

The Family of Shapes

The History of Bus Carrell's Forest Signs



BY GREG CHRISTENSEN



You know the shape of the sign. But do you know the history behind its simple design?

Government agencies aren't in the business of design. They're not set up to make things beautiful. Their priorities are efficiency and order, not typeface and color. The signs that identify government buildings and offices, and even their letterhead designs, vary from agency to agency, even within departments. Highway and speed limit postings, though uniform, are purely utilitarian. So it's remarkable that the U.S. Forest Service, a Department of Agriculture agency in charge of managing 193 million acres, has for decades produced signs that are not only recognizable but also appealing: people pull over, jump out of the car, and take a picture of their kids standing next to them.

Drive into any of America's national forests and you'll see them: large wooden trapezoids painted brown and cream, usually set on a low pedestal of stone. The shape is reminiscent of 1960s diner architecture, strikingly out of place in the forest. The colors are so neutral they border on nondescript. The letters are like a tween's refined attempt at cursive. The signs are flat-out unusual and yet instantly recognizable. They simultaneously demand our attention and defer to their surroundings. They're always on the side of the road, never hanging overhead in a gateway arch that could obscure a view. They're not cookie-cutter like highway or traffic signs. But their consistent coloring, font styles,

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Designed in the 1960s to be both legible and eye-catching from a speeding car, the rounded trapezoidal shape is both of its time and timeless.

and placement make them kin. In fact, their creator referred to them as a “Family of Shapes.” He had no formal design training, just a deep love for the forest. He was a ranger named Virgil Carrell, but everyone called him Bus.

“Bus” is one of those nicknames with a lost origin story. Not even his daughter Caroline, now in her seventies, can figure it out. “His mother called him Bus when he was young. Maybe because he was short? I really don’t know.”

He did look more like a school bus driver than a forest ranger. He was short and balding—even in his thirties. He wore glasses, and when required to dress formally, he showed a penchant for bowties. In a biopic, Bus might have been played by a young Wallace Shawn. But he had a palpable and contagious energy. Newspaper reporters described him as “genial” and “radiating pride and zeal.”

Caroline remembers that zeal manifesting itself on hikes with her dad through the dense Douglas fir and ponderosa pine forests of Oregon. “Dad would call out the biological names of plants,” she said. “He taught me north, east, south, west, and I never got lost. I was about four years old.”

Born August 8, 1914, Bus grew up in the Pacific Northwest, with all the outdoor values and sensibilities still found in the region. He was the son of railroaders—his father was an engineer and his mother a dispatcher tapping out telegraph messages to incoming trains. By 17, Bus was managing a sporting goods company in Seattle during the week and spending weekends maintaining trails in the Wenatchee National Forest. He was so drawn to the outdoors and the work he could do there, he enrolled in the University of Washington’s College of Forestry while continuing his work in the Wenatchee as a forest guard and laborer. He graduated at 23 and continued working for the U.S. Forest Service as he had since 1931, finally receiving appointment as a

forester in 1942. He was promoted to district ranger on the Mt. Hood National Forest in 1946.

THE BEGINNING

Estacada, Oregon, is a small town about halfway between Portland and the base of Mt. Hood. What began as a camp of workers building a hydroelectric dam on the Clackamas River became a base for lumberjacks working in a nearby logging camp. Once surrounded by meadows and dirt roads, Estacada became home to the Carrells when Bus was offered the position of district ranger for Mt. Hood’s Clackamas River area. He found himself in charge of planning and executing the largest timber harvest of any ranger district in the United States.

Suburban communities were proliferating in postwar America, and national forests became the primary source for the expanding lumber industry. Meeting the increased demand for timber while protecting and replenishing the forests he loved was a balancing act for Bus. He was managing more than a quarter-million acres of mostly virgin forest that was producing enough lumber each year to build 8,400 five-room houses. Bus was also responsible for organizing fire prevention teams for a forest mostly devoid of large roads that could handle firetrucks. With only narrow trails carved into the forest, he oversaw the training of firefighters who could reach the backcountry on pack horses.

As part of his duties, Bus supervised grazing, search-and-rescue operations, and campground cleanup for the 22,000 campers and hikers who visited annually. With a summer staff of 45 that dropped to 24 in the winter, he became a master delegator. And he was so good at his job that within three years, he was named Outstanding Forest Ranger of the Year.

