, like organisms, have evolved to take new meanings; wilderness is one of those words. According to the Wilderness Act of 1964, "Wilderness is an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain." (Wilderness Act

1964). Many Americans in this era saw woods, lakes, rivers, creeks, and other natural areas disappearing before their eyes. These stakeholders believed protection was needed if they and others after them experienced the same sensation. These concerns led to the passage of the Wilderness Act and other important environmental legislation.

During my second year at the University of Montana, I discovered Sigurd F. Olson's *The Singing Wilderness,* Olson's stories engrossed me in the beautiful imagery of wilderness areas. Meanwhile, in my law class, I learned about the Wilderness Act of 1964 and thought, "It is wonderful that there is a strong piece of legislation that protects these areas like Sig described." During the same time, I took *The Montana Course*, which covered the past, present, and future of the state I had called home for nine years. As part of this course, indigenous scholar Dr. Rosalyn LaPier lectured on the Blackfeet tribes' worldview and how it shaped Montana. Specifically, Lapier discussed how the 1964 Wilderness Act excludes the indigenous perspective, and that the concept of wilderness had resulted in Native people being removed from their ancestral homelands. She argued that the term wilderness was obsolete. This idea was troubling to me because of my previous studies, experiences, and readings such as Olson's. What I began considering and will present in this paper is a more inclusive definition of wilderness.

While the legislation may be problematic for some, The Wilderness Act of 1964 provides legal protection for wilderness against industrialization. The natural world has much to offer individuals who take the time to step away from their screens and everyday busy lives, and without it, people may become consumed by the monotonous routine and alienated from one another and the land. Without this federal legislation, the U.S. would be less equipped to protect and conserve natural areas. In a time when climate change and other human impacts are destroying biodiversity, I aim to cultivate a culture of greater appreciation for the natural world.

In this narrative, I propose redefining wilderness to make it more inclusive and to show readers that deeper appreciation of the natural world does not have to be found in some remote location or officially designated wilderness area, but rather, it can be found in one's immediate surroundings. If more people can grasp this idea and commit to protecting the future of life, our world's natural areas will be bright.

"Where man himself is a visitor who does not remain."

These are the last words of the definition of wilderness as defined in the Wilderness Act of 1964. In recent years, this definition has received scrutiny due to its unrealistic nature and exclusion of Native American perspectives.

This is not the first time wilderness has received criticism for its definition. Indeed, this debate has been reinvigorated. I argue that now is the time to have these difficult conversations with stakeholders and to engage the differing perspectives to build a more inclusive definition of wilderness.

A Discussion of Definitions

Wilderness is often identified with the Wilderness Act of 1964 (Watson et al., 2011). The Wilderness Act established wilderness protection for over 9 million acres of federal land, most of which is found in the western United States (Watson et al., 2011). In addition, the Act established the National Wilderness Preservation System (NWPS) and a system where Congress could create additional wilderness acreage (Watson et al., 2011). In 2011, NWPS contained more than 106 million acres, managed by federal governmental agencies, including the Department of Agriculture Forest Service, Department of Interior National Park Service, Bureau of Land Management, and Fish and Wildlife Service (Watson et al., 2011). That number has grown and is

now 111 million acres of protected wilderness areas (The Wilderness Society, 2023). More than half of these designations were achieved by passing the Alaska National Interest Lands Conservation Act 1980 (ANILCA) (Watson et al., 2011).

When most people think of wilderness, they envision the original Act's definition of a place where man is a visitor who does not remain, an untrammeled place defined by its opportunities for solitude or primitive and unconfined recreation (Watson et al., 2011). ANILCA keeps wilderness as it is defined in The Wilderness Act of 1964 but expands it to include Native American perspectives and way of life in these designated wilderness areas (ANILCA, 1980). Many managers acknowledge subsistence use as a legislated notable exception to the Wilderness Act that must be accommodated (Watson et al., 2011; Dawson and Hendee, 2009).

Scientific Perspectives:

Wilderness as a concept can be thought of for its scientific value, which researchers describe as those areas where management objectives feature protection of the natural processes that have shaped the physical-biological character of the setting (Stankey, 1987). Wilderness presents an opportunity for scientists to research the roles of the structural components of unmodified ecosystems or the genetic diversity within such ecosystems; this is dependent on the availability of areas where human activities and impacts are minimal (Stankey, 1987). Three categories of scientific values exist for wilderness. These include:

1. A setting that provides a baseline of the conditions in the natural environment that have evolved outside human influence. Leopold (1941) argued for the preservation of wilderness so that a comparison could be examined between wilderness and areas modified by human use and occupancy.

