

# **TABLE MOUNTAIN, WASHINGTON**

**by Susan McDougall**



## TABLE MOUNTAIN

It is a long stretch of a mountain, gently ascending from a low valley floor to a steep ridge that rises from an elevation of 4,000 feet at one end to over 6,000 feet at its highest point. Named Table Mountain, it forms the eastern boundary of an undulating land, cut by streams and the wide Yakima River, a swift but managed flow that is the lifeline of farms and ranches in the region. Irrigation ditches reveal the story of historical use, while along riverbanks and nearby slopes, fossils offer tantalizing glimpses into a land modified by local glaciers during the most recent ice age. Saber-toothed tigers roamed where cattle and horses now graze, while cultivated timothy hay thrives where wind-swept grasses once provided forage for the tigers' prey.



**Ponderosa Pine (*Pinus ponderosa*) with autumn snow**

On the mountains above the ice-altered Kittitas Valley as in the past perennial snows play a major role in defining the flora and fauna. Often persisting into May at the highest elevations, the balance between snow, soil moisture, and varying temperatures both limit and benefit plants and animals alike. During the brief summer, trees and grasslands offer food and shelter for birds and mammals and at times a nearly luxuriant plant community seems to burst forth from the frozen ground. It is an inviting place, cooler than the valley below, warm enough for life to thrive.

Populated with dark conifers at

the highest elevations, stately and wind-contorted pines grow from the ridgeline to the lower slopes of the mountain, eventually giving way to open ground, while near the base aspens are tucked on protected hillsides and in gentle stream canyons. Where the road finally flattens for a gentle descent towards the town of Ellensburg, a sprawling grove of native hawthorns nearly excludes other trees; in the springtime the group dominates the floral community with profusions of white flowers. This is a landscape of variable habitat and weather owing in part to the local topography, but also to a range of mountains that form the skyline on the



**Douglas' Hawthorn (*Crataegus douglasii*) flowers**

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opposite side of the valley. It is a “cold desert” where winter snows are constant, and summer heat occasionally intense. The wind blows often, particularly during the spring, while on the hottest days, change may seem stalled as the drying land slowly turns brown. On the mountain above the heated valley floor, the cool spring and warm summer progress in increments, with the end of the flowering season fading nearly seamlessly into the coming of autumn snows.

Geologically, Table Mountain defines the western boundary of the Columbia River Basalt Plateau. Possibly owing its origins to the moving Yellowstone “hot spot,” this huge outflow would over time define much of the current landforms of central and eastern Washington as well as parts of eastern Oregon, western Idaho, and slices of Nevada. The widespread basalts are “young,” with extrusions beginning around 17 million years ago and continuing for over 10 million years. Eventually reaching the Pacific Ocean in northern Oregon, the deep flows were subject to continuous modification even as the eruptions proceeded with inexorable regularity. Today, the basalt plateau is one of the most studied in the region, where deeply cut ridges provide a stratigraphic record that enables dating and detailed analysis. Altered by periodic flood waters with origins in immense glacial lakes that occasionally burst through ice dams, this variable topography has a nearly unearthly quality and for many years defied scientific explanation.

Since its formation Table Mountain has been modified by weather, biology, changing climate, and gravity. Alongside the road and on steep buttresses a mixture of dark gray and red rock provides evidence of these ongoing processes. In places the landscape appears raw and abrupt, where long columns of basalt rise from steep canyons, offering clues to the mountain’s origins.

For humans recreating in the 21st century, Table Mountain could be described as “multi-use,” for this is a seasonal place where the highest elevations are visited by astronomy enthusiasts in summer, while in the lower meadows, cattle forage on lush seasonal grasses. During the winter, the height of the summit is prohibitive to the occasional weekend drive, for here precipitation falls as snow, and a deep white cap persists well into spring. Then the



**Basalt flows appear fresh, hinting at geologically recent events**

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mountain offers recreational opportunities for snowmobilers and the cross-country skiing enthusiast. Hunters visit in autumn, mushroom seekers in spring, and by April or May those who seek flowers begin to search for the earliest blossoms.

As the leaf buds of lower elevation trees begin to swell in late March, a few flowers add tiny spots of color. Tucked amongst the grasses, with its many pale lavender blooms Ballhead Waterleaf (*Hydrophyllum capitatum*) puts in an early appearance, while the occasional “biscuit-root” pokes above the flattened grasses. The aspen begins to flower and early migrating birds pay a visit. Far above, on a rocky outcrop at the tip of the mountain, plants nestle in cracks or grow in insulated patches, enduring the frigid conditions with a retreat an annual below-ground existence. Their survival dependent on persistence and the survival of small nutritious seeds, these plants sometimes remain dormant until June or July.



