COMMUNICATING YOUR MOUNTAIN_

RE-IMAGINING THE TRAIL MAP & SIGNAGE FOR TODAY'S GUEST

_ BY COLIN BANE

Are the days of hand-drawn trail maps for ski areas, painted painstakingly to convey an artistic, serene mountain view of ski areas, beginning to wane? Sure, there will always be those die-hard ski areas that prefer the throw-back, traditional, arty trail map—after all, they contend, we go to the mountains and ski areas to get away from technology and truly disconnect from it all. But new generations, accustomed to technology and its convenience and ease-of-use (let's call them the Digerati) are demanding more user-friendly mountain maps and guest information platforms, and vendors are responding to these demands with inventive and novel technologies that are changing how we communicate with our guests on the mountain.

With today's digital, 3-D interactive mapping technologies and animations, drones and aerial photography, virtual reality, and real-time digital information systems on HD screens and even on lift chairs, our guests have never had information so accessible and immediate.

For example, when Arapahoe Basin announced a planned 338-acre expansion in November for the upcoming 2018 season, the Colorado ski area turned to VistaMap owner and digital artist Gary Milliken to help re-visualize their new terrain and overhaul and update the ski area's traditional trail maps. A-Basin's expansion will include a new chairlift in what is currently a popular backcountry zone and allow for its ski patrol to perform avalanche mitigation work in the expanded area. As part of A-Basin's press release touting the expansion, the ski area included Milliken's new digital map. VistaMap, along with a number of other industry vendors, is one of the leaders on the bleeding edge of this revolution to re-imagine how we communicate our mountains to our guests.

"We have been very pleased with Milliken's work on our new trail map so far," said Alan Henceroth, A-Basin's chief operating officer. "He created the first public map for our new expansion terrain, the Beavers & the Steep Gullies. We're looking forward to having an updated trail map that utilizes these newer visual mapping technologies."

Milliken's digital maps employ the latest technologies—up-to-the-minute Google Earth images, 3-D mountain mapping technologies, topography maps, and even drone imagery provided by resorts—all of which optimize the guest experience and provide an infinite ability to quickly modify the elements of the map. VistaMap's digital mapping technologies also make it easier to convert the winter mountain experience into a summer map as ski areas rapidly turn to four-season resorts, and in turn better reflect a mountain's true scale and proportion.

A lifelong skier, Milliken has a collection of old trail maps from the ski areas that he has saved as souvenirs over the years. Though he has now created maps for nearly 40 ski areas in the US and around the world, Milliken says the A-Basin project has been a point of pride, as he first started skiing there in 1981.

"We were able to really zero in on what A-Basin wanted, doing justice to both the front side of the mountain and the expansion areas—including the planned expansion and the previous 400-acre Montezuma Bowl expansion they did on the backside in 2007—while putting the new terrain rollout into a view and proportion to the rest of the mountain in time for their big announcement," Milliken said.

VistaMap specializes in vector-based digital map artwork for ski areas, amusement parks, zoos, museums, and other clients, but Milliken says ski trail maps are his bread and butter.

"These are highly-detailed and complete maps that can be easily enlarged, reproduced, and quickly updated in digital platforms," he said. "It's going to have the same clarity whether you're looking at it on a folded trail map, on a huge sign map, or zooming in on it with a computer or mobile device."

While there will always be those who pine for the painted and artistically rendered mountainscapes of old, the ease of use of digitally rendered maps and the visual clarity and accuracy they convey is here to stay. Milliken says that regardless of the size, he can print a map at 100 percent without losing any detail, unlike with painted and hand-drawn maps.

"With a bitmap file, you either end up with an unmanageably large file, or it starts to break up as you enlarge it," he said. With VistaMap's vector-based digital artwork, Milliken can create any file, in any size or format, so a resort can use the raw file for print, make a web-optimized file for the internet or a mobile app, or whatever it needs—all in intricate detail and precise navigability.

As the staff at Arapahoe Basin planned its expansion announcement, Milliken was able to create a map to better visualize what the terrain would look like once opened, while still being able to fine-tune it in the future once the chairlift and new trails are in place.

"Making them easy to update is a big part of the value in my maps and the service that I offer, well beyond the initial creation of a map," Milliken said. "I've always described it as a painting where the paint doesn't dry: I can go in and select any object in the map, down to an individual tree, to make changes at any time if at some point a ski area makes a change and wants it reflected on the map. If your original trail map is an actual painting, as is often the case in this industry, that can be a lot harder to do."

Milliken says it took a while for technology to catch up with the capabilities of his maps. But smartphone applications like Vail Resorts' EpicMix—which feature VistaMap for Vail Mountain and the company's other resorts—hint at some of what's possible. Milliken has also trail maps for Squaw Valley, Stowe, The Remarkables in New Zealand, and Sea Island, a seaside golf and beach resort mapped out over 100 square miles along the Georgia coast. He's also working on a summer map for Killington. This new generation of maps provides for dramatically easier wayfinding, visual cues, informational overlays, and inter-active graphics that were not available with painted renderings.

"When I first went around promoting VistaMap as a new way of doing things for ski areas 20 years ago, I got a lot of pushback. Now the full potential of digital-based artwork and the technology to use it has caught up with the tools I've been using all these years," Milliken said. Most people today have that technology right in their pocket, so a user can open up a map on their phone and see it clearly, potentially anywhere, without the frustration of trying to fold a multi-paged paper map in the wind on a lift.

Graphics technology is allowing ski areas to experiment even beyond digital map renderings. Cape Productions, for example, is moving its aerial drone videography service away from its initial business model of offering on-mountain use by guests on designated trails, like an aerial SharpShooter videography service. Now, Cape Productions is beginning to use its expansive fleet of drones to offer guests a "before you go" experience—in real time—by using drones to provide a video fly-over experience of a destination, right from their home computer or Smart TV. Although in its early stages, the company's new business model is simply a taste of what is likely to come with this revolution in technology. ▶

Gary Milliken/VistaMap

Vector-based digital artwork, such as this detailed rendering provided by VistaMap, are easily modified.