2. Wilderness provides a setting where the nature, role, and function of the various components and processes of ecosystems can be investigated away from sources of disturbance.
3. Science is concerned with the long-term preservation of wilderness because there has not been adequate time or effort to discover all the values such areas possess.

Utilizing wilderness for science allows for insights that can lead to improved prescriptions for the management of areas outside wilderness. Furthermore, these areas can help protect against biodiversity loss. Relevant examples are the extinction of species and genetic shrinkage, driving the loss of biological gene pools in which ancestral diversity exists.

There are four broad concerns associated with the scientific investigation of wilderness. These include:

1. The specific characteristics of the area including, size, shape, boundary location, and flora and faunal composition.
2. Concerns with permitted uses within the area, including recreation, exploitative activities, preexisting impacts, and fire exclusion.
3. The long-term security of the area, including its legal status concerning permanent protection and its susceptibility to impacts such as acid deposition from within as well as outside the area.
4. The extent to which scientific values are recognized explicitly in the area's management policies, including the development of specific guidelines for scientific investigations (Watson et al., 2011).

Expanded Perspectives

In the preceding section, wilderness is explored through a natural sciences lens. However, more recent literature has investigated wilderness from a social science perspective (Watson et al., 2016); contemporary researchers are examining the human dimensions of wilderness, including its recreational uses. Recreation will be explored to highlight how social science can provide the information policymakers and managers need to make decisions, along with helping the public better understand wilderness areas.

Social science research in wilderness areas began with recreation management and was used to enhance communication with visitors, monitor visitor numbers, and understand why visitors wanted to explore these areas (Watson et al., 2016; Hendee and Lucas, 1973). In these early projects, researchers thought this approach was a means to better understand the humans' environmental and social impacts in wilderness areas (Watson et al., 2016). However, Behen (1974) challenged this idea and thought wilderness designations took away opportunities for individuals. Other social science research has explored how many people were permitted to visit wilderness areas while maintaining the sense of solitude that users often cite as criteria necessary for enjoyment (Rogenbuck et al., 1993; Stankey, 1973; Watson, 1995; Watson et al., 2016; Williams et al., 1992).

Considering Indigenous Perspectives:

To this day, little research about wilderness, wilderness values, and wilderness policy in the United States has acknowledged the indigenous relationship with the natural landscape (Watson et al., 2011; Watson et al., 2003). However, there are instances where researchers have brought forth this perspective with the history between indigenous people and public land management agencies (Keller and Turek, 1998) and the relationship between indigenous people

and nature in general (Carlson, 1998; Watson et al., 2011). More recently there has been an increase in the number of researchers who are addressing this predicament locally and globally (Harper et al., 2018; Hintelmann et al., 2017; Kipfmueller et al., 2021; Youdelis et al., 2020).

The introduction to the legislative history, debate, and philosophical influences behind the Wilderness Act became a topic in academic programs in the 1970s, with institutions offering basic and advanced education programs with an emphasis on scientific research and academic exploration of the wilderness concept (Watson et al., 2011). The University of Montana's Wilderness and Civilization program is one such example. Wilderness and Civilization was established in 1975 to provide wilderness information, research, and interdisciplinary education (The Wilderness Institute, 2024). However, further research and conversation with indigenous people still needs to occur; these efforts can and should be strengthened.

Threats to Wilderness

The Wilderness Act notes a significant problem people face today with "increasing population, accompanied by expanding settlement and growing mechanization." Many legislators justified their decision to protect wilderness as a means to preserve the natural character of a given area (Watson et al., 2011). When legislators attempted to pass this Act, they aimed "to secure for the American people of present and future generations the benefits of an enduring resource of wilderness" (Watson et al., 2011). American environmentalist Bill McKibben described how, when walking the trail outside his house he encountered a tree cut down by a chainsaw, and he felt he could not escape human impacts on the landscape (McKibben, 1989). He describes how this makes him feel: "Even in the most remote wilderness, where the strictest laws forbid the felling of a single tree, the sound of that saw will be clear, and a walk in the woods will be changed—tainted—by its whine (Mckibben, 1989, pp. 47-48).

William Cronon says, “The time has come to rethink wilderness” (Cronon, 1996, p. 7). As Cronon mentions, he knows that his claim may be troubling to environmentalists as wilderness is the place people recognize as not being infected by civilization (Cronon, 1996). I agree with Cronon that the time has come to think critically about what wilderness means. A failure to rethink the story we tell and the people we have historically excluded may lead to “saying goodbye to the words wild and wilderness” (Lapier, 2021).

