

## Island in the Sky

### A Trek through the East Humboldt Wilderness Area in Nevada

I'm drowning in a sea of manzanita. My feet and fifty pound backpack are suspended on the tough biting branches. My 58 year old legs have already pounded up and down several miles of rugged terrain. The waves of dusty green stretch out for hundreds of meters in all directions resisting every attempt to advance. In frustration, I concede defeat and recline as if in an easy chair at home. The many small wiry limbs cradle me and I lean back taking in the vivid blue Nevada sky and let the August breeze cool my hot, damp, and scratched skin.

For a few minutes I release my concerns to the skies and relax my aching muscles. I recall that I have chosen this little adventure in the East Humboldt mountain range of northeastern Nevada. I wanted solitude and a close look at this "island in the sky;" a relatively moist alpine area popping up over the mostly dry landscape of the Great Basin; an important treasure that is struggling to survive much as I was struggling to survive the ankle-twisting boulders, and cursed patches of manzanita, willow, and aspen. Even John Muir had originally found this terrain stark and foreboding.

I sat up out of my bed of brush, and peered south to the ridge that concealed my alpine goal, Steele Lake sitting in the southeast corner of the Humboldt range. I moved into a vertical position and wrestled my way across the slope. A few more scuffles with scrub and a few hundred meters of elevation gain, and I arrived at Steele Lake. After I inspected my body, I found many blisters, bruises and minor cuts. All accomplished through a long-sleeved shirt and long pants. But the sight of the crystal waters, inviting sites, and diversity of flora made the struggle worth it.



*A common scene showing plentiful water, and nearly impenetrable brush*

Steele Lake is one of a handful of glacially created lakes that dot the upper reaches of Nevada's East Humboldt Wilderness Area. This range is a northern spur of the more

popular Ruby Mountains Wilderness Area. It is half the size of the Rubies, but contains far fewer maintained hiking trails. This has not always been the case. Older maps show trails that nearly circumnavigate the whole area, but their upkeep has petered out. In fact, it was my original goal to hike the whole wilderness area. My fight with the scrub on the eastern slope for the first two days of my week-long trek convinced me to make an adjustment to my itinerary, because my tortured legs needed a little rest, and what a better place to recuperate than the peaceful gem of Steele Lake. I spent three days at the lake and explored its many side canyons.

Just getting to this Wilderness from my Sierra Nevada home was a minor ordeal in its own right, more than 300 miles of straight, uneventful driving. Moving eastward through the Great Basin if you focus on the highway and the visual neighborhood it is reasonable to expect a narrow perspective of Nevada's wildlands. But having explored its highlands many times, I knew the succession of the massive, tilted, raised blocks of earth held, if not hid, a lush counterpart to the drier lowlands. The ranges of the Great Basin are typically very rugged, and aligned as Clarence E. Dutton, a nineteenth century cartographer said, like an "army of caterpillars crawling toward Mexico."

My hiking adventure began at the Angel Lake Trailhead 12 miles southwest of Wells, Nevada on busy Interstate 80. While this alpine lake does get some traffic from nearby towns, as soon as you step away from it, peace and quiet abounds. In the first few miles I was promptly welcomed into the moist hollows. Winchell Lake, a shallow body of water, was the heart of a park-like bowl of deep green grasses and willows. Interspersed were platoons of waste-high flowers, commanded by daisies and corn flowers, rivaling anything I had seen in the Sierra Nevada. Steps away from these wetter areas, chokeberries and raspberries provided tart, but sweet treats.

On the way to Winchell I had chatted with the first and last person I would see on my trek. He was a bow-hunter, on the only maintained trail I would traverse. Though he hadn't seen any Mule Deer in two days, I would see many herds of them off trail; bushwhacking has its benefits. In an envious tone, he said I would have the lake to myself. Not only would I have solitude there, by also in several miles of challenging, yet extremely dramatic hiking towards Steele Lake.



