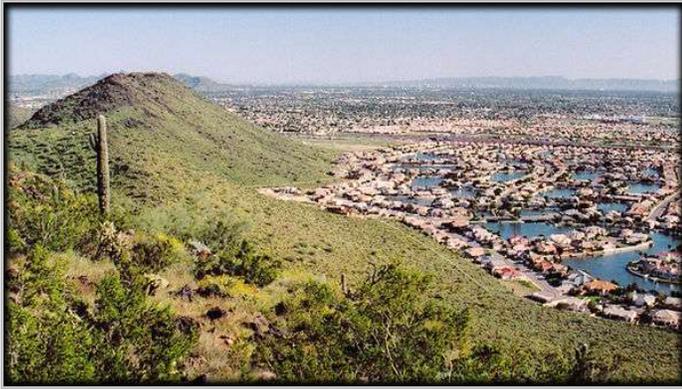


“Black Hills”



Looking southeast from the Hedgpeth Hills.

“Sandstone. It’s sandstone, I think.” Those words came loudly from behind, as I was standing in the warm, late-day glare, taking in the sweeping panorama in front of me. I quickly turned around to see two lady hikers talking to what looked like a group of students from a nearby high school, out for an afternoon workout or field trip. I reasoned that maybe it was a physical education class. I hoped it wasn’t a science class, because whichever had answered someone’s question was wrong.

The pair appeared to be teachers, and they were just getting their youthful group started back down the trail from the summit. Like me, they had all been spending a few moments, transfixed, at the top of the hill, since the vista of Phoenix from that spot was really quite good, and there was even a slight, cooling breeze. In the distance to the southeast, I could clearly make out the tall buildings of downtown. To the west, I could see the city all the way out to the White Tank Mountains, and right below me was a whole series of small winding lakes, each one tightly surrounded by upscale homes.

I knew I couldn’t let the error go. I just *had* to do some correcting, and besides that, I’m not one to turn down a chance to talk to some pretty ladies. “No, it’s basalt,” I yelled to the them, then about thirty feet away.

The blonde one looked over at me, the expression on her face saying, “so who are you?”

I explained, “I thought I just heard one of you say that the rock we are standing on, and all along this trail, is sandstone, and it’s not. It is a rock called basalt – it’s volcanic. I know, because I am a geologist. Look at the frozen bubbles in it.”

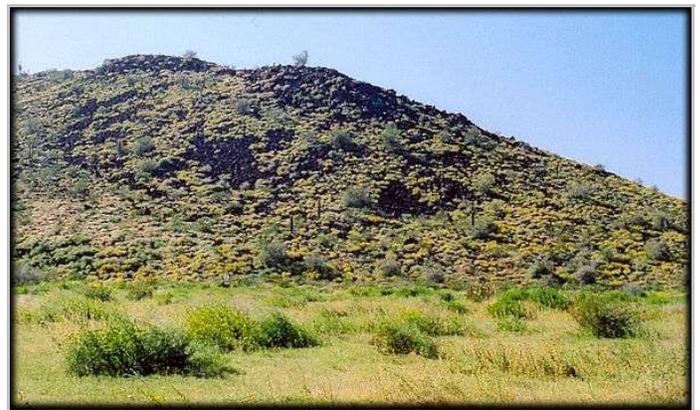
“Oh,” she said humbly, surprised at my interjection. She must have been the one who had made the sandstone statement. “Thank you.” And with that they headed down the mountainside, eager to catch up with some of the kids who had already gone on ahead.

Apparently they had not been as anxious to talk to me as I had been to them. But, hey, I don’t blame them. You never know what kind of weirdo you might meet out on the trail. You might even meet a geologist – one just itching to explain the rocks to anyone who will listen.

Now, don’t get me wrong. I don’t make a habit of hanging out along local trails, waiting for unsuspecting hikers to come by, just so that I can leap out and impress them with geological knowledge. But neither can I stand by and let a misconception go uncorrected. There is a reason we could call these peaks Phoenix’s “black hills”.

This interlude took place on one of the high points of the Hedgpeth Hills, a group of rounded, small mountains that lie mostly along the north side of SR 101, the Agua Fria Freeway. Much of the range here looks rugged, forbidding, and black. Actually, however, thanks to the City of Glendale Parks and Recreation Department, there are several nice trails within this refuge. Known as Thunderbird Park, it presents several magnificent viewpoints from which to gaze out over our vast valley. Named in the past after Robert Hedgpeth, a early homesteader in the valley, the hills were then just lonely hulks out in the middle of nowhere.

On that particular day that I was giving the free, unsolicited geology lesson, the rocks had greater contrast than usual. It was because of the absolute profusion of brilliant, yellow *Brittlebush* plants that literally carpeted patches of the hillsides. The moist smell of springtime filled the air, and just walking through thickets of that golden brush left smears of bright yellow pollen on my clothes. As I walked back down the path, well behind the class, I hoped there were none of those sociable little killer bees around waiting to massacre me on that rocky hillside.



Basalt covers much of the Hedgpeth Hills.

As I have written before, basalt is an igneous rock (*igneous* means “from fire”) that flows easily and readily when molten. It is heavy, and when hardened it eventually

erodes and forms dark rubble on the desert slopes that sort of looks like a multitude of coal-colored avalanches.

Among the youngest rock in the Phoenix area, here it is approximately 15 million years old. There are different, older rocks at the west end of the Hedgpeth Hills, but to me, they are not as striking, or as moody-looking, as the basalt is.

Basalt also makes for a good rock on which to inscribe petroglyphs. At the eastern end of these hills is the *Deer Valley Rock Art Center*, where there are well over a thousand ancient petroglyphs, some as old as 7000 years. You can get a good "feel" for the rocks there, also, and you don't have to hike up a mountainside to do it. And there are probably no geologists lurking in the background, either.



Left: Ancient petroglyphs adorn a basalt boulder at the *Deer Valley Rock Art Center*, at the east end of the Hedgpeth Hills.

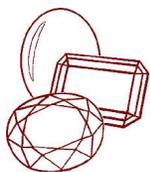
To learn more about the Hedgpeth Hills, visit www.gemland.com, go to the "GeoScenery" section, and click on "Hedgpeth Hills" on the map. Or you can click on any other name on the map to begin a series of images about other features of the Phoenix area's engaging rock formations and prehistory. All have geologic explanations available in pop-up windows, and you can send any picture to your friends as an E-postcard for FREE!

----- *Richard Allen*

March 2005

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At right: natural blue sapphire and platinum wedding set by GemLand © 2004



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