Volume 2

Cleft Location Project

Volume 2

–Ainia

Saturday 4 Aug 2012

Visited my archeology buddy, Kenny, now that he's back from his vacation. I particularly wanted to see if he'd be willing to tag along on my upcoming treks since I don't know how rugged the terrain may be and would rather not risk getting injured all alone in the wilderness.

In the course of this conversation, I explained to him about the D'ni and why I'm looking for the Cleft and caldera. He paused for a long moment and then told me about some investigations he and a friend had done many long years ago when we all were living in northern New Mexico.

Apparently, he and this friend were hot on the trail of an ancient underground civilization,

which was now gone but which had once had complex technology. They had been attempting to detect signals from this technology and then excavate for it. The end result had been unfruitful, as they hadn't been able to dig deep enough without better equipment. (At the time, they had been hiking deep into the wilderness and so had to use shovels.)

And another very interesting tidbit: Kenny and his friend had known a teenage boy who could hear the voices of the ancients. This boy had marked several locations on some maps of northern New Mexico, showing Kenny and his friend where to look.

Kenny has promised to look for these old maps, which are archived in a "very safe place" that he can't remember at the moment...

I should have known that Kenny would "get" my project. He's always full of surprises like that.

Wednesday 8 Aug 2012

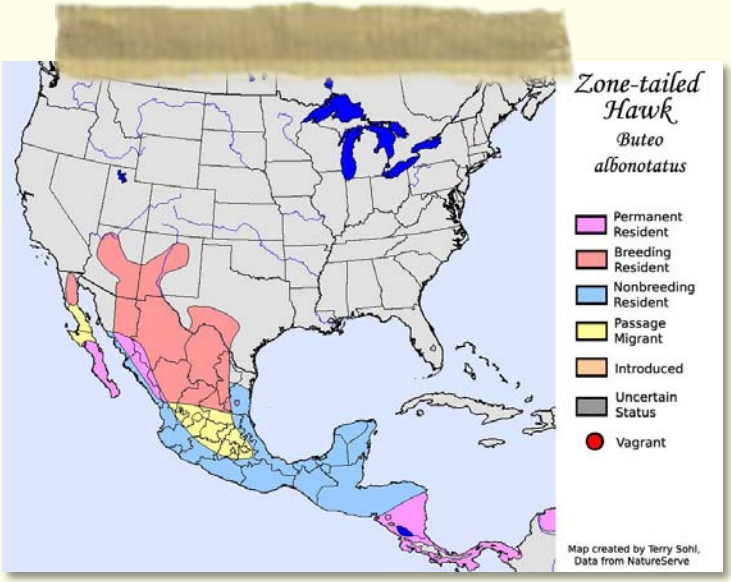
I had a chance to do a bit of online investigating this evening, this time focusing more on flora/fauna clues. In particular, I investigated the Zone-Tailed Hawk.

Although the D'ni Zoological Society only tentatively identifies the Cleft bird as the Zone-Tailed Hawk, examining all the other raptors native to New Mexico leaves the Zone-Tailed Hawk as the only possible match. So I must assume that the DZS has made an accurate identification.

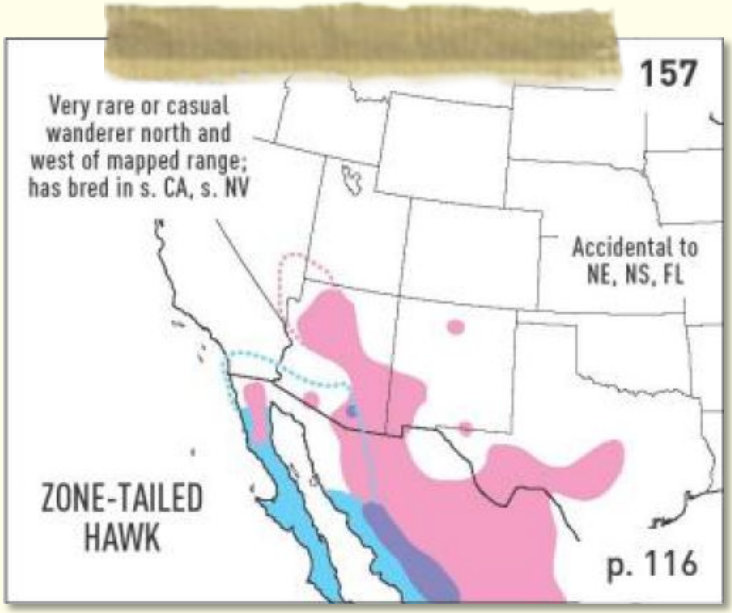
The Cleft hawk, identified by the DZS as a Zone-Tailed Hawk.

A photo of the Zone-Tailed Hawk, lifted from birdspix.com on the internet.

I was able to find several territorial maps for this bird, which provide some exciting clues.



The hawk appears to be a seasonal resident in the US and parts of northern Mexico.



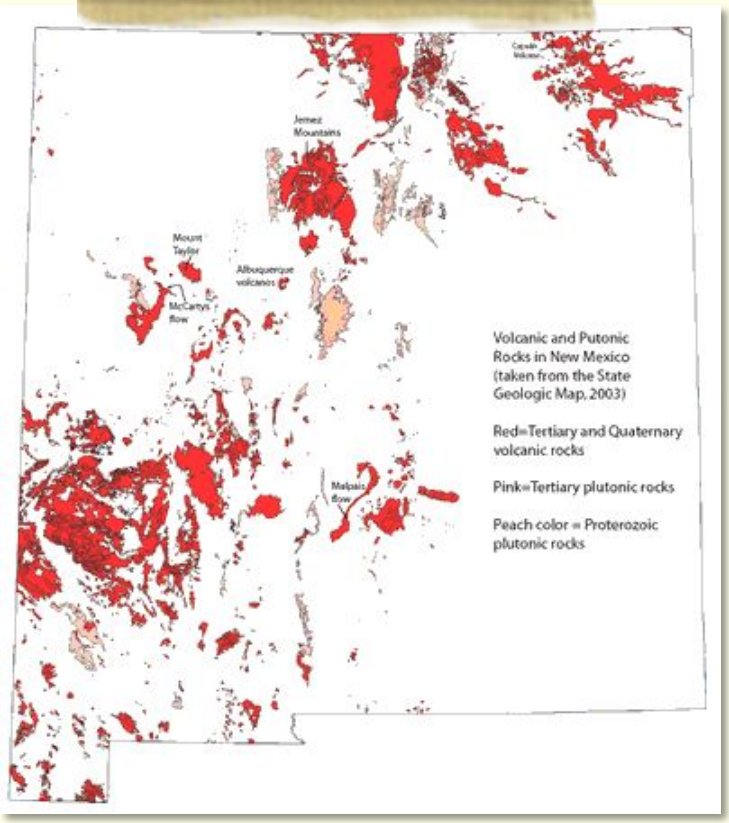
Lifted from the Peterson Field Guide to Birds of North America; pink zones are migratory breeding areas.

The second image above is particularly enigmatic and suggestive, showing a smaller range for this bird in the US than the first, but also showing a couple of isolated areas where the

hawk migrates. One is at the New Mexico–Texas border east of El Paso, and the other is up north in the Taos area. Overall, Taos is looking like a stronger candidate all the time!

Friday 10 Aug 2012

Some more online research, this time about volcanic fields up north. The Raton area is looking very promising so far. Although Capulin is by far the largest and most well-known volcano there (and a non-contender for the caldera as a result), there is a huge array of other volcanic formations in the area. It will take some time to find much in the way of good photos online, though.



A map of New Mexico volcanoes courtesy of NM Tech.

The Raton-Clayton volcanic field, lifted from the internet.

Although the general look of the volcanoes here is good, there is a distinct lack of sagebrush, the landscape being dominated instead by grasses.

The Taos volcanic field with the Taos Gorge in the foreground, lifted from the internet.

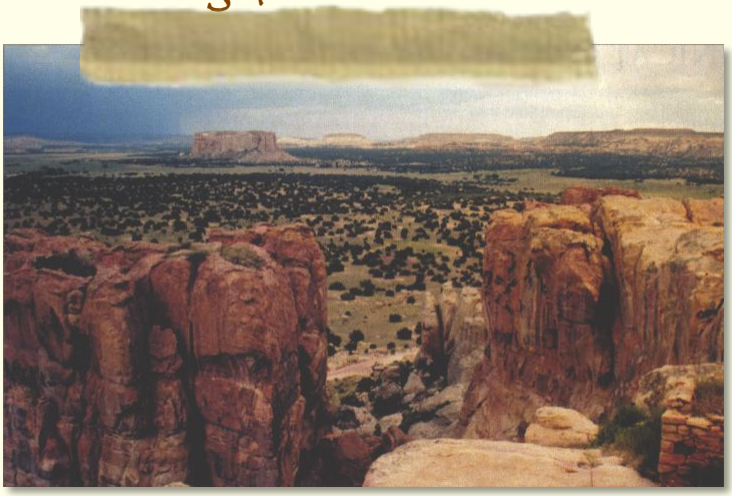
The vegetation here looks much closer, with plenty of sagebrush. Unfortunately, the photo itself is rather dark, apparently because of the extensive cloud cover.

Thursday 16 Aug 2012

I've been having an interesting offline discussion with larryf58 on the side for about a week now in the course of which I have realized that I need to get a better version of the Prima Guide photo of the Cleft caldera. Sadly, in using a screenshot from the eBook, the images are fairly low quality (for technical reasons I'm sure, since there are a huge number of images used throughout that very large document). So I will be posting a request for help on the forums tonight and hope someone out there has a hard-copy version of the Prima Guide and a good scanner...