**Ballhead Waterleaf (*Hydrophyllum capitatum*)**

In the meantime, by April the snow is reduced to patches in the lower elevations,

although with snow persisting above often shortens an automobile trip to Table Mountain. The solitary highway begins as a dozen-mile long flat approach through a landscape of Kittitas Valley farms before it becomes dirt rather than pavement and begins its steep climb out of the broad valley. Entering a narrowing canyon where a forest of Douglas-fir and Red Alder extends its reach surprisingly low in an otherwise dry landscape. Along the path of a small stream, brush and the occasional aspen grove add to the dense growth, but with elevation but the forest becomes more open with pines replacing the streamside denizens. The road flattens and emerges to a nearly snowless passage alongside a rounded bald where reddish-toned rocks mix with gray, and old grass stems lay bent from their wintery load. All is not gray, however, as free from competition at this early date a few small flowers open alongside the road, or sometimes as specks on the dry rock above and below the road.



**Sagebrush Violet (*Viola trinervata*)**

One of the most beautiful of these early-flowering plants is the Sagebrush Violet (*Viola trinervata*), a ground-hugging species with multi-

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toned flowers held on stout stems. Although it tends to wilt quickly and is miniscule by comparison to the garden pansies of lowland gardens, this violet combines a delicate beauty with a robustness that characterizes the environment in which it grows. Sagebrush Violet seems symbolic of the nature of a land where with emerging green leaves and rounded flower buds amidst the lingering snows, plants alone can transform the grays and browns of winter.

With the showy color of violets on the uphill side of the road, attention is nevertheless drawn to the left, as the car now traverses a steep slope that marks the transition from lowland to rugged terrain so abruptly that you hardly noticed it. And as is often the case on a mountain road the view to the valley below and the mountains beyond is spectacular.

A long line of immense wind turbines, appearing picket fence-size from this location a few thousand feet above, adds a bright white splash to the muted lowlands, while in the southwest a 14,000-foot mountain, clothed in white, contributes a conelike form to the long sweeping ridges and bare valley of a dryer land. The higher elevations are darkened with conifers, brightened with ribbons of lingering snow. Like the tiny violet flowering so vigorously, these forests thrive in the high country, where precipitation falls as snow in winter, and summer offers long days of recuperation.



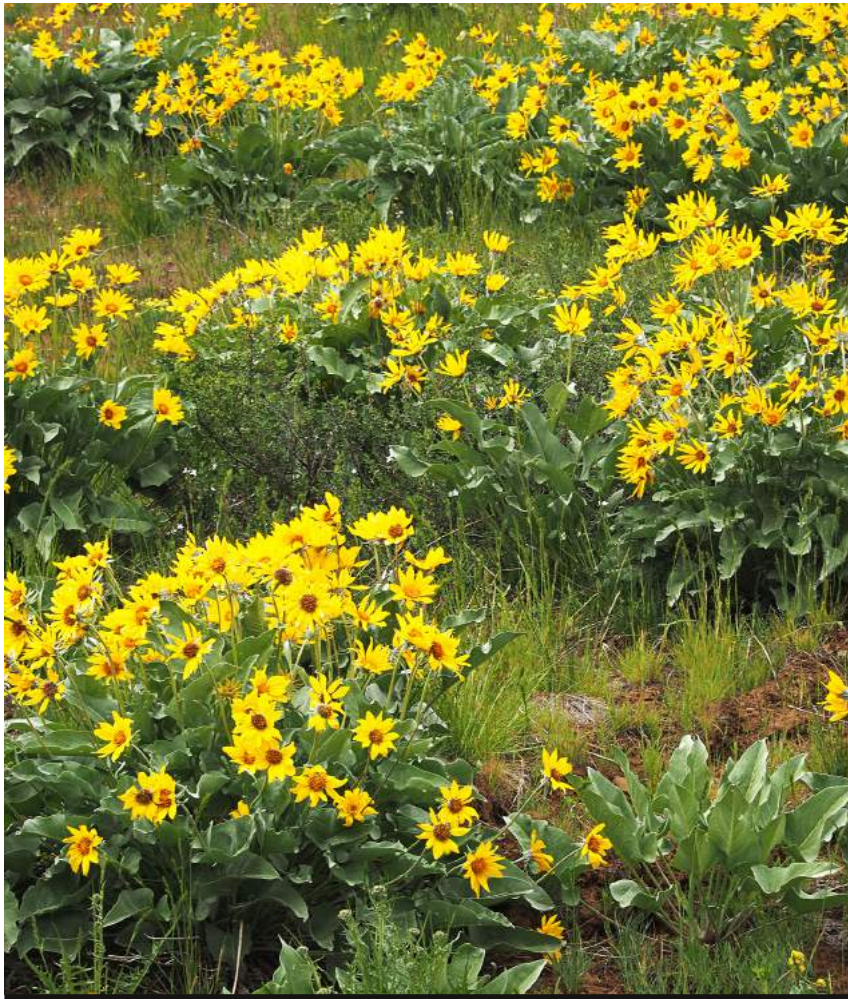
**Arrowleaf Balsamroot (*Balsamorhiza sagittata*)  
and valley below**