*Sunrise at Winchell Lake*

The lone force defying the vertical nature of much of the Nevada landscape is water revealed in the form of glacial lakes and valleys. Steele Lake is a small lake hanging in a steep terrain; a soothing smoothness in an otherwise bumpy world. But more so, a gathering place for melting snows and gurgling springs before the water is funneled into tight canyons and fed to the thirsty flatlands below.

The lake sustains much life around it; the only sizeable life forms extending much beyond the perimeter are scattered patches of the five-needled Limber Pine on the Southeast slope. The lake itself carries a healthy population of Brook Trout, most likely planted a few years ago. The only trout native to the Great Basin waters are the threatened Lahontan cutthroat trout, and they are limited to small portions of their original range. The fragmented nature of the Great Basin mountains and waterways restricts the distribution of many animal and plant species.

Other life abounded around the lake, though clinging closely to its shores. Clumpy grasses sprung up near the outfall area, along with bushy masses of willow. Occasional splotches of flowers hugged the lakeshore. A variety of berry species occupied the next ring expanding out from the lake. Game trails also radiated out from the lake; it was an obvious draw to the mule deer, mountain goats, and bighorn sheep that live in these mountains.

Evidence of mammals of a much smaller size was also in evidence. Pikas, North America's smallest member of the rabbit family, had eaten through three layers of material, including my tent, to sample some of my snacks, which were supposedly hidden safely right next to my sleeping bag. I saw them scurrying from beneath my tent one night while I was taking a midnight call to nature. Dr. Erik Beever of the USGS found

that pika now may be extinct in nearly half their original Great Basin locations. They may be analogous to a canary in the coal mine.



*Flowers along the perimeter of Steele Lake*

On my last day at the lake my legs had recovered enough to visit some of the basins draining into Steele Lake. Rocks gained the upper hand over vegetation here, but where there was water, usually puddled below the several patches of mid-August snow, there was an outburst of grasses and flowers, as lush and colorful as a tended English garden. Just west over the ridge from the highest basin sat Boulder Lake. By all accounts, it is a beautiful lake nestled into a larger basin ripe for exploration. But my legs would have none of it this trip. Maybe next year; now I would take advantage of the east side of the range.

This year the area had experienced a wet, cool spring, and the wildflowers seemed to be near their peak. Lupine, Indian Paintbrush, Columbine, and wild onion exploded in the protected and moist locales. However, this status is a delicate one. The surrounding desert sends up drying winds and blistering soils to battle with a few moist canyons seeping water saved from the stingy winter storms. The battle line may be creeping upwards, reported by some biologists, perhaps disarming the forces of water that protect desert mountain life. The Nevada mountains can be 20 degrees cooler and receive triple the precipitation of the nearby lowlands, according to the U.S. Weather Bureau. Unfortunately this advantage may be fade if recent climatic trends continue.

Just as rising waters in a lake can submerge an island, drought and heat can overtake a mountain and overcome its sensitive plant and animal species.

After my restful stay at Steele Lake, I chose to head back north, towards Lizzie's Basin, a pond-ridden area I had passed a few days earlier. But this time I kept higher, avoiding the thickets. There were more rocks, but if I stepped with more concentration, I could make decent time, hopefully avoid more unintended tattoos. The lower reaches of Lizzie's were populated with grazing cows, and the aquatic scenery was beautiful, but a little suspect. So I climbed higher, towards Hole in the Mountain, a natural opening in the crest of the range.



*Steele Lake from the west showing the characteristic glacial origin*

Yet again, I encountered a thicket, this time of quaking aspen. In my Sierra Nevada, they often stand as large vibrant trees, bringing brilliant color to autumn scenery. Even in Nevada they can provide a majestic array, but where subterranean water flows in higher exposed Nevada elevations, they are often a tangle of obstruction. Ironically quaking aspen is the most widespread tree in North America, extending to Alaska, Mexico and New England. As I dove into them, they blotted out the sky and created a rather eerie, Middle Earth ambiance. The cows however, proved to be good tunnel-makers, and I ducked and twisted through a maze of entanglement for fifteen minutes until I finally reached blue sky. After a little more boulder hopping, I found a small level spot between two miniature waterfalls. This terrain was stingy with suitable campsites, but the vista was worth it. The view to the east over the ponds of Lizzie's Basin, towards the Nevada desert was expansive. The view to the west was of rugged, steep, and colorful basin walls, and commanding, serrated peaks.