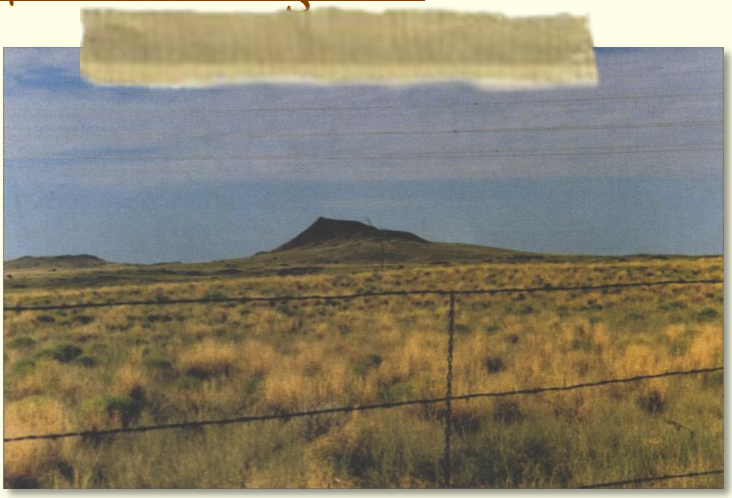
* * * *

Wow, that sure didn't take long! Within about an hour, I got a PM from Cal saying he not only has the document, but also a scanner. I now am the very happy possessor of a much better resolution image for the caldera!



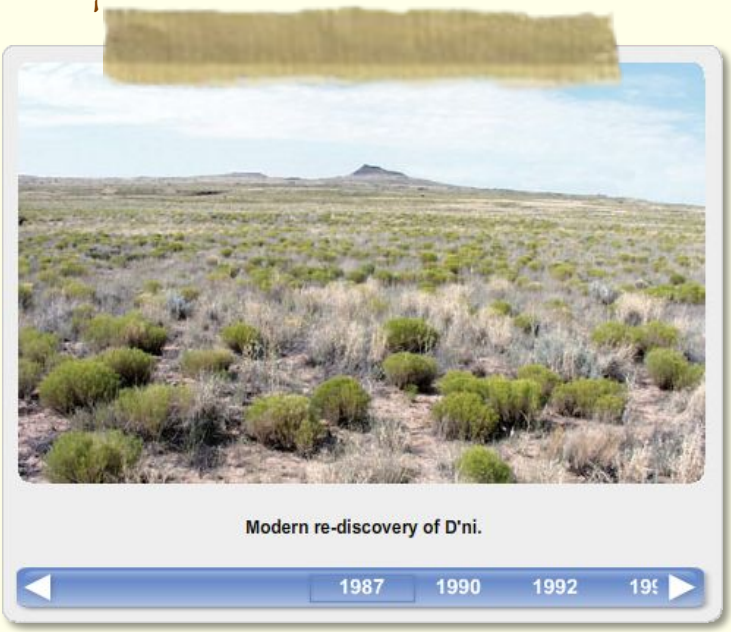
A scanned image from the printed Prima Guide—Enchanted Mesa.

A scanned image from the printed Prima Guide—NM desert vegetation.



A scanned image from the printed Prima Guide—the Cleft caldera.

And for good measure, I'm adding the DRC web site image of the caldera so it will be easier to compare the two and see what I can learn.



The Cleft caldera, from the DRC web site.

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Wow, it's remarkable how different these scanned images look—much better detail and a

much more realistic range of color values. I will have to consider getting a hard copy of the Prima Guide for my own records.

And actually, it was a very good idea to compare the two caldera photos; and it's quite fortunate that they were taken on two very different days and at two very different distances.

In comparing the two, so far I can see several interesting things:

- The attendant formations to the left of the caldera are the same in both photos, even to the small hump at the bottom left of the caldera, and the two eroded mesas/volcanoes farther to the left.

- There is a gradual downward slope in the landscape to the far right of the caldera.
- The wire fence likely is at the side of a dirt road which can be seen faintly in the distance in the DRC photo.
- The dark lines in the sky are definitely power lines. Because of their placement, they must be on shorter, local power poles which are set back from the fence line but which likely are following the fence line (very typical here in New Mexico).
- When comparing the darker/shadowy features in the foreground of the caldera, it appears that there is a small wash going horizontally across the landscape. It can be seen as a distinct dark shadow in the DRC photo and (in a different location)

as a darker somewhat striated landform in the scanned photo. It's hard to tell from either photo if this wash extends farther toward the right or if it ends near the front of the caldera. Overall, it appears to be wider farther to the left.

- In the scanned photo, there appears to be a solitary dead tree at about the wash location and in front of the caldera. Its apparent size makes it seem that the wash is not terribly far from the fence itself. Assuming that it hasn't collapsed in the meanwhile, this tree would be a good landmark.
- The caldera is accessible by dirt road only and could well be relatively far from any paved road.

- However, there is power out there, so the available dirt road will be fairly well-kept and used.
- Although no sign of the power lines can be seen in the DRC photo, since it's quite likely that the two photos were taken at separate times, it's possible that the power lines were absent when the earlier DRC photo was taken.

Wednesday 22 Aug 2012

Got a brief message from Kenny tonight. He finally found his old maps of Northern New Mexico! I'll need to plan to visit him soon so we can look them over.

Thursday 23 Aug 2012

More online research with Google Earth. I'm hoping to use the upcoming holiday weekend for a road trip and need to narrow down the possibilities.

Overall, I'm still inclined toward the northern New Mexico/Taos area. Particularly in light of the Zone-Tailed Hawk territory map, it's looking like one of the better possibilities.

But also in re-examining the two caldera photos, I keep wondering about locations to the west. After my trip to the Albuquerque volcanoes, the views from the summit showed a great deal of wide-open space in that direction, which certainly matches the two caldera photographs very well...

Most of the images I've found online for the various New Mexico volcanoes show them in clusters, oftentimes with a good number of volcanoes in very close proximity. The caldera, on the other hand, appears to be fairly isolated.

The more I look into this, the more mixed my opinion is becoming. I'm starting to wonder if the trip the DRC made to Acoma Pueblo may have been in the vicinity of the caldera as well. Judging simply from the three Prima Guide photos, it wouldn't surprise me if they were taken at about the same time, on the same road trip...

Friday 24 Aug 2012

It's my Friday off and I've decided I need to fill out my reference library. Sadly, the little flora/fauna app I downloaded for use in the field is quite limited. Thus far, I've found that more often than not, its database does not have references for the species I find. Plus, I need some geology reference books anyway.

First stop is the Natural History Museum's gift shop. If I'm lucky, they will have some good geology books there.

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Odd... I found a few helpful books in the gift shop, but none about geology. The museum's main emphasis is the dinosaurs of New Mexico,

so there was plenty about that topic, though mostly oriented toward children. I did find several good field guides for wildflowers and plants/animals. Next stop, the Petroglyph National Monument visitor center and gift shop. I hope their selection is better.

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Yes!! I got here a bit late but still in time to browse through their books. They have a good geology guide, a bird guide, plus some guides for rock art and Native American pottery. Unfortunately, there are no geology guides specifically about volcanoes. At any rate, I will be spending a good chunk of money here but it will be worth it.

Also, I found a good carrying case at an office supply store earlier, so it should be a simple matter to stow my new reference library and bring it along on road trips.

Friday 31 Aug 2012

I've been texting with Kenny about his maps and the upcoming weekend. We are debating about going north to Taos or west toward Acoma. It appears his maps are mainly of restricted lands (mostly private or tribal lands), which means they aren't an option for hiking. Dang.

Instead of going to Holman's and purchasing a bunch of printed topographical maps, I've opted for buying an iPad app which can access pretty much all the topographical maps for North America. However, getting them downloaded is a long process as I can only do one at a time. Fortunately, we have planned our road trip for

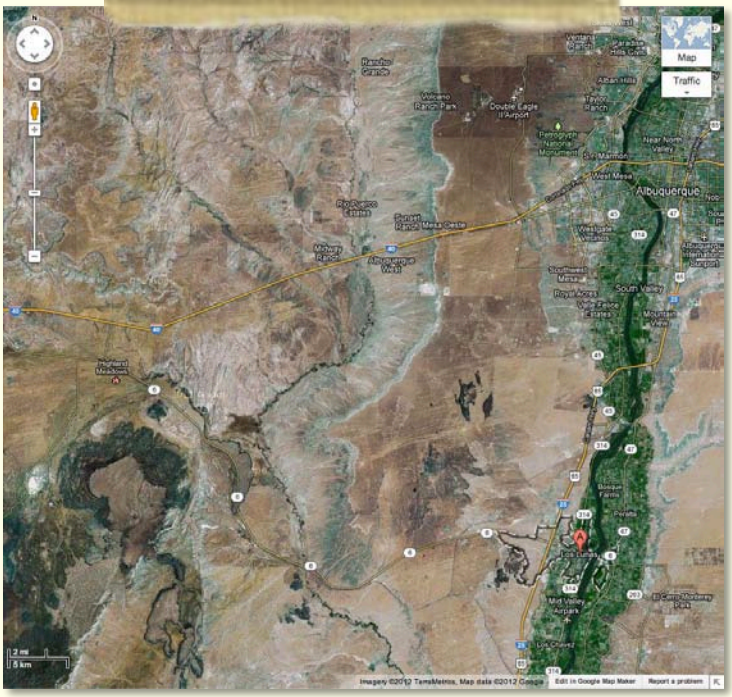
Sunday rather than tomorrow, so I can work on this all day Saturday.