To the north even the trees are limited to patches by steep slopes, ice, and the perennial snows of the great monolith of Mount Stuart, at over 9,400 feet in elevation the iconic mountain of the region. Whereas to the west Mount Rainier is approachable, at least to the base of its cone, Mount Stuart appears isolated, surrounded by steep giant shards of rock, guardians of a high land where human dominance is minimal, and an attempt to climb is best made with an attitude of humility.

But the undulating valley below, with all its own ancient grandeur, reveals with the many fences and turbines its human presence. Although less obvious, as with the forbidding mountains the lowland has its own demands and expectations. In this desert environment human employment depends on the historic alteration of river courses. As with the grazed hillsides, fields turned green by the rerouted water become brown as the season passes, and ultimately all depends on the snows which feed the irrigated land. Without the mountains, none could persist. With winter and water, they are the provider for those creatures making a living on this land.

The transition from low to high on the Table Mountain road provides an insight into this dynamic relationship between winter and summer, for even at elevation the land will dry, and the yellow of dying grasses will dominate the ground beneath the green trees. It is this

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**Daisylike flowers of Arrowleaf Balsamroot**

apparent unceasing grip of the cold that makes the contrast of what is to come so welcome.

As the violets hang tenaciously to their hillside home, and the occasional snowfall obstructs the view, the possibility of color other than the spots of purple or tiny white blossoms seems remote. Even the largest of leaves have been transformed nearly to dust. Yet it is here, close to the track of a passing car, that the largest flowering species of the region grows. Two thousand feet below a broad leaf may have unfurled a little, its size hinting at something quite unexpected. And within days after the appearance of the first green leaf the nascent wildflower community will be nearly overwhelmed by the brilliant yellow of the daisy-like flowers of balsamroot, a name derived from the roots which are scented like balsam fir. Like an apology for the long winter, not

only will they emerge by the thousands, but nestled within the crown of large leaves, the flower buds will open into showy flowers that rival any garden cultivar. Countless of these native plants will quickly transform the land from winter to spring in a way perhaps only possible in a desert.

There are three balsamroot species, each with its own annual clock, dependent on temperature and sun, but overlap provides a mingling that produces the occasional robust hybrid. Along the lower slopes of the valley the earliest balsamroots transform the land from brown to yellow, and on Table Mountain, the inevitable delay of altitude is more than compensated by a burst of color that rivals. Dominated by a single species, and in what seems an unbounded enthusiasm, they open in forest and open land alike. Only the driest rockiest areas escape the arrival. The contrast is so striking that you might think they were planted and watered. The scene never fails to surprise.

The first open area on the slopes of Table Mountain is transformed so completely by the yellow of balsamroot flowers that you might imagine having taken a wrong turn. Even the white patches of the distant ridge seem warmer above this golden glow. The flowers crowd the road and sweep a swath of color down the slope. They open beneath the old pines and nestle themselves amongst burnt logs. A beautiful and unexpected scene, it is

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understandable if other awakening smaller blossoms go unnoticed. Spring has made a statement like none other, revealing a land of striking contrasts where warming days allow the profusion of color to simply move up the mountain, persisting until cold days return once again.

