

# National Geographic maps out Santa Cruz's mountains, trails

Trails

By **BRENDAN BANE**

Hilltromper.com

✓ If you're shopping for a new car, a myriad of makers await your perusal. New computer? Nearly just as many options are available, with no clear market dominator. But within the realm of maps, one maker stands unambiguously above all. National Geographic has delivered the world into millions of Americans' mailboxes since its first map was published nearly a century ago. Today, it remains the gold standard of mapmakers. As part of its effort to cover regional areas, Trails Illustrated, a branch of National Geographic Maps, recently released a map of the Santa Cruz Mountains, and it's generating a great deal of excitement.

"This was quite the map to make," says Rachael Huerta, the project's lead cartographer. "A real beast!"

Huerta isn't exaggerating. The waterproof, tear-resistant map is two-sided, extending far north into Portola Redwoods State Park, south into Manresa State Beach on the Monterey Bay National Marine Sanctuary, and beyond the borders of Santa Cruz County into

Santa Clara and San Mateo counties. It features a panoply of trails (hiking, biking and equestrian), detailed topography, numerous state parks, hundreds of points of interest (both terrestrial and marine) and more detail than your average hiker would know what to do with.

The complexity of our mountains, and the organizations protecting them, made this project difficult but rewarding.

"This was a complicated map to make," says David Jay, vice president of sales and marketing at National Geographic, "much more complicated than, say, Yosemite. When you make a map of a national park, you're dealing with one entity: the National Park Service. It's a very straightforward process. But for the Santa Cruz map, we sat down with at least five to six different entities."

## COLLABORATION JUNCTION

For National Geographic, mapmaking is a highly collaborative process. Their cartographers work with local authorities, of which Santa Cruz has many, to retrieve the data they need. Once the mapmakers have a semi-final product, those same groups are consulted to help ensure

the map is accurate. Most of the information needed to make a map is already available, waiting in the form of existing maps and surveys. It's a matter of sourcing all those data, then compiling them into a cogent, aesthetically pleasing product.

"Different counties have different amounts of data on their parks," says Huerta. "It's awesome if they have trail data, but sometimes they don't." Much of the information on waters and main roads is publicly available, but sometimes pieces are missing. When that happens, cartographers like Huerta employ less-conventional means.

The first weapon in her cartographical arsenal is orbiting in space. If Huerta can observe trails through satellite imagery, as was the case with Wilder Ranch, then she can digitize them. "With satellite imagery, you can see everything around the coast. But as soon as you go in a little, a lot of trails are covered by trees. That's awesome in real life. But it creates a challenge." Where satellites fail, Huerta employs her second weapon: crowdsourced cartography.

National Geographic Maps has a partnership

with AllTrails, a San Francisco-based network of outdoor enthusiasts. AllTrails members use GPS tracking devices, pictures and user reviews to record trails all over Northern California. Huerta used those accounts to fill in the gaps.

## REALITY TESTED

When the map is about three quarters complete, cartographers travel to the region to test it in a type of trial period. Huerta spent two days driving through Northern California while using the nearly completed map (and subsequently saw her first redwoods in Big Basin). Other agencies and groups are asked to contribute to the review process.

"One of the things we do that sets us apart from other map makers," says Jay, "is that we bring our maps back and ask the agencies we've worked with to proof them. We believe that local knowledge and collaboration will result in the best maps." The same agencies will be consulted again in three to five years when the map is revised.

Friends of Santa Cruz State Parks is one such agency.

"I was really thrilled to

11.15.13  
be approached by National Geographic about this map," says Bonny Hawley, executive director of Friends of Santa Cruz State Parks and self-professed map geek. Her nonprofit group is on the forefront of garnering interest in and funds for California State Parks through educational programs, capital projects, and an extensive online events calendar. "I'm just really excited about getting the word out and giving people a new tool for adventure," says Hawley. "If you have this map in your car or backpack, there are going to be a lot of new adventures for you to go on."

The map is less than a month old and available at Friends of Santa Cruz State Parks Park Stores. Hilltromper and Friends of Santa Cruz State Parks hosted a map launch party at Hotel Paradox on Thursday, where Huerta and other National Geographic representatives were among the guest speakers.

If you're itching to get outside and make use of this tool, as you should, then Huerta puts it best: "Get outside and read a map. Put down your phone. Don't put the map on your phone. Use a paper map!"