* * * *

We have settled on a trip west, starting from Los Lunas and heading northwest to I-40, then west to El Malpais and the Chain of Craters volcanic field. I'll need to start gathering all my gear so I'll be ready for an early start on Sunday.

Sunday 2 Sep 2012

Got to Kenny's a little later than I'd hoped; we decided to drive in his Ford Escape rather than in my Subaru Forester. Got everything loaded up and now we're heading south to Los Lunas and the westward turnoff there.



Google satellite map showing our route from Los Lunas up to Interstate 40; Highway 6 passes through a large volcanic area, contained within the triangle formed by the two highways and the Rio Grande river.

Driving northwest on Highway 6, a string of volcanoes can be seen in the distance.

Old lava flows now much overgrown with desert flora.

The road follows the train tracks, which travel northwest from Belen.

A multi-layered mesa to the northeast.

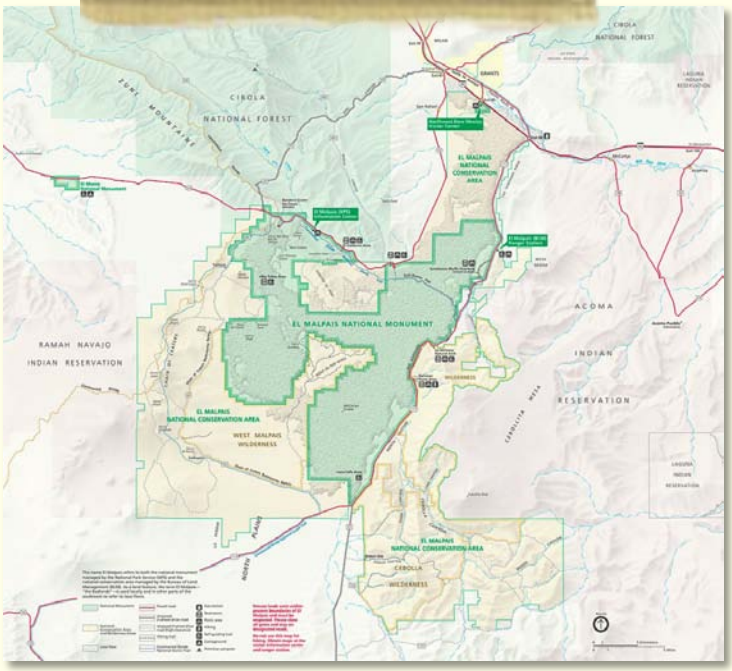
An eroded volcanic layer can be seen in the near distance.

Highway 6 has merged with Interstate 40 and we are now traveling westward.

A dramatic and colorful small mesa on the roadside.

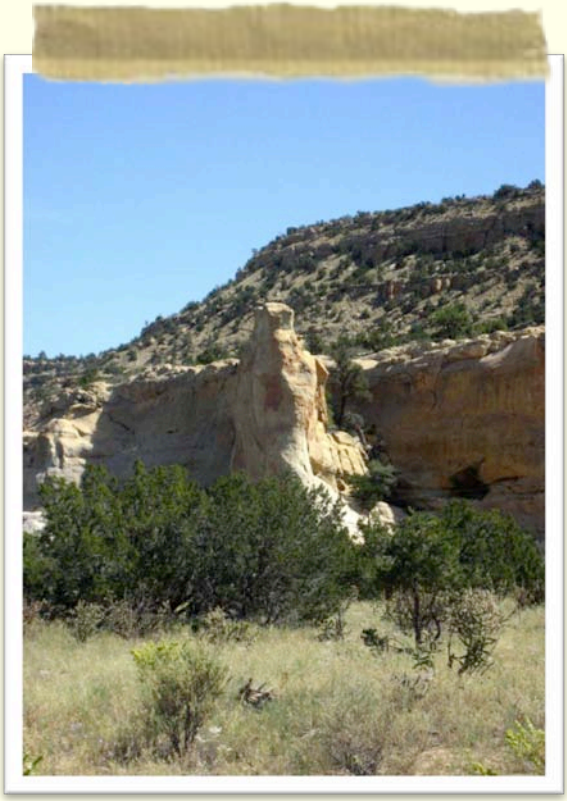
We are nearing Grants and are seeing the beginnings of the Malpais lava formations, with a volcanic basalt-topped mesa in the distance and a craggy jumble of more recent lava in the foreground.

We are about to exit the freeway and take the local road southward into the heart of the Malpais.



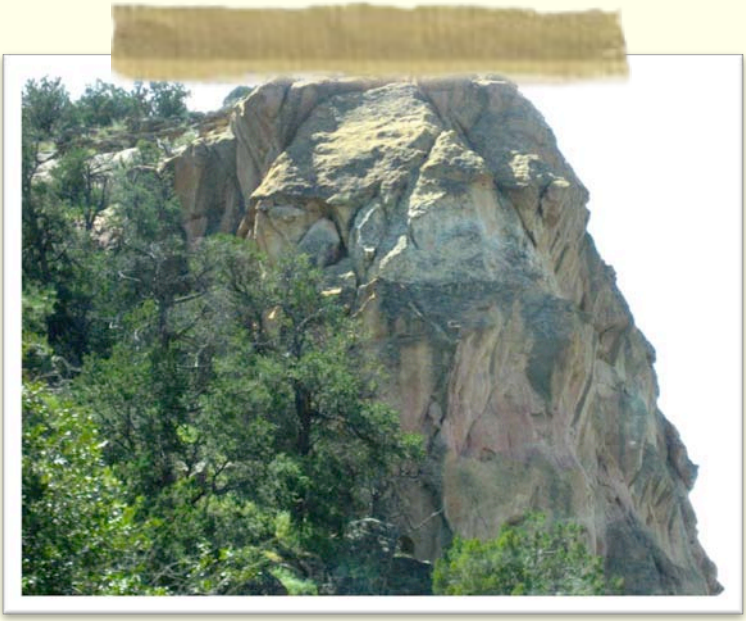
A map of El Malpais; we are traveling southward along the eastern side, skirting the edge of the lava flows.

A Spiderwort on the side of the road.



We are beginning to pass by some dramatically eroded formations.

On the west side of the road just past the trees is the edge of the lava flow; Mount Taylor is in the distance.



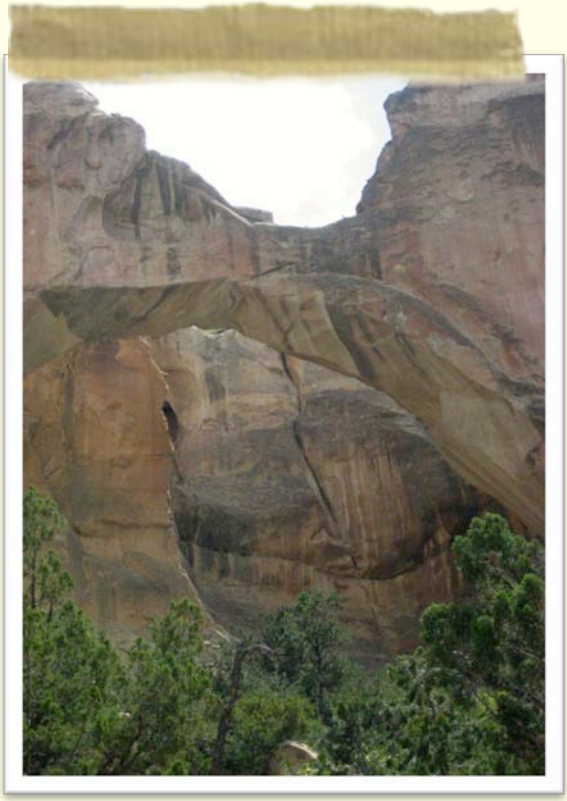
Another colorful and weather-carved formation.

The formations get more and more interesting; we are in Wile Coyote country now.

The colorful odd shapes are everywhere we look.

We stop for a short hike; there are Purple Asters at the side of the footpath.

Farther along, a Cholla has gone to fruit.

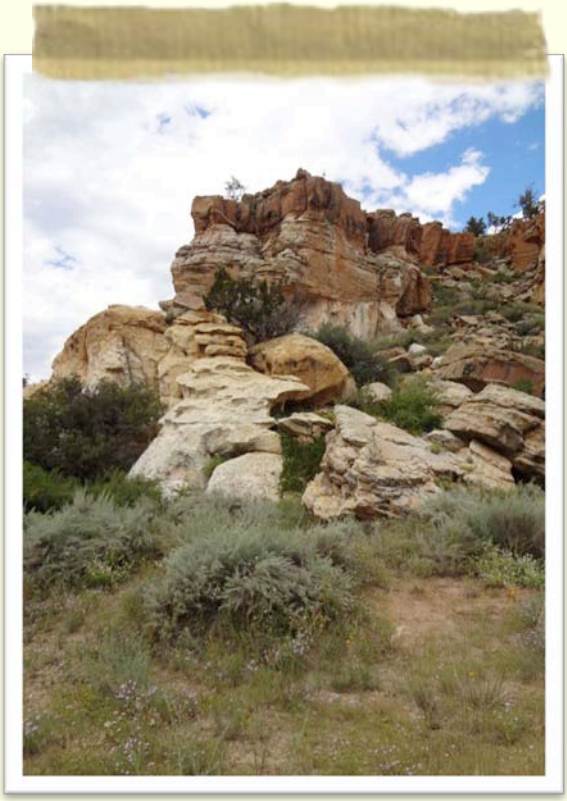


At the end of the path is a large natural arch.