The balsamroot flowering event is the most visual kickoff for the spring flowering season, so welcome and cheerful that other less grand blossoms may go unnoticed. But not far from where the persistent patches of snow linger on the smaller plants have begun their push through the warming soil. Soon the dominance of daisy flowers will be muted by pale purple, bright white, pink, and cream. Penstemons send up tall flowering stalks amongst the fading yellows, while pale lomatium blossoms add splashes of color to the muted rocky slopes. As the flush of color reaches its zenith, the sun arches to its high point in the sky at its own zenith, and the mountain warmth



**Bighead Clover (*Trifolium macrocephalum*)**



**Glacier Lily (*Erythronium grandiflorum*)**

dissipates the last patches of snow. Now the plants seem intent on completing the season, as one-by-one, the petals open and fade, revealing a less colorful, smaller form. Herein lies the seed, the promise for the plant's future and the reason for the show.

But before the season passes into memory and the cold returns, a late spring visit provides the opportunity to progress to higher elevations in the comfort of an automobile, where observed between the softened white patches damp meadows begin their transition to greens, speckled with the occasional warmer color. These lush openings seem to linger in this cool, moist state. It has a feeling of permanence, as if the snow will not completely disappear but only be augmented within a few short months. In the valley below the grasses turn yellow, and the heat of late spring becomes a daily event, welcomed by farmers, gardeners, and cattlemen alike. But here on the mountain the progression of the seasons seems to stall, and there is a sense of stasis in the highest elevations. This is the mountain environment at its

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best, a place where the trees thrive, protecting the soils beneath, and flowers dot the landscape.

A cool summer at the summit is a memory of early, drier times in the lowlands where the plants extend their roots, seeking the remaining water, and shriveling as the earth dries. Many are worth a closer look; these are often colorful creations. Their presence is a sign of both spring when the ephemeral nature of existence is evident, and continuance is sometimes borne with a surprising brilliance.

Although the winter snows are gone for a brief season when time seems to stand still, with the drying of earth and cloudless sky the impression of stability is misleading. The trees and plants have entered a vulnerable time, one for which they are barely equipped. And what the regular visitor had welcomed as constancy reveals itself to be under threat of unwelcome change.

### Fire on the Mountain

A hot, dry summer is typical in the high desert of central Washington. The yellow of balsamroot has long faded, to be replaced by drying exotic grasses, but in the hay fields the time of cutting is at hand. On occasion hot winds rearrange the particulate matter (dust!) and lift it above the ground, but for most citizens, going about one's business is undertaken beneath predominantly sunny skies and high temperatures. Only the weather forecasters, or perhaps the nervous observer, tends to watch the skies, on guard for the telltale sign.

When it came, the location was unexpected. This was not a fire of the valley or the lower mountain slopes. It was at a much higher elevation. Within a short time, the bright blue skies of the valley towns would be obscured with a persistence reddish, smoky haze. The forests of Table Mountain were ablaze.

Now the dry summers of the Pacific Northwest threaten like an extended curse rather than a season



**Trees blackened and killed by the Table Mountain fire**

long anticipated. It will be months before the autumnal rain and snow return. Yet as in winter the moisture from the ocean continues to rise, passing over the lowlands under the influence of strong winds only to be blocked by the mountains. Here the tops of white-and-



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gray thunderheads ascend to altitudes high above the surrounding terrain. Beneath the lowland dweller admires the form late in the day, while the hiker seeks shelter. The forest seems to shudder as the wind nearly throbs with great gusts, and the crack of a lightning bolt splits the sky. It is a time when thousands of small fires ignite, most to be obliterated by local rain or surrounding conditions. But in the driest lands, particularly (although not exclusively) those of eastern Washington, danger lurks with every strike. And when a nascent fire explodes and joins with another, the results can be devastating.

Such was the case with the 2012 Table Mountain fire. One of over 1,300 fires that would eventually consume nearly 260,000 acres, this local fire itself would be extinguished only after 42,000 acres had burned. It would be autumn, before the seasonal rains began, and the end would be the result of human intervention rather than the weather.

The question was not so much would the conflagration continue to burn, but how far would it spread. Would homes be threatened? Would it combine with other fires? Seeking to limit the damage, such potentially devastating fires would be fought with all the tools of the firefighting trade, and on the ground 655 firefighters would eventually be called upon to use their expertise and experience on the Table Mountain fire. Such employment is dirty and dangerous work, as the forest can explode, ignited by local weather conditions created by the fire itself. Terrain, weather, and heat would all contribute to the difficulty of fighting the fire on the mountain.