The honor came from the USDA secretary, a Coloradan named Charles

FOREST HISTORY SOCIETY PHOTO 0513-187



FOREST HISTORY SOCIETY PHOTO 09-35302



FOREST HISTORY SOCIETY PHOTO 09-35305





FOREST HISTORY SOCIETY PHOTO R9-362530



FOREST HISTORY SOCIETY PHOTO FHS6812



FOREST HISTORY SOCIETY PHOTO R9-495655

The Forest Service used a variety of shapes, designs, and materials in its signage until Carrell’s team established a set of standards. Until then, signs often lacked legibility and concision.

Brannon. Brannon invited Bus and his wife to take a cross-country train trip to accept the award in the nation’s capital, the first time the Carrells had left the West. A photo of the ceremony shows Bus on stage at the Sylvan Theater in the shadow of the Washington Monument accepting the award from Secretary Brannon. He’s wearing a double-breasted suit with wide lapels—clothing about as far removed from a ranger’s uniform as Washington was from Estacada.

Perhaps the recognition gave Bus’s career a little boost. As for so many other foresters, moving up the organizational ladder meant spending several years moving around the American West. At the Region 6 headquarters in Portland, Bus helped launch a forest education program that became the standard for national districts. From the Region 3 headquarters in Denver, he directed timber management for national forests in three states. Being named supervisor of the San Juan National Forest required moving the family to Durango, Colorado. And in January 1960, Bus was assigned to a position in the national headquarters. When the Carrells left the forests and mountains of the West for the monuments and meeting rooms of Washington, it was more than a drastic change of scenery for the family. It was an assignment unlike any Bus had previously encountered, or had even trained for.

THE NATURALIST AND THE DESIGNER

In the 1950s and 1960s, Americans began road-tripping. As more and more families began to camp, hike, fish, and boat, both the National Park Service and the Forest Service expanded and improved their recreation facilities to meet that demand. Then as now, the general public confused national forests with national parks. But to the agencies, which operate under different government agencies and exist for very different purposes, the distinction

between a national forest and a national park mattered enormously. Wanting to differentiate between the two in the minds of visitors, the Forest Service’s Division of Engineering was assigned a special project to “review and modernize the Forest Service’s sign program.” Equipped with zero design training but ample, well-honed management skills, Bus was named to lead the effort.

Design work that could shape public opinion was not a new concept to the Forest Service. Fifteen years earlier, the agency had launched a fire prevention campaign and assigned a young artist named Rudy Wendelin to help. Rudy, a versatile talent who started in the Forest Service around the same time as Bus, transformed a new character named Smokey—an anthropomorphic bear in a ranger’s hat—into an icon. Wendelin would serve as Smokey’s “caretaker” for three decades, creating hundreds of Smokey illustrations for the Forest Service between 1946 and 1973.² He also did other graphics and design work for the agency. When Bus was put in charge of the new signage project in October 1961, Wendelin was one of the first to join his team. Bus later described him as his right-hand man.

For some bureaucrats, creating a consistent look for signage would be a simple matter of coordinating color and font that could be read at high speed. A government agency that prioritized efficiency of resources over design might well have decided that “Welcome to [name goes here] National Forest” should be printed in standard Helvetica. White letters against a dark background (whatever color was calculated to be the most cost-efficient paint) would have been an easy solution, and easy to mass produce.

I spoke with Charles Spencer Anderson, a world-renowned designer, about all this. The work of the Minneapolis-based design firm that

bears his name has been exhibited in museums around the world and examples reside in the permanent collection of Museum of Modern Art in New York. When I asked his opinion of the typical government sign, he declared he abhors that approach. When asked about what Bus and his team created, he said, “Whoever designed these signs really gave a damn.”³ Familiar with the signs but not their creators, Anderson said, “I don’t know if they had a sense of history when they designed these things, or if they knew how long they might be around, but it appears they understood the gravity of the assignment.”

That burden of responsibility might have pushed others into worry and second-guessing their decisions. But for men who loved the forest, the task was an opportunity to do what any outdoor-loving group with a loose mandate and government financial backing would do. They took a road trip.