A closer view of the arch.

A colorful mesa near the arch and to the south.

Our shadows on the footpath, as we hike back to the car.



Farther south on the road, we stop by a picnic area for lunch and enjoy this view; the ants are very busy near our table.

Nearby are some Four-O'clocks growing amongst some Gumweed.

As we continue southward, we spot a somewhat ironic sign to the side.

Shortly after we exit the National Monument boundary, we find the southern end of the Chain of Craters road and begin driving it northward; the old volcanoes loom ahead.

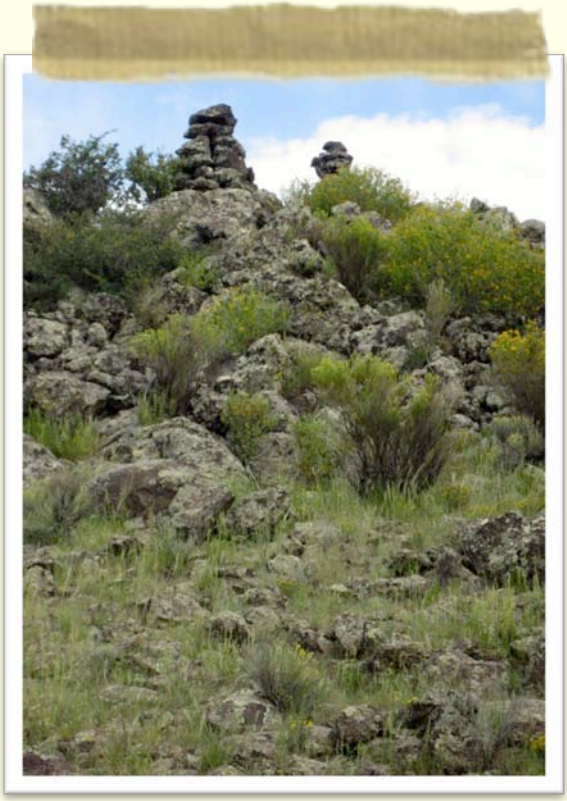
We stop briefly and find a Thistle shedding its bloom.

Nearby is a Threadleaf Groundsel.

As we continue traveling toward the volcanoes, we are leaving the desert scrub and entering into a Pinion/Cedar dominated transitional zone. The road soon veers northeastward, away from the volcanoes themselves and so we only glimpse them from a distance at the start of this leg of the journey.

Some Chamisa growing at the roadside.

Nearby is some Fleabane.



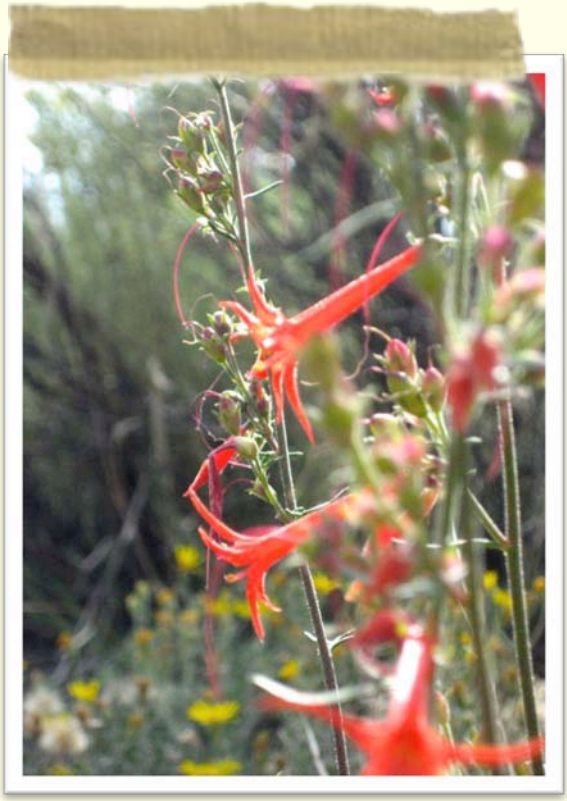
Just beyond is a volcanic outcrop with two cairns atop.

Climbing to the top, we can see another volcanic outcrop in the near distance.

Cattle can be seen here and there throughout this national wilderness area, a common practice here in the western US.

We stop again for more photographs; Kenny's car has gathered a coating of dust from the dirt road and there are storm clouds brewing to the north. We are about halfway up the 35-mile northward circuit.

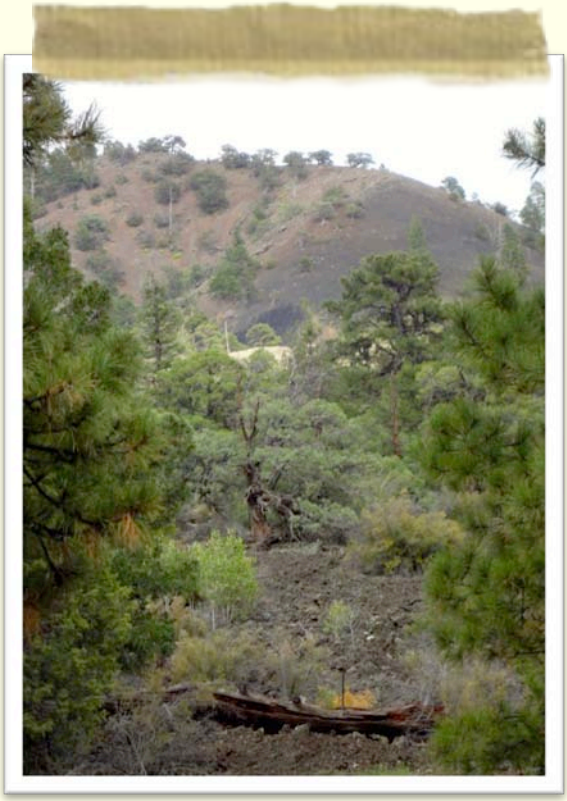
We are now in a more mountain-like zone, with Ponderosa Pine and Juniper dominating.



Some Skyrockets at the roadside.

A Scarlet Penstemon farther up the road.

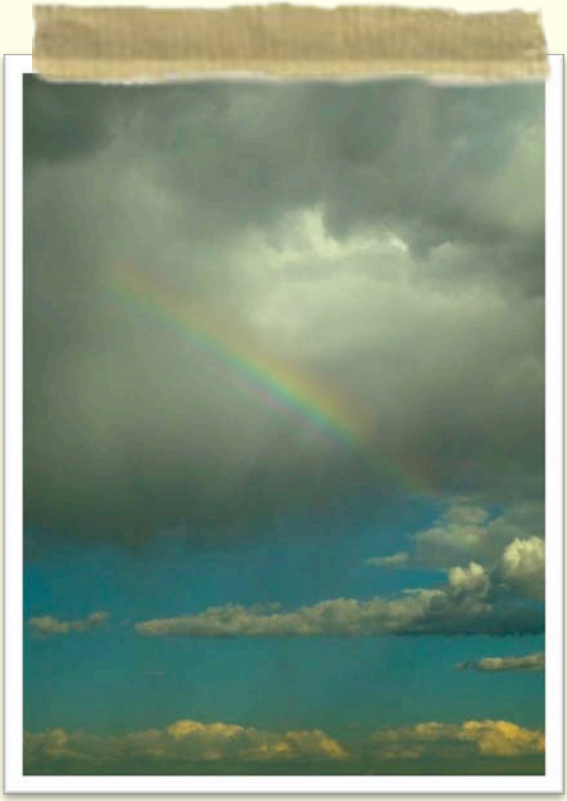
The road has curved back to the western edge of the volcanic flow; the flora slowly is encroaching upon the former wasteland.



As we near the northern end of the Chain of Craters road, we can see some young Aspen flourishing in the volcanic rock. This is the only location where we have seen Aspen growing—perhaps they prefer the edge of the lava.

Back on the main road, the storm clouds loom closer; we are fortunate to have missed the rains while traveling the dirt road as New Mexico mud can be treacherous to navigate.

Along the interstate, there are huge chunks of rubble to the side.



It is raining ahead and we have a lovely view of a rainbow.

We meet the rain, though it is brief for us as we continue eastward through the shower.

Just past the rain, there is another volcanic-topped formation to the south.

Descending into the Rio Grande basin and Albuquerque, we will be getting to Kenny's house just in time for dinner.

* * * *

It has been a long and rewarding day. The trip went without mishap and since Kenny drove the entire time, I was able to keep a sharp eye

out for the caldera as we traveled. Sadly, I never spotted anything suggestive.

The Chain of Craters seemed a good possibility at first. However, as we drove the dirt road northward, it quickly became clear that the vegetation near the volcanoes themselves was wrong. Although the desert scrub was a good match at the southern end of the road, as we neared the volcanoes, it was obvious that they were in a mountainous zone instead.

So I have eliminated this area of New Mexico as the Cleft caldera location. I will need to search the nearby areas of Acoma and Laguna Pueblos at some point, though, just in case...

All things considered, out of all the locations we visited today, the volcanic triangle we saw at

the beginning of our trek, between Interstates 40 and 25 and Highway 6, looked the closest to the caldera photos I have on hand. I wonder if I can revisit that area and find some local roads for further exploring... Or perhaps start with another Google Earth overview.

Tuesday 18 Dec 2012

Although it's been several months since I've written here, I've been by no means idle. After the trip to El Malpais, I've been pondering the enigma of vegetation.