A Quiet Voice to a Roar

Having a more holistic picture of wilderness and how the current debate emerged, this portion of my paper will investigate how wilderness does injustice to the indigenous communities. In one view, there is the idea of ‘Indian Wilderness” From this perspective, European Americans came here and looked at the continent and said: ‘This is something different, this is wilderness. The Native Americans said: This is home’ (Rothenberg, 1980). Following this, two interpretations of this phrase are 1) the Native American is or was at home in ‘wilderness’ and that ‘wilderness’ equals home; or 2) the Native American makes or made a distinction between their habitation and the surrounding non-habitation, which the European American fail or failed to honor, treating the whole continent in its aboriginal pre-European American state as a continuous ‘wilderness’ (Rothenberg, 1980). Furthermore, as one journalist discussed in *The Idea of Wilderness Erases Native People: Here’s How To Fix It: “*The big problem stems from the enshrined concept in federal law: the Act is rooted in a cultural outlook that defines Native people as either subhuman or non-existent” (Clarke, 2017, para. 2). “Therefore, the idea of wilderness erases Native people and needs to be rethought” (Clarke, 2017, para. 3).

In North America, the idea of wilderness, as presented in the Act, gained momentum even as nearby Native communities were being exterminated through military and vigilante violence, and while suffering from the impact of European epidemics. As American settlers expanded westward, they came into lands once heavily occupied by indigenous cultures and understood these places as the 'primeval' lands described in the Wilderness Act. Unbeknownst to these settlers was how the indigenous cultures impacted the landscape. Therefore, when the Act describes wilderness as "without permanent improvements or human habitation," it fails to recognize the people who had lived in the landscape for millennia (Clarke, 2017). Perceiving wilderness landscapes as without Native people caused what has been described as intellectual genocide. "First, the land was stolen and we were killed, then claim them and act like their works never existed" (Clarke, 2017, para. 7). From this view, one can see why some indigenous communities dislike the wilderness concept (Clarke, 2017, para. 12). However, this does not mean that all indigenous communities are upset about the land being protected by the Wilderness Act (Clarke, 2017, para. 13).

Traditional Ecological Knowledge argues that humans can live with the land instead of living on it (or being excluded from it); This approach has made some people question the concept of wilderness (Clarke, 2017, para. 14). Clarke (2017) argues that calling the concept into question is not a problem in itself, but attempting to remove the concept altogether in the current political climate and scholarly discourse is risky, especially when one cannot deny that the Wilderness Act has protected millions of acres that otherwise would not exist. So, how should individuals who care about the natural world resolve this conundrum? Some managers are already attempting to make wilderness more inclusive and to reconcile Western concepts (including ecological and social) and indigenous views of how to care for the land. Scientific,

environmental, and broader public views and values should also be considered. In addition, there is hope; as William Cronon said, “Wilderness is quite profoundly a human creation—indeed, the creation of very particular human cultures at very particular moments in human history” (Cronon, 1996, p. 7). I propose that instead of saying goodbye to the words wild and wilderness, we, as people who enjoy these scenic landscapes, should come and discuss what it is we value in wilderness, and we should be sure to include a history left out of the creation of wilderness. I argue that wilderness is a human-constructed idea, and we can rethink our understanding of wilderness and make it more inclusive.

Previous sections of this paper explored wilderness from its creation, the values from a scientific and social science perspective, threats, and the exclusion of indigenous perspectives. In the following sections, I will describe some of my personal and academic experiences that have contributed to my understanding of wilderness. I will also discuss some authors who have been especially important to my wilderness journey. In my discussion, readers can see the evolution of my understanding and, may too, realize that wilderness exists right outside of their backdoors. My hope for readers is to have a connection to me as a person and to think of when they have felt a similar feeling in connecting to the natural world. If the message can be adopted into our society, we can reshape how we view our place in the world and take care of the land that provides for us.

A Seed is Sprouted

An early, mild summer day in Missoula, Montana, in my grandparents' backyard, is where my connection to the natural world and conception of wilderness begins. My grandparents had just moved from the north side of Missoula to the south (where they currently reside) to a cul-de-sac where a cream-colored house outlined with a green trim would be home for my mom, twin sisters, and me. My grandparents built a fence and planted flowers, trees, and vegetables during our stay. While they began the process, I would come outside and help in the way I knew how to; digging around in the dirt, and uncovering the hidden world of insects. During my adventures, I looked for any insects I could find, particularly worms, 'roly polys,' and grasshoppers. To work off my youthful energy, my mom and grandparents would walk McClay Flats, where my sisters and I would bring nets to play with down on the banks of the Clark Fork river. Besides throwing rocks in the river, we would attempt to catch minnows in the shallow waters. These early boyhood memories are the sprouting seed of my connection to the natural world.