Bus, Wendelin, and the two landscape architects assigned to the team visited parks and forests, noting the designs of signs and markers, where they were placed, and what materials were used. They discovered signs that served as grand gateways and metallic eyesores on the roadside. Some were well designed; most weren’t. They found monosyllabic signs bearing only the name of the location, cluttered messes where only the Forest Service shield was legible, or storied histories carved into wooden slats. What they didn’t find was consistency.

Bus summed up their findings in an essay titled “Signs to Complement Natural Beauty.” Writing in the first person, his style is whimsical and familiar. He’s your buddy and your slightly overeager tour director. He opens with what reads like a conversation between two old friends: “For a quick look at the signs of our day, let’s locate our credit cards, jump into the family car, and take off to see

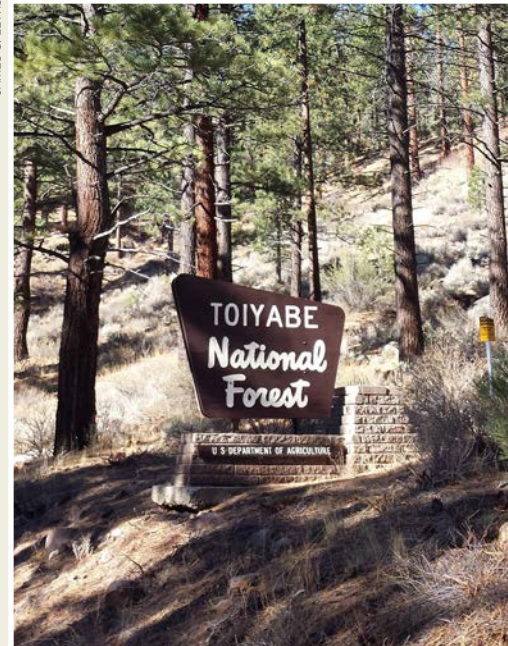
America first. On our way, allow me to point out some things about signs you might like to know.”⁴ Two aspects of Bus’s personality become apparent in the essay: Bus the Naturalist and Bus the Designer.

Bus the Naturalist is concerned with how the signs affect the landscape. In his essay, he expresses gratitude that the Highway Beautification Act of 1965 limits the placement of signs on any road constructed with federal aid. He suggests that the best signs blend naturally with the environment. He expresses the need to have “competent stewardship over our priceless natural resources.” Effective signs “tell us the rules” of an area—fire prevention, for example. But rather than simply state that effective signs can help control forest fires, Bus the Naturalist takes the reader aside to explain that forest fires cause not only scars on the land but “also loss of payrolls, recreation pleasures, fish and game, and loss of the soil, which in turn makes scouring, muddy, low-quality waters.” It’s a digression only someone with his outdoor values and firsthand experience would instinctively make.

Bus the Designer is punctilious, as all good designers are. The following quotes from his essay reveal his understanding of form and function and reflect the approach that led to today’s national forest signs:

- “A sign is good when its function is achieved without calling attention to itself.”
- “The text must be readable, brief, and above all, accurate . . . The text should develop no more than one topic and have a warm tone.”
- “It is wise to use the best materials available at a reasonable cost. To keep costs low, signs should be uniformly standard and simple. A sign does not have to be the gaudiest, the biggest, and the most colorful to be the best one.”

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COURTESY OF THE AUTHOR



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Carrell's signs emphasize the location's name instead of that of the Forest Service's. In addition, having one style designated for a national forest or grassland only and other styles for other units subtly conveys information at a glance.

- “Signs and their supports need to be proportionate, well balanced, and constructed with materials which can stand the test of time.”
- “Wood has proved its worth for many years. It blends naturally with the rural environment. It is attractive, and this must be a component of all signs. It is available, easy to shape, fit, preserve, paint, color, and maintain. Wood is also inexpensive. But it must be used right.”⁵

Bus the Naturalist and Bus the Designer collaborated to create the Family of Shapes we recognize today.

DESIGNING “MINI-MONUMENTS”

Charles Spencer Anderson describes Bus’s national forest signs as “mini-monuments.” The rounded trapezoid shape and script font are typical of 1960s design, a reflection of a postwar, prosperous country in the pursuit of happiness. Born from midcentury American style, they feel tastefully retro today. The magic of Bus’s design is that it feels both natural in any decade and at home in the forest.