It became clear fairly quickly that the vegetation at the old volcanic mountains there was wrong. The Cleft and caldera is in a sagebrush and grasses zone, whereas El Malpais was pinion, aspen and Ponderosa pine. So elevation is an issue.

I've made several trips up north to Santa Fe in the past few months and it was pretty clear that the Rio Grande valley looked right all the way to La Bajada Hill. However, the vegetation at the top there shifted to the pinion

and juniper, so the Santa Fe area altitude is simply too high.

Tonight, I finally did some online investigation about altitude/elevations for various areas of New Mexico. Here's what I learned.

- Las Cruces: 3908' ASL
- Carlsbad: 3295' ASL
- Carlsbad Caverns: 3599' ASL
- Alamogordo: 4336' ASL
- Socorro: 4579' ASL
- Albuquerque: 5312' ASL
- Santa Fe: 7000' ASL
- Grants: 6460' ASL
- Gallup: 6468' ASL

Based on the above elevations and what I already know about native vegetation, my best estimate is that the Cleft and caldera are located between 4500–5500 feet above sea level. Lower elevations have more yucca and cholla; higher elevations have pinion and juniper. Now I need to find an elevation map of New Mexico and mark the areas at the above elevation range.

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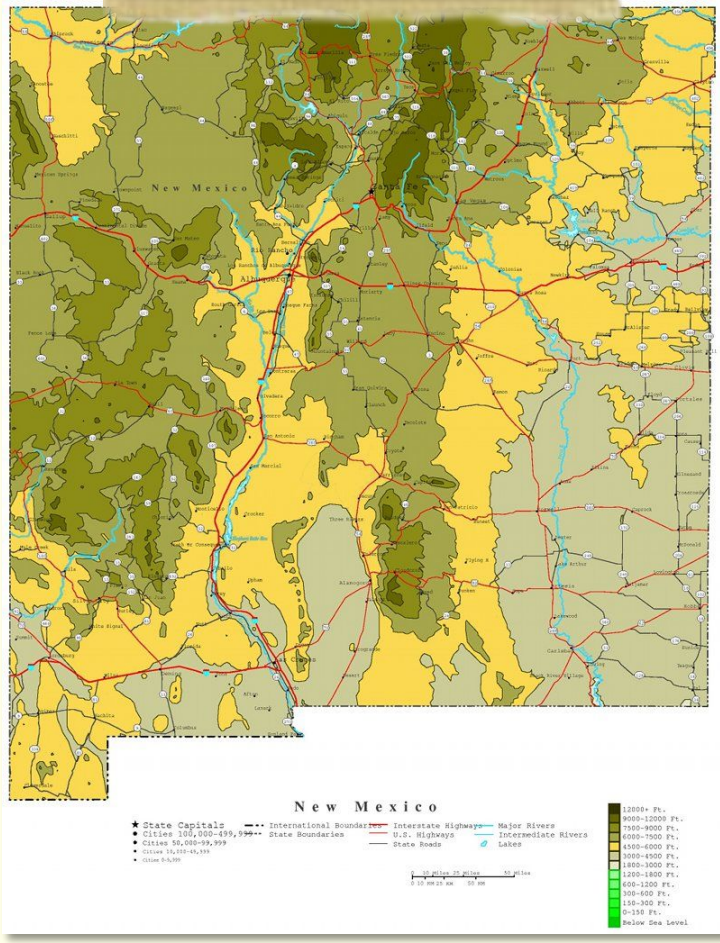
What luck! I found something very nice online and have recolored the Cleft zone yellow (from the original shaded green of the map). There are numerous places scattered throughout New Mexico that are good candidates...



Elevations of 4500-6000 feet ASL.

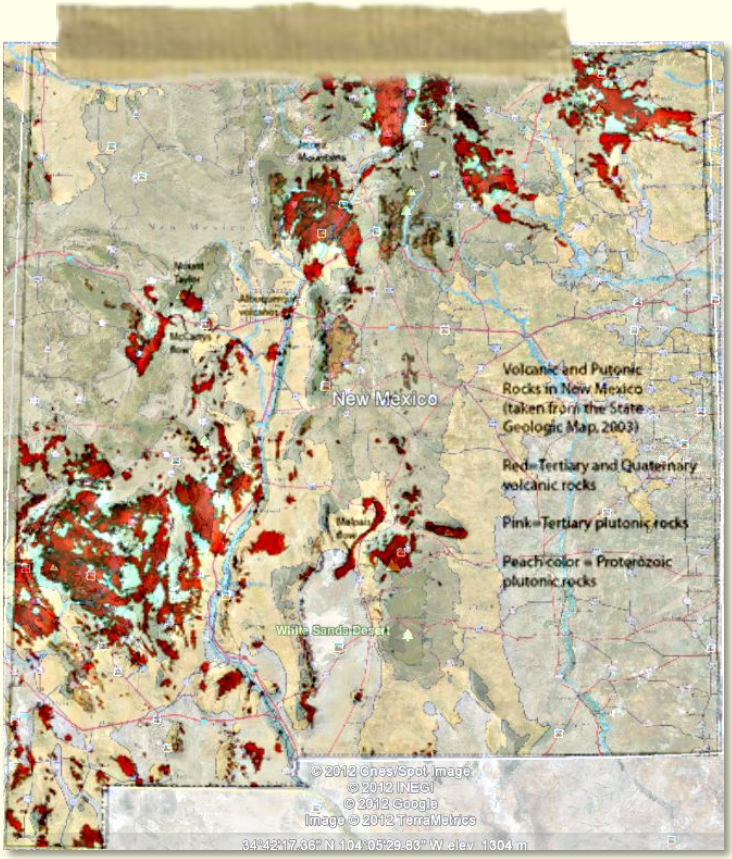
Combining this map's information with the volcano and Zone-Tailed Hawk migratory maps, the middle to lower Rio Grande valley and boot heel portion of New Mexico are looking like the best contenders for the Cleft and caldera at this point.

Sunday 23 Dec 2012

Kath made a great suggestion on the forums a few days ago, that I attempt to create a merged version of the three maps. I tried unsuccessfully yesterday to do so, finding that the volcanic map in particular is problematic. It was fairly easy to create a transparent version of it but it aligns poorly over the elevation map, with some land forms obviously being misaligned between the two of them. Since the volcanic map was created by students at NM Tech, I fear they were less than accurate in their lat/lon locations throughout.

However, when I visited the forums tonight, it appears that Kath has gone ahead and created one on her own. Brilliant girl!! Although it

suffers from the same misalignment issues, they are far less dramatic than in the one I had worked on.



Kath's merged map of New Mexico.

Wednesday 26 Dec 2012

I have been working off and on over the past number of days getting all the NM topographic maps downloaded to my iPad. It's a long and tedious job, but my hope is that once it's done, I can search for a likely looking shape to match the Cleft caldera. I have a rough idea of what its topo shape should look like, so I'm hoping that between Kath's version of the elevation map and the topo maps, I can find some likely suspects to visit via Google Earth.

At this point, I've gotten all the maps for southern New Mexico and am now working on all points north of Albuquerque. We'll see...

Thursday 27 Dec 2012

Whew, all the maps are finally downloaded, a whopping 2034 of them! It seemed to take forever, but I'm now hoping it was worth it. I want to draw a rough topographical map of the Cleft caldera based on the two photos I have plus what I've observed for myself during my visits. With that on hand, perhaps I can find a rough equivalent somewhere in the official topo maps I now have...

In terms of size, the hike I did around Vulcan Volcano on the west mesa shows it to be a good rough equivalent. In checking the downloaded topo map showing it, I'm guessing that the caldera will be just as small and hard to spot via map gazing, being perhaps .2 by .1miles in area

along the base. In a single topo map, this is pretty tiny, so this search promises to need a great deal of careful scrutiny over a prolonged study period.

Fortunately, I will be able to narrow down the likely locations, so won't have to review all 2034 maps. Nevertheless, it is a daunting task.

Friday 11 Jan 2013

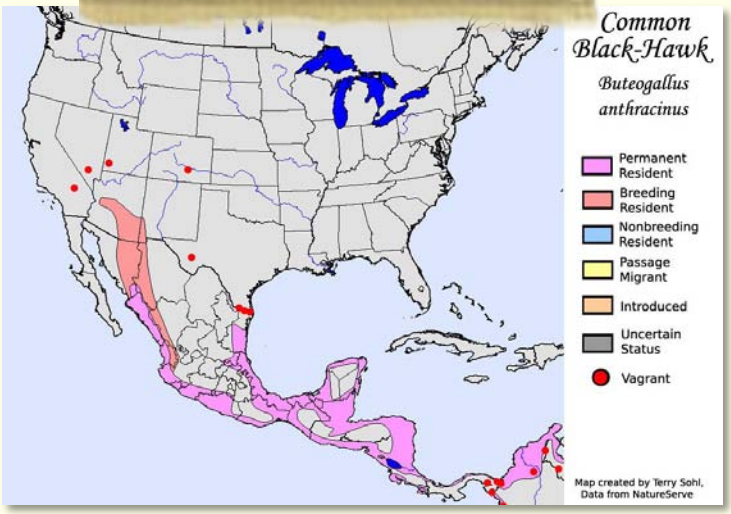
I had a brainwave yesterday about the Cleft bird species and went online to track down the calls sounds of various raptors present in New Mexico. The surprising thing is that absolutely none of the recordings I found bore any resemblance to the call we hear at the Cleft. All the raptor calls are much higher in pitch.