After these summer days spent playing in the backyard, I moved to other backyards with more insects to explore when my mom, twin sisters, and I moved with our father to his new station in Clarksville, Tennessee. My dad was still in the U.S. Army then, so moving around was a part of our family's lifestyle. In the summer of my second-grade year, on July 3, 2010, after a long U-Haul voyage across the country, we finally made it to our new home, and I met my dad, who, until this point, was just a voice behind a phone that I corresponded with periodically. The house had a screened-in porch that led to a larger version of my grandparents' backyard. Being in

the Southeastern U.S. presented me with a new insect, the firefly. In the evenings, my sisters and I would collect these specimens whose green rumps lit up the evening skies. Some other memorable parts of our house in Tennessee were a pond with a trail that led to a cave, a petting zoo, and a zoo. However, these locations were only occasional excursions because, as a military family, most of our time was spent on the base and at social events with others in the community. After a year in Tennessee, this chapter of my life closed, and a new one began in El Paso, Texas.

Moving from the eastern forests of Tennessee, my family now lived in the southern deserts of Texas, where my favorite animals, snakes, could be found in abundance. Though my memories are fuzzy, I recall our backyard having palm trees and a high rock wall. Some connections with the animals I made were through visits to the zoo about 40 minutes away, to a ranch with a petting zoo, and to Sea World. During this time, I was obsessed with approaching the reptile enclosures where I could view the snakes in their containers. I liked the other animals as well as they captured my eyes with their unique looks. For Christmas break, my family visited Sea World, which opened my eyes to the wonders of the oceans and where I would meet for the first time, my beloved sea otters. After a year, my family said goodbye to Texas and hello to my new home, North Carolina.

With our move to the eastern forests of North Carolina, we lived in the countryside near Fayetteville, where I had been born. The exact details of the house escape me, but I remember the backyard with a few large Ponderosa Pines. Right down the road from our house, there was a big farm field that my sisters, some nearby neighbors and I would occasionally explore. These were some of the best times of my childhood; we would play for hours until the sun sank lower in the sky, the streetlights came on. A zoo, aquarium, and Kure Beach connected me to the natural world. My fascination with snakes and mammals grew.

In North Carolina, I was further mesmerized by the creatures of the sea, especially when I could touch them in enclosures, such as the friendly sharks, sting rays, corals, and sea urchins. Even though I had only spent a week in Wilmington, the home of Kure Beach, this location soon made North Carolina my favorite state. During spring break, we swam in the ocean, and I would have stayed in all day, if I could. It was always fun looking for shark teeth that had washed up onto the shore, watching the seagulls as they stole people's food, and thinking about what organisms lived below my feet in the deep blue swaths of the Atlantic. My adventures in the ocean slowly washed back into the current, and the only time I would get to experience this again is when these waves touch the shores of my memories. As the school year ended, my dad got deployed to Germany, and my mother decided that we would go to Montana for summer vacation to see our grandparents.

After a long day of catching flights, we finally made it in the evening as the sun set in Missoula, Montana. Even though it had only been four years since I had left this place, it felt longer because, to my eyes, so much had changed. Up to this time, the seeds of the natural world had been slowly growing in me as I interacted with the different animals I viewed. Now, images of fishing and exploring the woods took over my mind. Those ideas I had about what I would be doing remained dreams as it would take a few more years until someone showed me how to fish and guided me to some areas to explore. Some activities that spurred my love of the natural world were exploring Glacier National Park and a few camping trips. With all these adventures under my belt, I could not wait until I got back to North Carolina to share the stories with people whose reaction to me saying I was visiting Montana was, "Is that even a real place?" However, I would not be returning to North Carolina. My mom had decided to have my sisters and I remain in Montana to have a more stable life as we approached our middle and high school years.

After moving back in with my grandparents, this chapter would close after a year, when my mom found a home south of Missoula in the community of Stevensville, where she attended high school. The Bitterroot Mountains were quite the sight when I saw them for the first time, and would be a scene I got to look at every morning from our new house. The new house was a cozy little 1970s-style home with lots of tall, old trees and surrounded by a cattle farm. As I grew in this location for the next several years, I went on occasional hikes with my family and on school field trips. Still, my every breathing moment was not consumed with going out into nature.

