CGS `GeoGems’ Report is Golden

By Don Drysdale

There are gems spread through the California State Parks system. Some are of the sparkly, semi-precious variety, to be sure, but we’re talking about something much larger.


CGS worked on the project under contract with the California Department of Parks and Recreation. The introduction to the report explains: “We selected exemplary units of the State Park system to highlight California’s geologic legacy. The selected parks are dubbed “GeoGems.” Of these, a third have been bestowed various national accolades and recognitions.”

The report adds: “With this set of GeoGem Notes, readers will better understand the richness of our geologic heritage that is the canvas upon which our scenic landscapes are painted. The interrelatedness of geology, biology, ecology and human life — past and present — clearly shows that we share a common future.”

The GeoGems include well-known locales such as the Marshall Gold Discovery site, Lake Tahoe’s Emerald Bay, and Mount Tamalpais and Mount Diablo state parks, as well as more obscure places such as the Hollister Hills State Vehicular Recreation Area and Ahjumawi Lava Springs State Park.
Each note is a narrative about the location, including a description of why it’s important or unique. For example, the Sutter Buttes – visible from DOC’s Sacramento headquarters on a clear day – are distinctive because they “are the remains of a period of violently active volcanic eruptions between 1.35 and 1.6 million years ago. The origin of the Sutter Buttes has been hotly debated. The volcanic activity has been variously related to the Cascade Range to the North, to the Sonoma volcanics to the south and west, and to plate tectonic interactions deep below the terrestrial crust.” The buttes are sometimes called the world’s smallest mountain range.

“We’ve been limping along with this project the last several years, doing it in a catch-as-catch-can fashion,” said CGS Supervising Geologist Bill Short, one of the many contributors credited with creating GeoGems. “It’s always a good feeling to get a large, complicated project completed, very rewarding. Everyone’s reaction so far has been very positive – it’s great, it’s wonderful, it sets a high bar, that kind of reaction.”

Short credited Mike Fuller of CGS with doing “the lion’s share” of coordinating the report’s creation. Credit for the final design and layout of the document goes to Anita Carney whose eye for graphic design resulted in the pleasing presentation of the information. Fuller, Short and Chris Wills were credited as co-editors. Former or current DOC staff who contributed include Dave Branum, Will Harris, Cheryl Hayhurst, Janis Hernandez, Chris Higgins, Pam Irvine, Bret Koehler, Jeremy Lancaster, Dave Longstreth, Gerald Marshall, Jon Mistchenko, Steve Reynolds, Jim Thompson, and Michael Wopat. Many Parks employees contributed material.

“We tried to involve people for whom the project made sense – that is, near where they’re based, or were working, or who had particular expertise,” Short said. “It turned out being a pretty good thing, we think. It’s substantially more than it was supposed to be initially. We think it will provide good information to state park visitors, which was our main intent. Secondarily, we hope it will help Parks when it’s doing planning or preparing environmental documents and needs some basic geological information.”

Fuller said pulling the text together was relatively easy but gathering photos and other illustrative materials – and then choosing what to include and what to discard – was extremely challenging, although ultimately rewarding.

“Although I knew all the general facts and concepts about California geology, it was very interesting to learn more about each of the individual parks,” he said.

Each of the GeoGems is a four-page segment that can either be printed separately as a handout
to park visitors or included as part of the comprehensive report. Parks and CGS are working to get some hard copies of the complete report printed as a coffee table book for sale in park gift stores. DOC Public Affairs is collaborating with Parks to promote GeoGems to the public.

“This is just a small sub-set of state parks and recreation areas, so it could have been much, much bigger,” Short noted.

Indeed, there are 280 "park units" in the state system – from the Admiral William Standley State Recreation Area to Zmudowski State Beach – including actual parks, historic resources, reserves and recreation areas.

“I think anyone who reads the GeoGems report, whether or not they’re a geologist, can learn something,” Short said. “We think the audience is broad, but if you’re a scientist of some type and you want to research more about certain aspects of a park, we list all the references that were used to make it easier for anyone interested to go deeper.”

Asked whether he found any of the GeoGems intriguing enough to explore in person, Short said: “There are a lot of places I want to go visit now. What I found out from reviewing the write-ups is that there are places I probably didn’t appreciate previously as much as I should have.”

If you’re into wind and waves, Point Lobos is the place. Mike Fuller photo