*Hole in the Wall and serrated peaks above Lizzie's Basin*

In the higher terrain, every new ridge or turn brought a new experience, a new surprise. An incredible view, fleeing herds of deer, a lingering pocket of snow, an explosion of flowers, or a lone marmot popping his head up, suspicious of my presence. Geologic records have shown that whole groups of plants and animals have perished in the American West. More recent evidence has shown that many contemporary species are endangered, or in fact, extinct. The cause of these changes is largely atmospheric, and recent studies suggest human activity may be the cause.

The insular characteristic of desert mountain ranges according to many biologists is equaled only by oceanic wonders such as the Galapagos Islands. All earthly systems respond to external pressures. Some hold up better than others. Desert mountain ranges are an example of life on the edge. They are islands of ecological communities separated by extreme soil and climatic conditions. Their capability to genetically sustain themselves is tenuous. According to biologists R.L. Peters and J. D. Darling in their climate change research “high-elevation plant communities decrease in area, fragment, or vanish.” Biogeographical research has also shown that the smaller an ecological zone measures in contiguous area, the less likely that its diversity can be maintained.

The benefit of the desert mountain ranges to the surrounding human and biological communities is great. They capture the little atmospheric moisture that happens by, and store it in soil and snow banks. The natural and human green splotches I saw from my hike, are proof to the mountain's generosity. The panorama afforded from these largely open, treeless slopes revealed to me a direct connection between the mountain and the valley below.

In my many explorations in Nevada, I found that where ever there was a mountain range in the Great Basin, there was a strip of vegetation on the slopes that extended a distance into the attached valley floor. Without the mountains, there would be little water. The few clouds waving by would continue eastward, carrying their life-giving liquid with them. The connection between the mountains and the life, both human and non-human, below that they support was strong, and very unambiguous to me.

Mounting evidence is showing that climate change is impacting the distribution of ecological life zones. Biota can migrate along flatter terrain given enough time. And wetter or larger mountain ranges have enough cushioning to accommodate some climate change. But smaller communities such as in the East Humboldt Wilderness Area, may be more susceptible to external forces. Nevada is one of the most biological diverse states, but this also underscores its susceptibility.

Leaving Lizzie's Basin, I came across another anathema to the Nevada landscape, a Beaver pond. A large mud and stick lodge sat in the middle. The habitation looked quite permanent to me. An aquatic wonderland, where the presence of water is clearly important to the long-range residence of these resourceful mammals.



*Beaver pond and lodge in upper Leach Creek*

The ponds drained into canyons that paralleled my final descent that would signal the end of my excursion. My eyes easily followed, in the open vistas, the ribbons of green as the higher areas drained into the lower. The creeks were like ropes tying one place to another. The connections were very evident. Peering down towards the valley floor, the vista was clear, the destination obvious, the whole sinewy road was in sight.

An old jeep trail provided a smooth route out of the mountains, although I found myself looking backwards many times, saying farewell with my glances, as the panorama became more expansive, yet receding from my reality. A few pockets of aspen and willow provided company on my descent, clear evidence of hidden water. Sagebrush became more and more dominant, and cow fences and old outbuildings were signs that my solitude was over.



*Looking back over my shoulder as I descended from Lizzie's Basin through many life zones*

As I hit highway 232, the first roadway traveler I encountered was a rancher on a horse, rounding up wayward cattle. After an enjoyable conversation (remember I had not talked to anyone for several days), he went up ahead and stopped a truck coming towards me. After they chatted for a few minutes, the truck met me, and Greg, another local rancher volunteered to get me back to Angel Lake, a 20-mile trip. On the way back we spotted smoke billowing from the Jarbidge mountains, another Wilderness Area to the north. Greg, who had earned a degree in rangeland management, said grazing helps minimize the destruction of fires. He was quick to point out that he thought many ranchers he knew were in fact practicing environmentalists. Thankful for the ride, I kept to myself the fact that although cattle do keep some of the brush down, they don't eat sagebrush, and concentrate on meadow grasses. This encourages the growth of shrubbery, which is dangerous fire fuel.