My connection to the natural world deepened in the summer of 2020 when I transitioned to becoming a college student at the University of Montana (UM). As this new chapter began, I was nervous as I anticipated what this new journey would hold for me. To ease these worries, my grandmother signed me up for the Freshman Wilderness Experience (FWE) so I could meet other students with similar interests. FWE is a program for incoming college students at UM who go on a four-day backpacking trip somewhere in western Montana or a rafting trip. For me, this was my first time backpacking and camping overnight for an extended period. As I gathered the necessary items and supplies for my adventure, I had a quick demonstration by Mom and Grandmom about how to stuff a backpack properly and how to set up a tent. On a lovely, warm sunny August morning in Missoula, I headed to Schreiber Gym on campus, where I met my trek leaders, who would be guiding me into the Fred Burr reservoir. Eight other freshmen would accompany me, with me being the only person from Montana. On the night before we left Missoula, we played icebreaker games and cooked out on the lawn across from the Adams Center. After washing our dishes in the Clark Fork river, we camped on the campus golf course, where we lay under a clear sky looking up at the stars.

Rising early the next morning with the sun coming up behind Mt. Sentinel, my group and I divided ourselves between the two leaders, and made our way to Fred Burr (which is actually close to where I grew up in Stevensville). As we made our way back into the Bitterroots to the trailhead, we unloaded our gear, and the adventure began. Initially, our hike was rough; there was no clear trail so we went a little too far and realized we needed to turn back. Once we made it onto the horse trail, we knew for sure that we were headed in the right direction. Eventually, the horse trail did become an actual trail, and we found our way to the dam where we would be camping. While hiking to our destination, the group began playing trail games and conversing about our high school experience and what we were looking forward to in college. With college, I had the idea at the time that I would study Human, Health, and Performance while pursuing the pre-med track. My goal was to become a dermatologist, but in school, I wanted to learn more about sports medicine. I decided to pursue this track because from high school to the time I came to college, I had lost over 80 pounds, and I wanted to learn more about exercise science and to help other athletes because of the positive impact it had on my life. Furthermore, I was interested in dermatology because of Dr. Sandra Lee, aka "Dr. Pimple Popper." Some of the other students in my FWE group were planning on studying psychology, elementary education, forestry, and biology. When it came to what we looked forward to with college, all of us were excited about the friendships we would build and exploring our interests further.

We made it to the dam, which was filled with water, and after finding a place to set up camp and take a lunch break, we took a dip into the reservoir to cool off before dinner. On night one, we played card games, talked about random things, and shared laughs around the campfire. Having only been to the reservoir, I was now unfamiliar with where our next two nights would take us. After breaking camp, we crossed a creek and headed onto the main trail. We came across

huckleberries as we made our way deeper into the woods. So, I had to introduce my hiking buddies to this delicious Montana mountain delicacy. Having enjoyed the berries they found, we all took out our mess kits, and, as we walked, we collected more huckleberries so that we could enjoy them later (and if you can avoid eating them all, you can even enjoy them with your breakfast). After splurging on huckleberries and traversing a log above the trail, we came to another spot where the trail ended. To get to our destination, our trek leaders had to pull out a topographic map to see which direction we were supposed to go to not get lost and make sure we made it to our destination. Seeing this shocked me, but I trusted that our leaders would get us to where we needed to go. The next several miles were some of the best as we walked among the wildflowers. After finding what looked like a deer bed, we had to reassess where we were going. As the leaders sorted this out, it was the perfect time to take a snack break and have another opportunity to purify some water and refill our water bottles from a nearby creek.

After a refreshing break in creek water, our leaders found the direction we were supposed to go. At this point in our journey, we reached the part where we began the portion of the hike with the most gain in elevation, and with lots of switchbacks. To keep spirits high, one of the students devised a switchback song that we repeated 40 times. The switchback song did its job and got all of us to the top with our spirits lifted. Our spirits were further elevated once we saw the alpine lake before us. To celebrate the long trek uphill, we jumped into the freezing water and then, like lizards, sunbathed on the rocks. We spent the next couple of days doing quick day hikes around our campsite, and before you knew it, we had to head back down the mountain. In our descent, we reflected on the journey and what we were looking forward to with school in a couple of days. While reflecting on the way home to Missoula, I knew I wanted more

experiences like the past several days where I could connect with a community of students who enjoyed the outdoors.

Experiential Education

Some ways in which I found the community of students and personal connection with the natural world during my college years were working in the Avian Science Center, spending my summers at the Flathead Lake Biological Station (FLBS), participating in UM's Wilderness and Civilization program, and my own personal adventures. Beginning in my sophomore year, when I had just switched my major from Human Health and Performance to Wildlife Biology, I learned about a job posting in my Careers in Wildlife Biology course about watching bird videos. I initially thought about how this was a great way to get a job on campus and make some extra spending money. After getting started with my new job, I quickly fell in love with birds as I watched them return to their nests, feed their nestlings, and keep their young warm by sitting on them. For me, it was enjoyable watching the nestlings pop up from their nests and ask their parents for food. I observed and watched hundreds of videos, and I never got tired of the task. After a year, I moved on to another project within the bird lab, where I watched videos on my favorite bird, the black-capped chickadee. As my fondness for birds grew, I began getting into birding and enjoyed exploring these creatures for myself. The black-capped chickadee holds a special place in my heart because of its "hey, sweetie" call, which always brightens my day. A moment I will never forget is when I observed a bird banding station with UM's Bird Ecology Lab in Florence, Montana on the MPG Ranch. Throughout the morning, I saw people collecting birds and information for their datasheets. Toward the end of the morning, the workers began letting us release the birds. I got the special honor of releasing a yellow warbler. However, before I did this, the worker put the bird next to my heart so that I could hear its heartbeat. For those

