



On the Roof of the Rocky Mountains

The Botanical Legacy of
Betty Ford Alpine Gardens
Vail's Alpine Treasure

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Betty Ford Alpine Gardens is more than a beautiful garden: it is a laboratory of testing, studying, and showcasing a rich palette of native and exotic perennials, most of which had never been grown above 6,000 feet anywhere in America.

—Panayoti Kelaidis, Senior Curator and Director of Outreach for Denver Botanic Gardens

This book is a beautiful memory of a unique high alpine garden in Vail, Colorado. It is also an important conduit into the vitally important work of botanic gardens whose work increasingly extends far beyond the garden walls to support, care for, and restore wild places both locally, regionally, and globally.

—Sara Oldfield, past Secretary General of Botanic Gardens Conservation International

This book has over 285 color photographs, an artistically-rendered map and over 22,000 words of text, essays, and informative captions. Recommended readings and index make it a resource book for lovers of plants, gardens and the great outdoors

This book was produced and printed by private donation. All proceeds from the book go to Betty Ford Alpine Gardens to support the its world-renowned collection of alpine plants, as well as its horticulture research, environmental stewardship, and community engagement.

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Sarah Chase Shaw

BETTY FORD ALPINE GARDENS



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Introductory photos: Todd Winslow Pierce/BFAG





In appreciation for Betty Ford's many contributions to the Vail community, the Board of the Vail Alpine Garden named the Gardens in her honor. At the groundbreaking ceremony held in spring 1988, Mrs. Ford, accompanied by Marty Jones and Helen Fritch, turned the first shovelful of soil. ©BFAG Archives

A Garden is Born

We are horticultural pioneers providing unique educational resources and programs, plant research and community beautification; and we create and maintain Betty Ford Alpine Gardens.

This was the original mission of the Friends of the Alpine Garden, a group of community members for whom gardening was both a lifelong hobby and a newfound challenge. Many had moved West from gentler climes; places where spring was a joyous season rife with the fragrance of flowering fruit trees and lilacs, and flower gardens exploded in a cacophony of color and texture in the heat and humidity of summer. What a shock it was, then, for these enthusiastic green thumbs to find their tulips crushed by heavy snow in June, and frost on their daisies at Labor Day. Gardening at 8,200 feet, it turns out, was harder than it looked.

Great ideas are born everywhere, even the back seat of a car, and Vail Alpine Gardens was no exception. In the late summer of 1983 a new truck driven by Marty Jones, a landscape designer and owner of a small nursery devoted to alpine plants, broke down by the side of the road in Georgetown, Colorado. In those days, thumbing a ride home to Vail was more common than not, and almost immediately he was picked up by Helen and Bob Fritch, recent transplants from Illinois and new owners of the Sitzmark Lodge. "For two hours I hunkered down in the back seat, talking with Helen and Bob about our collective dream to build a public garden in Vail," recalls Marty.

Despite—or perhaps because of—the inherent challenges of cultivating a garden in the Rocky Mountains, Helen was a passionate gardener and plantswoman. Kindred spirits, Helen and Marty approached the Town of Vail with their idea.

At the time, Vail—the small town and the ski mountain—was quickly transforming into a year-round resort, its reputation boosted by well-known political leaders and athletes who now called it home. Gerald and Betty Ford owned a house in Vail, and when he became President of the United States in 1974, the ski town made front-page news. He was such a regular on the slopes, in fact, that the White House press corps began calling Vail "The Western White House." An early leader in opening its mountains to year-round recreation, Vail operated its gondola and chairlifts all summer, transporting hikers and



A carpet of wildflowers is bathed in the golden glow of a midsummer twilight. Distant panoramic views of the Sawatch Range include Vail Resort's Blue Sky Basin and Mount of the Holy Cross at sunset. From late June through mid-August, high mountain meadows burst with color and the buzzing and fluttering of bees, butterflies, moths, and hummingbirds as they flit from one flower to the next, gathering and transporting pollen. ©Todd Winslow Pierce



A Walk Through Betty Ford Alpine Gardens

Vivid, prismatic jewels of color, displayed on delicate, minuscule plants that hug the ground or grow in sheltered cracks and crevices: these are some of the characteristics that differentiate alpine gardens from all others. Perhaps the most optically impressive of all botanical displays, they are a source of endlessly fascinating and ever-changing visual delight. Programmed to succeed against all odds regardless of elevation, latitude, geography, or hemisphere, alpine plants across the globe share a common characteristic; they have adapted to harsh climates denoted by frigid temperatures and short growing seasons. Survival of the fittest in an unforgiving environment means alpine plants bloom early, and they bloom quickly.