On my return to my car at the Angel Lake trailhead that day, I felt that I wasn't ready to leave the mountains. I took off south from Angel Lake on one of the few maintained hiking trails, this time without the backpack I had begun to loathe. In a few miles I reached sparkling Smith Lake, yet felt an urge to continue up-basin. My extra steps were



rewarded with the sight of twelve bighorn sheep, grazing nonchalantly on the greenery, quite unperturbed by my presence, although the lead male kept an attentive eye in my direction the whole time I was there. I advanced to within six or seven meters, and found there appeared to be an unspoken, agreed minimum distance of our engagement. As I moved, they moved, in quiet unison. The males bobbed their horns in my direction a few times as if to say “stay put,” or perhaps to proclaim their regality. If they are indeed the emperors of this kingdom, they might be wiser stewards than I. I would now end my stay in these mountains, relinquishing all hold I have over it, because in reality it had hold over me.



*Bighorn Sheep (ewes) above Smith Lake*

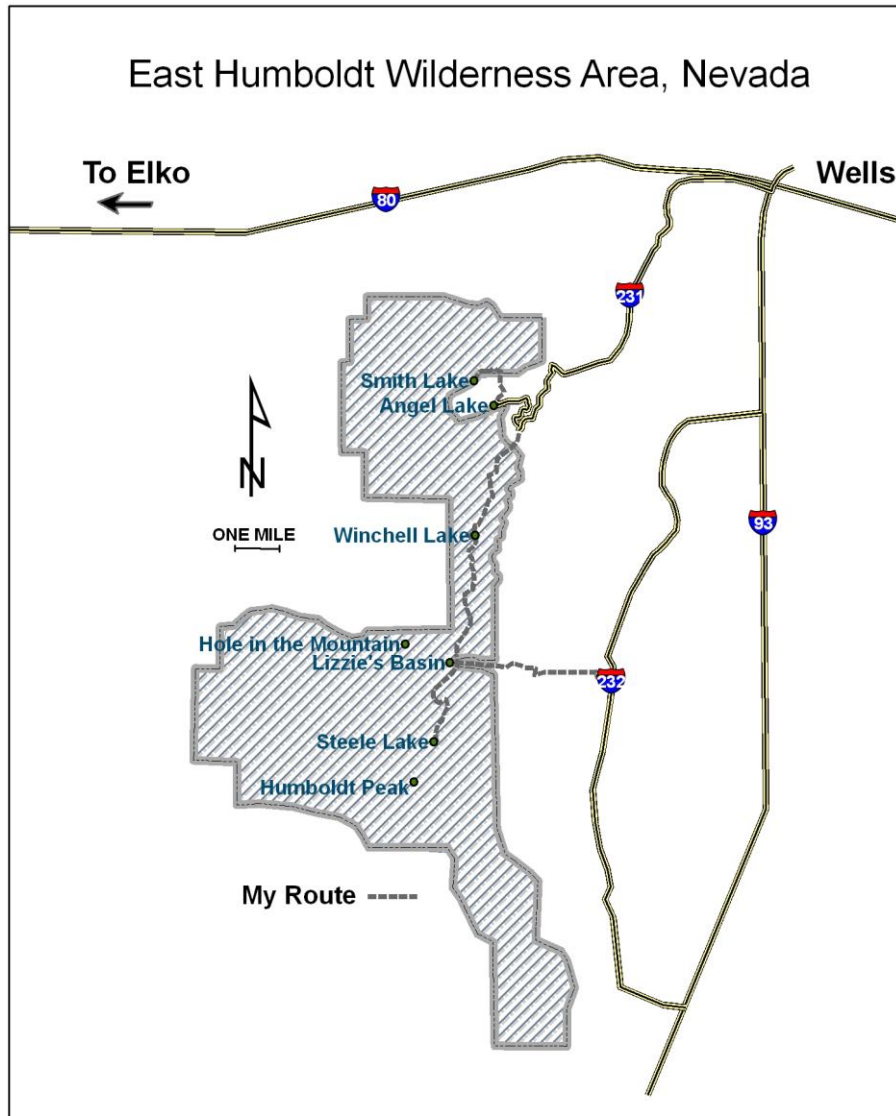
John Muir ultimately found the Nevada landscape to be more rewarding than he had thought in his first experience there. And although I had an appreciation of the Nevada landscape beginning in childhood with my father’s amateur archeological digs, I perhaps was more struck this time with the delicate interplay between geology, weather, and life. Perhaps my struggle with the elements prodded me into a new understanding. Did my anxious search for replenishment of my water supplies reveal the daily activities of all life here? Fully three quarters of the plant species live in the riparian zone of these mountains. Did my struggles with brush and boulders, pushing me to the edge of my capabilities mimic this place’s life on the edge here? My trip had left me breathless in more ways than one.