who have never heard a bird's heartbeat, it is a rapid, steady beat that is much faster than our own. After hearing the bird's heartbeat, I remember feeling as one with the bird and a call to protect these fascinating organisms. The yellow warbler was then placed in the palm of my hand, and I had to encourage it to fly away by gently moving my hand up and down to give it a boost. In a few seconds, the yellow warbler left my hands, but its imprint on my heart and mind remained.

To find a community of students like the ones during my FWE trip, I took summer courses at FLBS during both my sophomore and junior years in the summer. Both summers, I stayed up at FLBS for eight weeks, where I learned about ecology by going out in the surrounding area (including Glacier National Park) to see the scientific processes in action. One memorable experience was in my Alpine Ecology course, where I learned about the ecology of this habitat and the indigenous history of the land we were exploring. In addition, the course taught me how to think about how scientific research impacts the general public. To put these concepts into practice, my group decided to make a documentary film on the boldness of Columbian ground squirrels in Glacier National Park in addition to the proposal we were writing. We decided to do this because we wanted our research to have a larger impact on the public rather than just doing a PowerPoint presentation. Our efforts were successful as our film reached 1400 people and earned 100 likes, comments, and shares on FLBS's social media platforms. This experience taught me that as a scientist, I must find ways to make my research engaging for the public and to show them how science can be fun. No matter which course I took during my two summers—Field Ecology, Evolution of Animal Behavior, and Forest and Fire Ecology--was surrounded by a cohort of students who, like me, enjoyed the natural world and immersing themselves in it.

During fall of 2023 I was a part of UM's Wilderness and Civilization during which I completed a minor in Wilderness Studies and further explored my relationship to wilderness. Some of the courses I took were Ecology of Literature, Environmental Drawing, Conservation Ecology, Wilderness and Civilization, and Field Studies. In Ecology of Literature, I looked at how wilderness was historically viewed, philosophies that led to Western Society's disconnect with the natural world, and threats to our environment. My favorite part of this course was reading Romantic poetry, describing why a connection to the natural world was necessary. These authors found that people would feel unfulfilled without this connection and thought they could find it again if it were lost. The Environmental Drawing course engaged with a passion I lost when coming to college: drawing and painting. However, our instructor pushed us to think about what art is. To shift our minds, we looked at some environmental artists and their pieces to see what is deemed environmental art. After sketching with pencils and watercolor, we moved on to creating our environmental pieces. For my piece, I used a pre-made wreath and stretched some cotton like a spider web. Along the spider web were different photos that represented who I was. In front of the spider wreath was a circular bathroom mirror where on one side I had an original poem printed and glued on. My thought process behind my piece was I wanted viewers to first look at themselves in the mirror, flip over the mirror to read the poem, and then look at me in the spider web. I aimed to create a connection between myself and the viewers. Another aspect I enjoyed about the art class was getting to do art on our field trips as this was one way for us to slow down and connect with the natural world around us. I had put to use a new skill in my scientific research during my Conservation Ecology course as we worked on our observational skills to come up with our end-of-year research project. In the process of developing a research question we had to observe the areas we were visiting during the trip and come up with a

scientific question. For myself this was a new skill and was difficult to do in the beginning. I eventually came up with my question where I observed that strawberries appeared to be more abundant in recently burned areas (past 5-10 years) compared to sites which did not have a fire in sometime (10+ years). By observing the areas, I visited throughout the semester it allowed me to be present in the moment and to take the time to ask potential questions about why the land looked the way it did. Wilderness and Civilization is the course where I learned from other various students' perspectives some of whom had grown up spending their time in the outdoors, and others, who, like me, were beginning to get into outdoor recreation. During my semester, I learned how these perspectives could be brought together, how civil discourse can occur between people and groups, and how wilderness can be redefined in more inclusive ways.