So I listened to crow, raven and vulture calls as well. Again, nothing sounded right (and vultures don't really have a call, they just hiss). So what in the world are we hearing at the Cleft then??

While trying to investigate this more, I ran into another hawk that is a possible visual match for the Cleft bird—the Common Black Hawk.

Interestingly, its range in New Mexico is quite small, down in the bootheel region. I was able to find an online photo as well as a range map.

Photo of the Common Black Hawk, lifted from the internet.



Range of the Common Black Hawk.

The only explanation I can think of regarding the visual and audio disconnect with the Cleft bird is that it's not a Terran native... Perhaps it had some ancestors that fell through the fissure along with the Wahrk? This would make a degree of sense since the insects inside the caldera itself seem to be from Direbo. So we may be seeing a

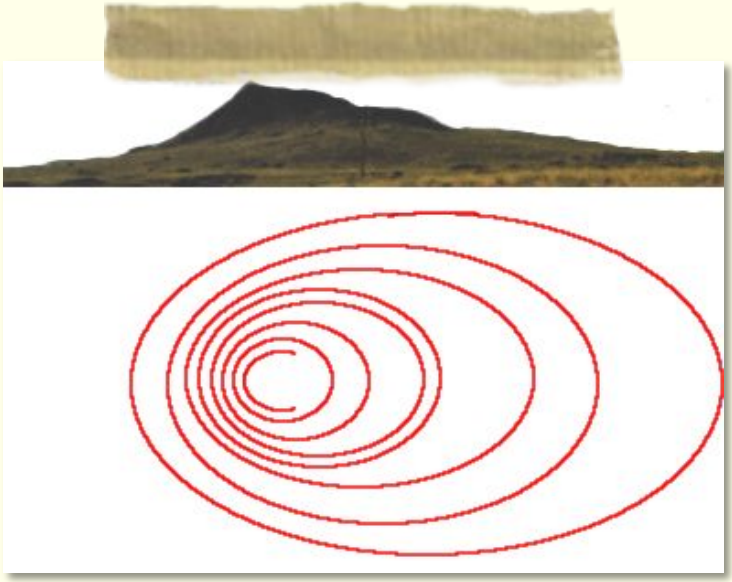
great deal of non-native life forms here at the Cleft...

So, this issue is only getting more and more puzzling. But I guess the bootheel part of New Mexico is definitely the place for me to focus upon next with my map search.

Monday 14 Jan 2013

I have been working tonight on a topographic drawing of the Cleft caldera. I based it on the best version of the Prima Guide photograph I have. Although my drawing is certainly far from perfect, I'm hoping it will provide a decent rough shape that I can work from to search the relevant topographic maps.

I decided to make the drawing symmetrical since I only have a good photo of the long view. The chances are fair that the actual formation is generally symmetrical since this is in the nature of cindercones and their formative process.



Cleft caldera side view and birdseye topographic drawing.

Saturday 16 Feb 2013

I've been working occasionally on searching with Google Earth or my iPad topographic maps. Nothing suggestive so far, but I'm concerned that the caldera is so small, it may be difficult to recognize.

The winter cold has kept me focused on indoor activities for this project. But I've been yearning to get out on the road and think I'll see if Kenny is up for a return visit to Three Rivers. Even if the weather up here is cold, it should be warmer down there; plus I like the notion of revisiting the site at roughly the same time of year as before. I checked, and it's in the right vegetation zone. If nothing else, I'd like to re-locate all the D'ni glyphs there.

Sunday 17 Feb 2013

Talked with Kenny today and he's interested in a road trip! So we agreed on the first Saturday of March. I'm hoping to get in some map searching of the area before then.

Sunday 3 Mar 2013

The trip yesterday was successful, though not fruitful in terms of finding the caldera (except in eliminating some of the possible locations). It was a very long day but the weather was perfect. I was able to find some of the D'ni glyphs from before, but not the two I was most interested in—Yeesha and the "busy rock" with the star fissure.

But all things considered, it's fortunate I found all the glyphs I did. I'd forgotten that there are more than 20,000 of them there, spread out over an ancient, rambling lava flow. I probably hiked non-stop for more than three hours all told, carrying a fairly full backpack and climbing up and down the cliff faces. My legs won't forgive me for a few days yet, I think.

We stayed to watch the sunset and so had a beautiful view of the stars on the way home. Orion was at his apex for the season. Which reminds me, I need to re-read the Book of Atrus regarding the view of Orion from the Cleft. There may be some clues I've forgotten or overlooked about that...

Over the course of the trip, I took 460-some photos, which I have been sorting through so I can add the best ones here. But I think I've sorted enough that I can document the trip.

* * * *

I bring along Larry, Curly and Moe. Moe is small enough that I can carry him in my backpack, and so I hope to get some photos of him alongside the D'ni glyphs. He will provide scale

as well as a light-hearted reminder of the DRC and D'ni cavern.

Larry, Curly and Moe in my driveway, ready to go.

Moe topped with my Aussie Adventurer hat.

We get a decently early start from Albuquerque in the morning and drive southward toward Socorro and San Antonio.

Crossing the Rio Grande south of Albuquerque, we can see the Three Sisters up north.

We pass a suggestive cindercone to the east.

Continuing south, mesas, hills and mountains to the west.

The Sevilleta National Wildlife Refuge toward the east.

Passing through Socorro, the School of Mining and Technology's iconic M on the mountainside.

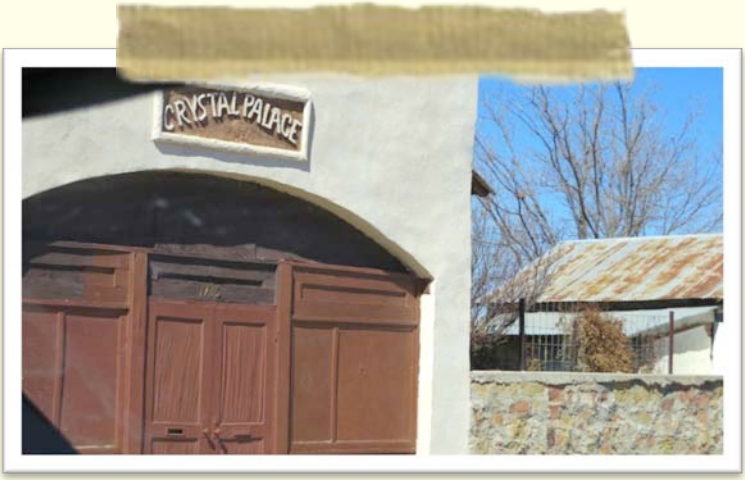
We turn eastward at San Antonio, in order to skirt the northern edge of White Sands Missile Range as we head toward Carrizozo. It is a 65-mile leg of the journey through some wild and rugged country.

The famous waystation in San Antonio, New Mexico.

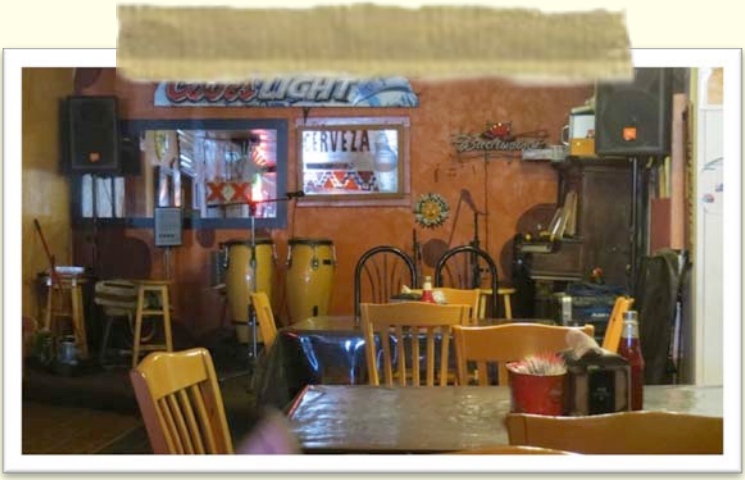
Leaving town, heading east toward Carrizozo.

The road is blocked due to tests on White Sands Missile Range ahead, so we drive back to San Antonio for an early lunch stop.

A crumbling railroad depot.



I've always wondered about the history of the Crystal Palace...



Lunch inside the Buckhorn.

Heading eastward again, we cross the Rio Grande.

Some interesting peaks to the south.

One of the White Sands installations in the southern distance.

The only waystation along this stretch, where I met a genuine range cowboy many years ago.

We climb into a juniper/pinion vegetation zone.

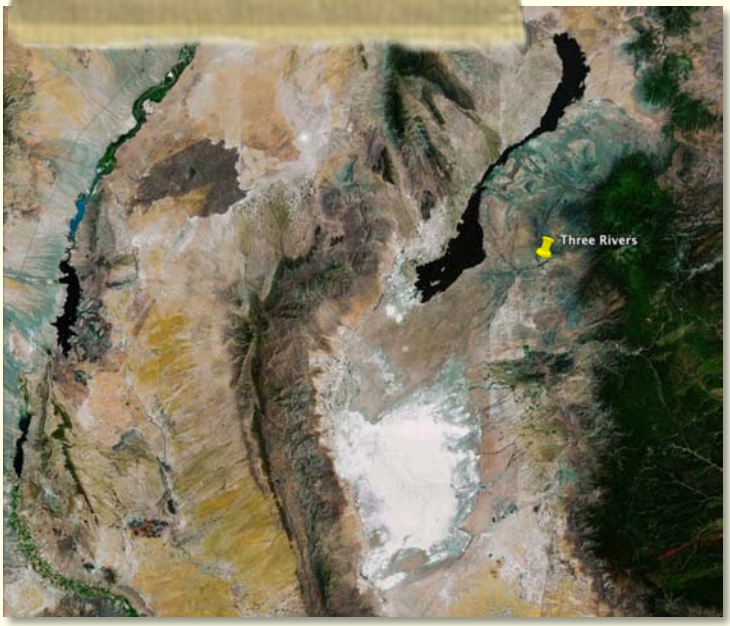
Descending, we are approaching the Valley of Fires/Carrizozo Malpais lava flow.