At 8,200 feet in elevation, Betty Ford Alpine Gardens is the highest public botanical garden in North America. A remarkable and unparalleled collection of over 3,000 species representing alpine environments around the world can be found within the compact five-acre grounds, a naturalized landscape that reflects the terrain of the Southern Rocky Mountains ecosystem in which it is located.

Species from Colorado to the Himalayas, and from South Africa to the European Alps, are managed by an internal clock that awakens them as soon as the sun begins to warm the soil, and in some cases, even before the snow melts. From that moment, a race to the finish line begins with each plant given eight to twelve weeks to accomplish what some other plants have the luxury of a full year to accomplish: wake up, grow, bloom, produce fruit, set seed, and go back to sleep. As a result, there is an ephemeral bloom time, both in the Gardens and in the wilds of the Northern Hemisphere, that extends from early-June to mid-August where waves of brilliant colors cascade over rocks, adorning boggy areas and stream corridors, carpeting the landscape with an ever-changing display.

Opposite: Pollinators and flowering plants have co-evolved to perform a well-timed dance with reciprocal benefits for both partners. For example, this bumble bee's fuzzy body is perfectly shaped to collect and distribute pollen from one colorful blanketflower (*Gaillardia aristata*) flower to another. Eventually, the bee will carry protein-rich pollen and nectar back to its growing colony.

©Kate Morris for BFAG



One of the smallest of all the columbines, Utah columbine (*Aquilegia scopulorum*) is a compact cushion-forming plant that grows on rocky slopes in subalpine forests and meadows in Utah, Nevada, and southwestern Colorado. ©Todd Winslow Pierce/BFAG



With an unusual floating growth pattern, oil shale columbine (*Aquilegia barnebyi*) appears to hover over seeps and springs that emerge from steep cliffs in the shady canyons of northwest Colorado and north-eastern Utah. ©Todd Winslow Pierce/BFAG



BETTY FORD ALPINE GARDENS

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Alpines of the World Collection

During the planet's major Ice Ages, rapidly advancing ice sheets and mountain glaciers pushed the ancient relatives of today's alpine plants out of the way. Once the ice melted, they reestablished their range in a broader swath throughout the mountains of the world. Considered the ultimate opportunists, alpine plants have successfully evolved to occupy a unique ecological niche, maintaining a tenuous foothold in areas above treeline where an inhospitable climate—impenetrable and nutrient-deficient soils, rock and ice, and a short growing season—invites only the toughest plants and animals into its fold.

The Alpines of the World collection at Betty Ford Alpine Gardens represents a global cross-section of species from familiar and exotic alpine ecosystems, including South Africa, the western European Alps, the Caucasus Mountains, Central Asia and the Silk Road, the Himalayas, and the Rocky Mountains. What these landscapes have in common is rock, and in the Gardens, as in the wild, alpine plants have achieved a co-dependence with the rocky landscape, looking to it for both protection and provision. Seeking water, nutrients, and minuscule soil deposits, plants inhabit tiny crevices, sending their roots deep into rocky fissures. On warm surfaces, dwarfed stems branch, spread, mat, and mound, extending a carpet of blooms up the sides and across the top of boulders and rock formations.

Specific areas within the Gardens are devoted to geographic collections; however, examples of species from other alpine environments throughout the world can be found in individual gardens as well. In some cases, a species' presence is experimental and random; in others, plants have been introduced as companions to compatible species from other geographic areas. While each geographic collection represents a unique area of the world, they share in common an ability to withstand cold temperatures, frigid winds, ice, and snow.



A golden halo of pollen coats the stamens of Utah columbine (*Aquilegia scopulorum*).

Following spread: In June, the Alpine Crevice Garden transforms into a magic carpet of effervescent alpine jewels. Photos these pages ©Todd Winslow Pierce/BFAG



Above and opposite: Nothing compares to the cascading carpets of trumpet gentian (*Gentiana acaulis*) found throughout the Gardens in June, its intense blue color accentuated by high levels of ultraviolet light found in Vail's mountain environment. ©Todd Winslow Pierce/BFAG



Above: Seed collection timing is crucial. If collection is delayed, seeds are quickly harvested by birds and rodents, or carried away on the wind. This specimen's seeds are both immature (green) and mature (black), but only mature seeds will be kept.

Opposite: Horticulturists and botanists use taxonomic plant keys to correctly identify species. In the alpine, the window of opportunity for identification is limited, but essential for accurate record-keeping and research. Here, Gardens staff utilize field guides to identify plants on Loveland Pass, in Summit County, Colorado. *Photos these pages ©Dominique Taylor/BFAG*