The rapid beat of a bird's heart and the connection with students and faculty over the years have deepened my understanding of wilderness. Now, at the end of my undergraduate studies, I can confidently say that the seed planted as a young boy has sprouted. Now, that sprout is a sapling, that over the years, has had time to grow fully into an adult tree. Over the coming years, I will have leaves that drop from my branches, but I will always have my roots to keep me grounded and sustained. Having shared my roots, I will share the nutrients that have helped me to grow by sharing some of the authors who shaped my views.

Love of Learning: Exploring Other Perceptions

The person who inspired me in my journey of understanding wilderness and changing my major to Wildlife Biology in my sophomore year is the author Sigurd F. Olson. During my consideration of changing majors, I read many of Sigurd's books and was captivated by his description of the canoe adventures he had in Minnesota and Canada. I connected to his work because his journeys in wilderness went beyond the aesthetic beauty of the landscape and were discussed as a psychological and spiritual necessity. Furthermore, Olson included discussions on his interactions with Indigenous people he interacted with and his view included what he had learned over the years from these relationships. So, when I heard the proposition to remove wilderness altogether, I was hesitant because, from my readings, I saw a person whose definition included the indigenous perspective. Here is a passage from Sigurd's *We Need Wilderness* (1946) article:

> Wilderness to the people of America is a spiritual necessity, an antidote to the high pressure of modern life, a means of regaining serenity and equilibrium. I have found that people go to the wilderness for many things, but the most important of these is perspective. They may think they go for fishing or the scenery or the companionship, but in all reality it is something far deeper. They go to the wilderness for the good of their souls. I sometimes feel as though they had actually gone to another planet from which they can watch with cool detachment the fierce and sometimes meaningless scurrying of their kind. Then when the old philosophy of earth-oneness begins to return to them, they slowly realize that once again they are in tune sun and stars and all natural things, and with that knowledge comes happiness and contentment. I believe this need of wilderness is inherent in most of us, even those seemingly farthest removed from it by civilized living (Olson, pp. 61-62, 1946).

For me, this passage encapsulates what I have experienced in my experiences at the Flathead Lake Biological Station and during my birding excursions. Later, I will describe these moments when I have felt what Olson calls “earth-oneness.”

Another influential person in my conception of wilderness and how I view my relationship with the natural world is Aldo Leopold. Leopold's understanding of wilderness was “a continuous stretch of country preserved in its natural state, open to lawful hunting and fishing, and big enough to absorb a two weeks’ pack trip, and kept devoid of roads, artificial trails, cottages, or other works of man” (Leopold, 1992, p. 79). However, his Land Ethic has shaped how I view the interconnectedness of humans and the organisms that live among us. The passage exemplifying this for me is in Leopold’s *A Sand County Almanac* in the subchapter ‘The Land Ethic’ which reads:

> The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land.
>
> This sounds simple: do we not already sing our love for and obligation to the land of the free and home of the brave? Yes, but just what and whom do we love? Certainly not the soil, which we sending helter-skelter downriver (Leopold, p. 204, 1949).

My view of the landscape expanded from valuing only a part of the land to valuing the whole ecosystem. For me today, when I think of ways to protect species, I do not just think about a single organism, but its relationship to the entire ecosystem. For example, the Montana Audubon wants grasslands protected and uses the Greater Sage-Grouse as a symbol to protect these habitats. The Greater Sage-Grouse is partly chosen because it is considered an umbrella species, meaning by protecting that species, surrounding species are protected (Montana Audubon, 2024).

In my outside reading, I explored views outside of my own culture. One of the most influential writers in my thinking is Robin Wall Kimmerer and her book *Braiding Sweetgrass*, which touches on Traditional Ecological Knowledge, blending indigenous perspectives with western science. Kimmerer's chapter 'The Gift of Strawberries' particularly resonates with my view of the landscape. Kimmerer writes:

Strawberries first shaped my view of a world full of gifts simply scattered at your feet. A gift comes to you through no action of your own, free, having moved toward you without your beckoning. It is not a reward; you cannot earn it, or call it to you, or even deserve it. And yet it appears. Your only role is to be open-eyed and present. Gifts exist in a realm of humility and mystery—as with random acts of kindness, we do not know their source (Kimmerer, p. 23, 2013).

In the previous passage, I appreciated Kimmerer's description of the plants around her and how she was connected to them. I have a similar sensation of connectedness when I go birding and observe the birds around me. Every time I am out amongst the birds, I believe I receive a gift when I hear their sweet melodies. I respect Kimmerer's perspective on how humans can re-imagine their relationship to the landscape. The species that is the strawberry for me is the black-capped chickadee whose call brightens my day with its constant "hey sweetie" and hearing all the other chickadees calling back. I have also learned that there are indigenous stories that describe the chickadee's call and how the people felt connected to their surroundings thanks to this little fluff ball. It does not matter how many times I spot or hear a black-capped chickadee; I know that no matter where I go, their call will guide me back to the present moment and remind me to take time to appreciate them and the other gifts that the land is sharing with me.