Anderson explains the dichotomy this way: “The materials let them blend into the environment, but their design helps them be noticed. So, they do two things at once, which is really a tricky balance. It’s a contrast between the natural materials and then this weird shape that comes out of the blue. There are a lot of contradictions going on here, but it’s incredible how well they work.”

Bus’s Family of Shapes was implemented in the mid-1960s and has since been used to mark not just the entrances and boundaries of national forests and national grasslands but also the hiking trails, ranger stations, and scenic overlooks within them. It’s notable that the signs do not all include the equally iconic Forest Service shield. But Bus’s brown trapezoid is so iconic, it’s even aped on stickers, key chains, and other souvenirs in recreational havens like Lake Tahoe and Jackson



In 2003, Bus Carrell stood beside a sign identifying the place where his career began.

Hole—not to signify that they’re official Forest Service merchandise (they aren’t) but as a memento of being outdoors. The Family of Shapes has come to symbolize not just Forest Service boundaries but recreation in nature itself.

Today, the design and use of the Family of Shapes are carefully prescribed in a lengthy and doctrinaire document titled *Sign and Poster Guidelines for the Forest Service*. More than 600 pages long, it outlines everything from sign maintenance and repairs (for pollen and fungus “wash the surface with a 3- to 5-percent sodium hypochlorite solution”) to the numerically correct hexadecimal colors (the yellow-cream is #23695, the brown is #20059).⁶ The Family of Shapes is used to designate America’s 154 national forests and grasslands, as well as features like national scenic rivers and national volcanic monuments—all places under the Forest Service’s aegis. Each marker still identifies the surrounding area in script known only as “national standard logotype.” Although Smokey Bear makes an appearance in the

document (his likeness stands next to fire condition rating signs that alert travelers to that day’s danger level), neither Rudy Wendelin nor Bus Carrell is mentioned.⁷

BACK TO THE BEGINNING

In 2003, Bus traveled back to Estacada, where he began his work as a forest ranger. His protégée Bud Unruh took a photograph that shows Bus standing next to the Mt. Hood National Forest entrance sign. The photograph is not famous but it is poignant. The brown-and-cream sign would not have existed when Bus worked there. It shows both his origins in the Forest Service and his greatest contribution to it.

“Good design is about making something that adds richness to people’s lives,” says Anderson. “If you removed these incredible signs with the stone and the weird shape and the hand-routed type and just put up a cheap highway sign or a computer-printed billboard, the contrast would be pretty stark. Thank God they don’t look like that. There are too many things that look that way now.”⁸

When Bus died in 2014, at age 100, his passing was noted not just in his adopted hometown of Florence, Arizona, but also in the communities in the national forests of the Pacific Northwest and Colorado where he had worked.

Bus’s grandchildren are aware of their legacy. “We tell them to place their hands over their hearts each time they pass one of Grandpa’s signs,” his daughter Caroline says.⁹ But Bus’s legacy is more than familial. It’s cultural. Every year, hundreds of thousands of Americans road-tripping across America enter national forests. And it’s no small number that stop the car and tell the kids to go stand by the trapezoid emblazoned with the national forest’s name. It’s a family picture with the Family of Shapes.

Greg Christensen is a writer and advertising creative director based in Dallas, Texas. He began researching Bus Carrell after a drive through Targhee National Forest and has since helped design thanksbus.com to increase awareness of Bus Carrell’s legacy.

NOTES

1. C. J. Dennison, interview with the author, April 2020.
2. James G. Lewis, “Smokey Bear: From Idea to Icon,” *Forest History Today*, Spring/Fall 2018: 14.
3. Charles Spencer Anderson, interview with the author, March 2020.
4. Virgil R. “Bus” Carrell, “Signs to Complement Natural Beauty,” in *Yearbook of Agriculture 1967* (Washington, DC: Government Printing Office, 1967), 253.
5. Carrell, “Signs to Complement Natural Beauty,” 253–56.
6. Engineering Staff, *Sign and Poster Guidelines for the Forest Service* (Washington, DC: USDA Forest Service, 2013), 16–3.
7. Engineering Staff, *Sign and Poster Guidelines*, 10C-1–10C-3.
8. Anderson, interview.
9. Dennison, interview.