It began late in the day on September 8th at eight p.m: the cause – lightning. Storms rolled across the mountains that day and strikes were common. Many fires were obliterated by local downpours, while others spread along a path of inexorable growth. The smoke rising along the ridge was the signal. But although the cause was evident, nearly a month before, on August 12th a valley fire would ultimately be determined to owe its origins to human error rather than lightning. The so-called Taylor Bridge Fire would within a short time destroy 61 homes and blacken 23,000



Through a burnt hole

acres of desert lands. Three years later a 60-million-dollar settlement from the State Department of Transportation and its contractors would compensate the landowners in the path of this destructive fire.

A week after the suppression of the Taylor Bridge Fire, late summer thunderheads began

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to pile up along high ridges above the valley. As lightning dispensed its concentrated energy in flashes of brilliant white, within a short time, slashes of red and tentative billows of smoke signaled the start of a major event. Fire incidence reports came in, and officials scrambled to set into motion the human response. Trained firefighters across the region readied themselves, not knowing how long their services would be required. Personal limits would be tested in the days ahead, as the clad fighters occupied the field like so many soldiers, their battle plan of necessity requiring a fluid response as much as a trained one. A voracious enemy burned unfettered on the heights above. The job description was in its essence simple enough — rein it in. To do so would require facing the smoke, heat, and flames, their job complicated by local winds, low humidity, and dry forest.

Nearly two-thirds of the Table Mountain fire was on forest service land, but private land was consumed as well, and nearly 300 mountain homes and structures lay in the path of the fast-moving burn. A month later, as the fire breathed its last, finally succumbing to the herculean efforts to contain it, the cost for the fight was over 15 million dollars. No homes were lost, although many were situated close enough that evacuations were necessary.

Those homes, the road, the wettest meadows, the rocky outcroppings— all that escaped through human intervention, or that of terrain and habitat — were modified in the timeless fashion of a recurring natural process. But it is one that often comes as a surprise to those who make their home in such forests. The mammals, the birds, driven out of a place that formerly suited them so well, must now search elsewhere. Perhaps there would be opportunity higher in the mountains where the fire did not reach, or lower on the hills where cover was less but competition much greater. It was autumn, a time when the birds were moving on. But what would they encounter on their return?

For the trees, what could possibly replace such a devastating fire? Was there any replacement for the smoldering giant pines?

Yet the 2012 fire could not possibly be a unique event. Many plants, in particular the trees, are adapted for reoccurrence of fire in the forest. With time, sometimes short, the evidence for such tuning to fire events would become evident. But in the days and weeks following the demise of the Table Mountain Fire, when roads and trails were closed, and the ground remained hot and smoldering, when birdsong had ceased, and the terrestrial animals had fled, the devastation seemed complete. The top of the mountain appeared black against the blue autumn skies, and as normalcy returned to towns and countryside, the wait for whatever that meant for life in the mountains began.



**Hot, tree-killing fire**

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The human population of the Kittitas Valley was not alone with their concerns that autumn. Several other forest fires began that stormy day in 2012, many of them large conflagrations. The Table Mountain Fire itself would eventually combine with the Peavine Canyon Fire, threatening historic structures in the old mining town of Liberty, Washington, and driving residents from their homes. Two weeks later the fire had tripled in size and was barely “contained.” As the dark smoke settled on towns, residents were advised to remain indoors and plans for local events were altered in response to conditions created by the unchecked fire. Within days tendrils of smoke snaking over the mountains to the west would expand to a mass of brown particles, turning the sunsets brilliant and the skies unhealthy. It was sufficient to catch the attention of newspaper editors throughout the region, as for a time the fire knew no boundaries.

Given its size and intensity, amazingly the Table Mountain Fire was extinguished approximately a month after it began. Autumn rains would seal its demise and life for the human population of mountain and valley would return to normal. On the slopes and plateau, as the weary firefighters departed, and the area was declared dangerous, at least for the remainder of the autumn season, silence enveloped the gray land. Blackened trees showed little signs of life, as this had been a hot, scorching fire, and the ash-gray ground quickly reduced the richly colored landscape of autumn flowers and yellowing grasses to memory of other, happier times. The devastation seemed complete; Table Mountain was dead. Winter was coming, a time when the roads would close as the snows returned. Meanwhile, residents of the valley and mountains could breathe sweeter air, free of smoke and ash, and enjoy the cool autumn days.