The lava flow stretching southward with the Sacramento mountains behind.

Heading south again, the ancient lava flow looks like a shadow in the westward distance.

The lava flow extends about forty miles from north to south, ending just north of the white sand dunes of White Sands National Monument. This makes the Three Rivers petroglyphs location a very special place; I wonder if the early natives who pecked the images were acknowledging this conjunction of black and

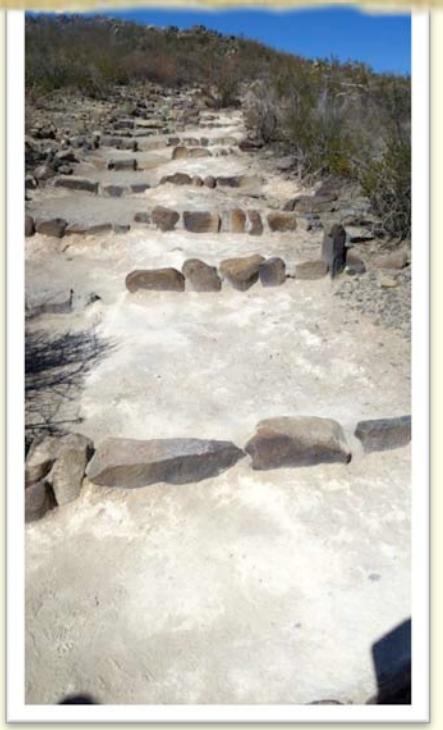
white, fire and water (the sand dunes are created when the rains dissolve the gypsum in the landscape).



Google Earth image of the Carrizozo Malpais, White Sands and Three Rivers.

We reach the eastward turnoff to the petroglyph site.

It's a beautiful sunny day, warm but not hot. I had forgotten the sheer number of glyphs here.



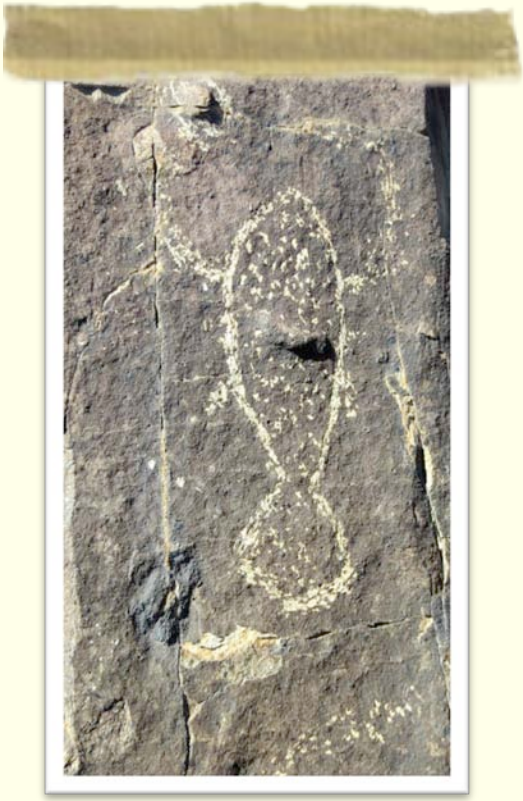
The trail to the top of the mesa/lava flow.

The San Andreas mountains to the west, with a small lava outcropping nearby.

Hiking over to the outcropping, I find a magnificent spiral glyph.

A nearby cluster of lichen-encrusted boulders.

Back at the main lava mesa, a cluster of handprints.



I am thrilled to find one of the shroomie glyphs again.

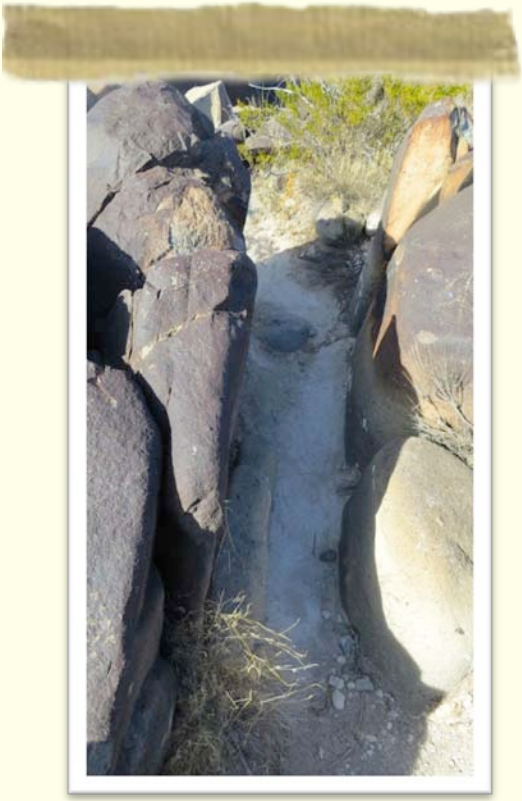
A comet glyph atop a tall boulder.

Some glyphs prove more difficult to photograph than others, largely due to the bright sunlight and the varying positions of the glyphs relative to the light. Many glyphs curve around the sides of boulders, making them challenging to capture with justice. Sometimes I'm able to stand in a position to provide shadow, improving the contrast.

Atop the volcanic mesa, I can see a white smudge in the southwestern distance, the white gypsum sand dunes of White Sands.

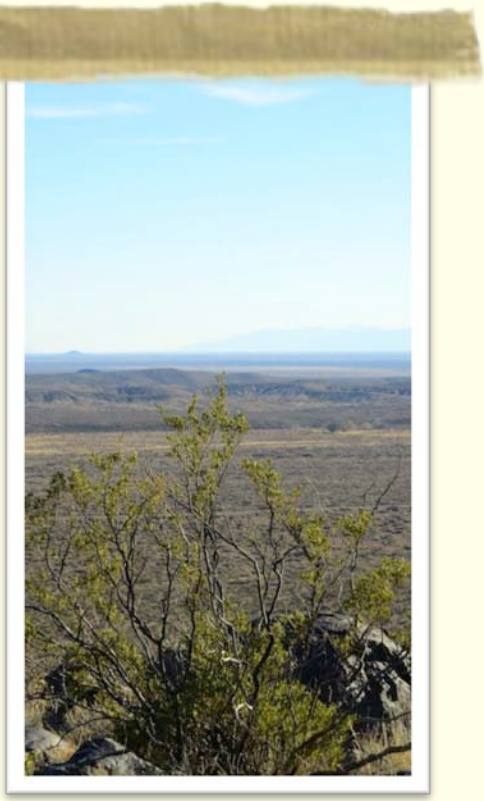
A boulder covered with geometric patterns.

Far along the mesa, I find a wonderful dragonfly glyph.



There are numerous narrow well-worn paths between the boulders.

I have been hiking for well over two hours now and the mesa still stretches to the north.



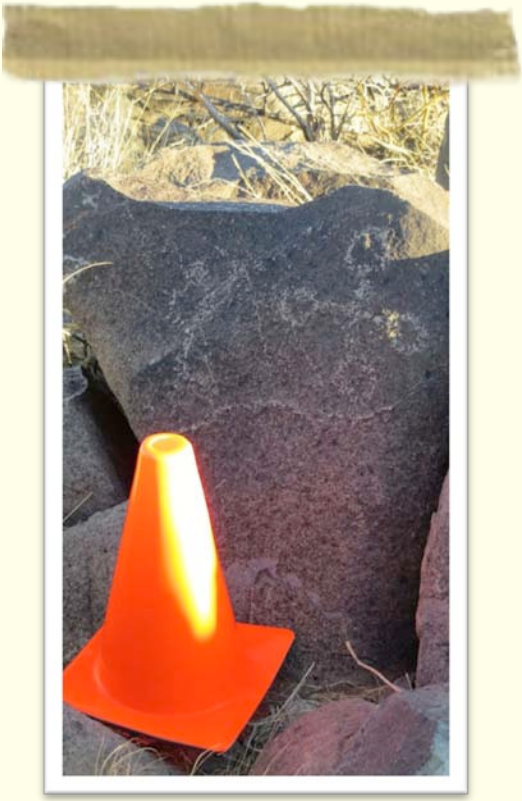
There is a suggestive lonely mountain in the very far southern distance.