But a rigorous hike in a rugged, mostly treeless terrain provides incredible views of surrounding valleys, neighboring ranges, and stately peaks at nearly every turn. It allows for excellent opportunities to get away from the crowds. Perhaps because of the absence of the human crowds, I was blessed with more types of mammal sightings than I ever get in the Sierra or Pacific Coast ranges.

I honestly have mixed feelings about supporting the repair of overgrown trails in these mountains, and about advertising their beauty. I can't say I would not have been a little disappointed if a group of fellow hikers had joined me at any of the lakes. But drawing some attention to the precarious nature of their biological diversity and strength, and their benefit on the surrounding ecology might be worth the mention I give them in my discourse. Add to this the fact that the economy of the area is equally dependent on the water provided by the mountains, and their importance should spread beyond just what some term "just a small group of backpackers." Any reduction in habitat or water availability (by climate change or diversion) must carefully consider the impact of such moves. Local communities, both human and biological, depend on our "islands in the sky."



*A crazy cirrus cloud over Smith's Lake*



*Map of East Humboldt Wilderness Area, Nevada*

## Addendum: A More Recent Trip (August 2019) to East Humboldt Wilderness Area

This backpack trip was taken ten years after the first one. I wanted to go to the north end of the Wilderness area to search for trees not known to be in the area, such as bristlecone pine and subalpine fir. I had recorded the bristlecone pine in the central Ruby Mountains, and the subalpine fir north in the Jarbidge Wilderness Area so I thought they may be here.

After a long drive that morning, I only made it to Smith Lake after leaving the Angel Lake trailhead mid-afternoon. I found only whitebark and limber pine near the lake, as well as some curious bighorn sheep. A similar scene as I had come across a decade before at the lake. In the evening I climbed into the rocks and willow uphill from the lake looking for any other conifers – to no avail.

The next morning, I made my way north, up and down some steep canyons. The trails shone clearly on the USGS topographic maps, were not to be found. I fear through years of neglect they had started to turn back into their wild state. The very northerly part of the trail was steep and filled with large, unstable rocks. The remainder of the hike to Grey's Lake was equally difficult – plowing through nearly impenetrable quaking aspen thickets – until at last I found myself at the lake.

I camped at Grey's for a few days, wandering up the slopes looking for trees. I found whitebark pine and not much else. I didn't see a soul anywhere after Smith Lake for three days. But I did see some great sights as these pictures might attest to.



**Angel Lake, at trailhead**



**Smith Lake from on high looking northwest**



**Looking south from Smith Lake toward willow and whitebark pine**



**Grey's Lake looking east**



**Grey's Lake in distance and un-named lake nearer (note the snow in July!)**



**Very rocky area on way to Grey's Lake**



**Wet area, notice wild onion with violet flowers**