In developing my own land ethic and spiritual connection to the landscape, I have come to appreciate an unfamiliar lifestyle of agriculture. I partly grew this relationship as my grandparents were dairy farmers in Maryland before coming to Montana. Hearing stories from farmers like Wendell Berry, who values conservation, also influenced me. To me, a farmer must be in tune with the landscape and biological processes in order to nurture and care for their land. I read about this in an excerpt from Berry's *The Need to Be Whole,* which reads:

> My long advocacy began in love and fear for my own home country and community. By the time I was thirty, I could see that my native place and the life of it, along with my affection for it, was not in favor with the urban-industrial system that had clouded over it after World War II. Such a place—rural, small, "backward," and "under-developed" – was in fact, virtually nonexistent, to that system, and thus mortally endangered by it. I could see that, as it was, its days were numbered. But I could see also that, as it was, its human community was taking respectable care of itself and of the local countryside that supported it (Berry, 2022, para. 6).

Berry also writes "It has become ever clearer to me that you cannot conserve the land unless you conserve the people who depend on the land, who care for it, and who know how to care for it—the people on whom the land depends (Berry, 2022, para. 7). Another point Berry makes that shapes how I view what my Wildlife Biology and Master's of Public Administration program has taught me is:

> I finally understood this and approved of it. It meant that my permanent motive would be love; it certainly did not mean that I was a hobbyist. But my commitment was pushing me way beyond my schooling. I would have to deal with issues of science, of art,

> religion, of economy, ecology, and so on, with no foreseeable limit. There can be no set bounds to the work of love when it faces boundless violence (Berry, 2022, para. 8).

I, too, have come to this point of doing the "work of love." As Berry describes, I too fear the loss of the land I have come to cherish. However, as I have learned from conversations and coursework in public policy, the way to protect the land begins with a reframing of the conservation of the *ecosystem* to the conservation of *people*.

These four authors are just a few who have influenced my perception of wilderness and my connection to the natural world. My journey of learning will not stop once my formal education is complete but will be a continual work in progress. As I go forward from academia, I will continue to learn from other authors, studies, personal interactions, experiences, and self-reflection.

At Crossroads

To end my story for the current moment in my life, I will detail how my exploration of wilderness and finding my connection to the natural world will be carried into my future. I am graduating with a B.S. in Wildlife Biology in Spring 2024. Next spring, I will wrap up my Master's in Public Administration (MPA) through which I have learned about governmental processes and how to make changes in government through policy. Wendell Berry's discussion of how education extended beyond his coursework resonated with me and how conservation intersects with all public values and interests. In my graduate coursework, I have explored these intersections. These studies have heightened my interest in public policy.

In my remaining year left of studies for my MPA, I have options of where my future can take me. I could continue my scientific training in Wildlife Biology in UM's Luikart Lab where I currently work. Here I would explore the management problem of the hybridization of westslope

cutthroat trout and rainbow trout. In some of my study sites, I might deal with wilderness areas, and questions could arise about whether management should translocate fish into these areas. In regard to my connection with the natural world, I would be exploring a new species and a new biological system.

With my interest in policy, there is the potential pathway of pursuing law school. Here, I would gain training in the legal system which might allow me to make an impact through legislative and judicial systems. Since I strongly value wilderness and humans' connection to the natural world, I would pursue environmental law to help protect these areas for present and future generations.

Most recently, I have reflected on and come to see myself as potentially becoming a high school biology teacher. I have considered pursuing a Master of Art in Teaching at the University of Louisville. To explore this option, I will substitute teach at my former high school while completing my MPA. As a teacher, I have imagined my curriculum would include hands-on learning opportunities such as garden beds, birdhouses, and raising poultry. This emphasis in experiential learning is rooted in my own involvement in research and summer field courses. I would like to inspire students in science to have to have an immersive, enjoyable education. Some students, like me, may have not grown up exploring the wonders of nature. I hope that as a teacher, I would be able to share my passion and to help students form their own connection with the natural world.

For the future of wilderness, I think that instead of removing the word from the discourse entirely, stakeholders should come together and discuss their values, and work collaboratively to redefine wilderness. Wilderness is discussed by some authors as a human-constructed term (Cronon, 1996). If this is true, then I believe humans can also redefine the term. With this in

mind, policymakers will need to make concerted efforts to ensure that indigenous perspectives are included. Through these conversations, I believe that wilderness can evolve to be a more inclusive concept. No matter which path I decide to pursue, I know that my experience and connection to the natural world will make an impact.

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