### After the Fire



Profusion of buttercups – after the fire, June 2017

The Table Mountain Fire of 2012 did not reach the lower mountain, and a springtime visit there was much like in the past. The surviving plants continued to flower, and the living trees were clothed in the bright green of the warm, damp season. A visitor in 2013 could look upwards to the gray fire-swept land of the ridgeline, but here, along and above the valley, life seemed reassuringly normal. You knew as the spring progressed that the balsamroot could not possibly fail.

In the higher elevations, where the fire scorched the earth, within six months the deep-rooted perennial plants begin to pop through the ashy layer, evidence of

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the persistence of life, at least below the ground. Here at the edges of the burn, where the earth was blackened beneath dying trees, in a surprisingly short time, saplings and green grasses began to contribute a cool, inviting color to the disrupted land.

Within a couple of years, all seemed well on Table Mountain. Fields of bright pink flowers, the brilliant yellow of buttercups, and the blue of camas once again welcomed the visitor with a scene unlike any other with near monotonous of color offset by smaller accents. The “grass-widows,” the borage, the monkeyflowers – all bursting with the disappearance of snow and cold. The memory of fire dimmed in the presence of unstoppable life.

A visit to the forest of Table Mountain nevertheless reveals the alterations, with species dependent on occasional fire thriving, and dead spires serving as reminders of what had seemed permanently green. Yet as the season progresses, the gray forest seems to recede beneath the brilliance of clear skies and the dependable profusion of flowers. Birdsong is heard once again, and people return to their normal activities. The astronomy clubs set up their scopes and look upward above the gray sky-piercing tree spires, and for those who visit to partake of the views and the flowers, or perhaps just enjoy a ride in the mountains, the opposites of life and death are both prescient and breathtaking. Nature in her raw, life-taking form might be serving a warning, but for those who travel back to a favorite place, the feeling of continuance is reassuring.



**Grass-widows (*Olsynium douglasii*)**



***Salt-and-Pepper (*Lomatium gormanii*)*, one of several beautiful “biscuit-root” species**

### **The Progression of Flowers**

The dependability of balsamroot is always a welcome sight on Table Mountain, but by mid-May, the warm yellow is transformed to a montage of color by the appearance of cool blues, bright pinks, and spots of white. In the lower elevations, a small forest of native hawthorn loses its winter gray coat beneath a covering of pale blossoms, and the conifers begin to brighten with the green of fresh needles. The warmth of June adds the purple stalks of penstemons to the collage, and brilliant shooting stars open in wet fields and along forest edges. The road is snow-free at last, permitting a drive the length of the ridge and a

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descent to the north, passing through burned land and dark forests. A short side trip leads to Lion's Head, a buttress of rock that overlooks the valley thousands of feet below.

By autumn the balsamroot show seems a distant memory. Smaller flowers begin to fade, as grasses turn silvery beneath a morning dew. The lower valley slopes have long since lost their green, and even the highest elevations of Table Mountain begin to take on a warm brown hue. The view to the valley below is for the most part absent of flowers. The cool morning air serves to remind that the warm season is in reality quite short. And although this change may seem like an overnight phenomenon, in fact it has progressed continuously over the summer months. Now it seems evident that the Table Mountain flora is defined by winter cold and snow as much as the brief summer.



*Valley and windmills in autumn*



**Table Mountain road in autumn**

In October, a chilly ride to the ridge sometimes is rewarded with the aftermath of an overnight dusting of snow. The sun peaks in-and-out from behind thin clouds, and the entire scene is transformed. Gone are the summer flowers, their brilliant color subdued by shortening days and colder nights. They had been most welcome in the years following the fire, with their brief sojourn life-affirming. But now the constant evidence of gray spires begins to dominate the scene once again, as death does not acknowledge the change of seasons. A “ghost forest” creates a beauty so unique that with the coming of winter it remains in memory as much as the profusion of summer color.

In the valley below a warm glow suffuses the land. The skies are clear, and the harvest continues. Smoke is part of collective memory now, as autumn rains and winter snow hold their promise of renewal. Within a few weeks the snow

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cap on Table Mountain sends fingers of white down the slopes, and the road becomes a ribbon-like path along the top of the ridge. The birds move on to warmer lands, while the more permanent residents prepare to settle in for the restorative winter. Humans retreat to heated homes, perhaps venturing out for an excursion in the snow but returning to shelter as the cool sun sinks behind a southern ridge. On the mountain, the plants lie beneath a protective cover, waiting for the restorative days of spring.



**Ghost Forest**