I head back toward the entrance trail. I am somewhat disappointed that I haven't found

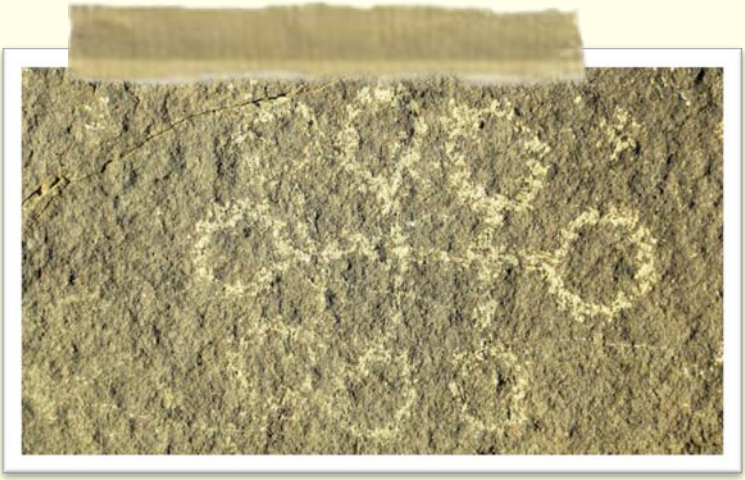
some of the D'ni glyphs I'd remembered. But sun is westering and I am tired after clambering around up and down the mesa sides hunting for D'ni glyphs. I do not want to get caught in the fading light amongst these sharp rugged rocks, particularly when I'm feeling spent. I decide to augment my earlier photos of D'ni glyphs with Moe, so pause intermittently on my way back to find as many of the glyphs as I can manage.

One of my favorite D'ni patterns, elegant and simple.

The Great Shaft and path towards D'ni, more symbolic than literal, I think.



One of the Kadish glyphs; I haven't been able to find the other.



Close by, another Kadish-like glyph, but with eight circles instead of four.

My shadow portrait for this adventure.

A cottontail snacking on a cactus near the trail.

The sun is getting ready to set, so I linger at the bottom of the trail, hoping to capture a few nice pictures.

The sun is dipping below the mountains to the west.

The golden glow from the departed sun.

As the sun continues to move westward, the clouds turn a salmon pink.

Although not impressive by New Mexico standards, it still is a lovely sunset.

Tuesday 5 Mar 2013

I've kept thinking about watching Orion on our way back home on Saturday night... Kath recently posted her research about Atrus's birth date and commented that in the Book of Atrus, it describes him sitting on a ledge in the Cleft two days before his seventh birthday, gazing at the moon and the stars of Orion.

I keep going back to how narrow the Cleft is, and how the view of Orion from there would reveal a great deal about the exact time of year, as well as help to nail down the compass directions there. I've never been sure exactly where north and south really are...

So I grabbed my KI and Relto book and headed off. I remembered to take my copy of the Book of

Atrus so I could try to find the exact spot where Atrus must have sat as a child.

As it turns out, the descriptions in the book provide a very narrow set of possibilities for Atrus's perch that night. The book says he was sitting on the ledge in front of the sleeping chambers, above the level of the kitchen and could see Anna to his right inside the kitchen window.

I spent at least an hour trying to work this out down in the Cleft and the only place where he could see through the kitchen window from that ledge offers a very poor view of the night sky. However, there are a couple other places on that ledge that have a very good view of the sky and offer a view through the kitchen door...

For Atrus to have seen Anna to his right, though, he would have been seated with his left shoulder toward the near Cleft wall; if he'd been sitting with his legs dangling over the edge, Anna would have been on his left...

Considering how Orion looks this time of year, I'm guessing that Atrus couldn't have seen Orion from within the Cleft except when it's close to the apex. Orion is too close to the horizon for much of its celestial journey to be visible at all so far down from the surface. It's possible it could be visible briefly during the night at one of the corners of the Cleft, providing the corner is oriented southward. But I think it's more likely that Orion would be visible more than briefly from within the Cleft, else Atrus would not

have been studying it from there at all, but rather from the surface.

Overall, I expect that Atrus had a favorite stargazing spot where he sat in the evenings and this particular night was no different. After everything I've looked at, I'm concluding that the only location which offers a good view of the kitchen along with an optimal stargazing view is directly in front of Anna's sleeping chamber doorway.

View of the kitchen from Anna's doorway.

View of the sky from Anna's doorway.

To view Orion for any length of time in this location, the far Cleft wall would have to be oriented roughly southward. Even so, I'm not convinced that one could see the entire constellation from here... though the belt and bow are the only features mentioned in the book. It's a frustrating pity that we aren't able to visit the Cleft at night.

While I was in the Cleft, I tried to check on some of the other details described from that time.

Atrus's sleeping area is described as the inner chamber, however there aren't any chambers within chambers... so I concluded that "inner" is a reference to its position toward the far corner, farther into the Cleft fissure. In examining this room, it appears that the far niche once was the sleeping area for the young child. Anna notes in the book that he soon would outgrow this space, so the adult sleeping area we see now must have been an expansion or enhancement added at some point.

The current niche for the pillow would have been the old sleeping area for young Atrus; the silk fabric bought for a privacy hanging can be seen at the foot of the adult bed. The lamp niche described from Atrus's childhood can no longer be seen, presumably because the alterations needed for a growing boy required it to be moved or carved away.

Anna's sleeping chamber is much simpler than Atrus's, with only a few narrow storage niches in the pedestal. The oil lamp atop is a common middle eastern design, which likely was purchased from the traders at some point. We can surmise that they sold Mediterranean and African goods since Flame clearly was an Abyssinian, native to Egypt. Atrus's silk curtain likely was European in origin.

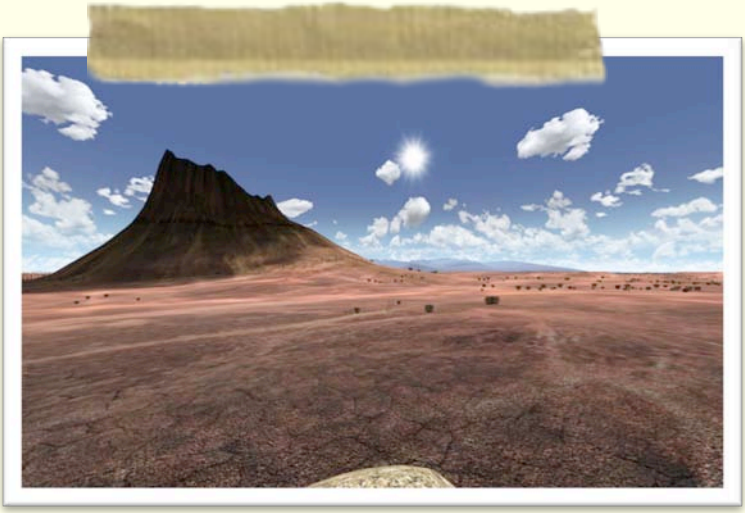
Sadly, I cannot find the remnants of the shadow calendar, which would have helped greatly in determining compass directions. It would have been close to the top lip of the Cleft, facing eastward to catch the early morning sun as it rose.

Another interesting set of objects I cannot find are the garden trough shelves where Anna cultivated her precious herbs. I'm not sure what might have happened to them, but we already can see that Yeesha has altered a number of things here in the Cleft, so perhaps this is among them.

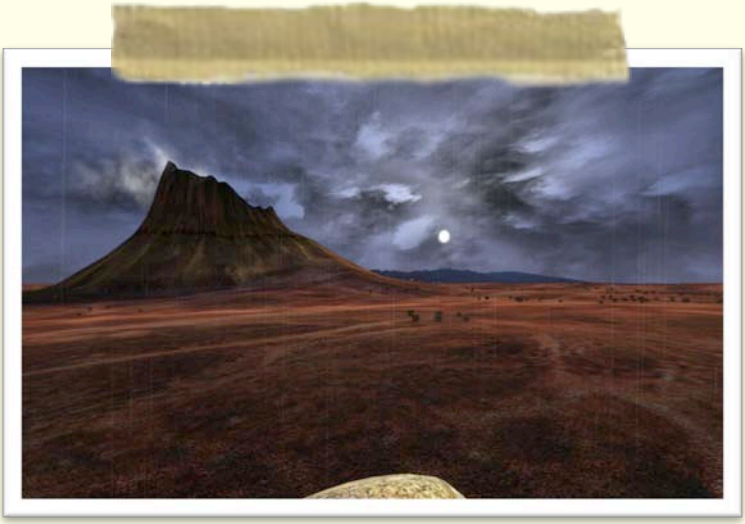
* * * *

I decided that since I couldn't determine the cardinal directions with any certainty from inside the Cleft, I would attempt to see what I

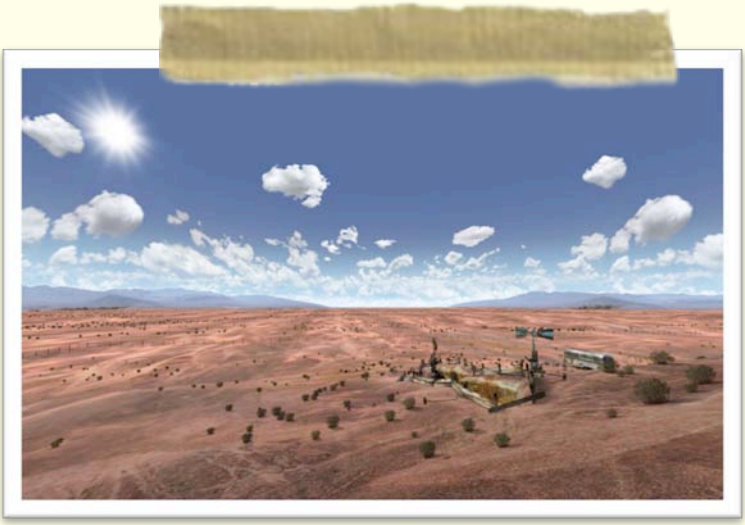
could learn from the surface. The most obvious approach was to compare the sun's location between the sunny and rainy days. I was able to gather some interesting photographs.



The caldera during a sunny day.

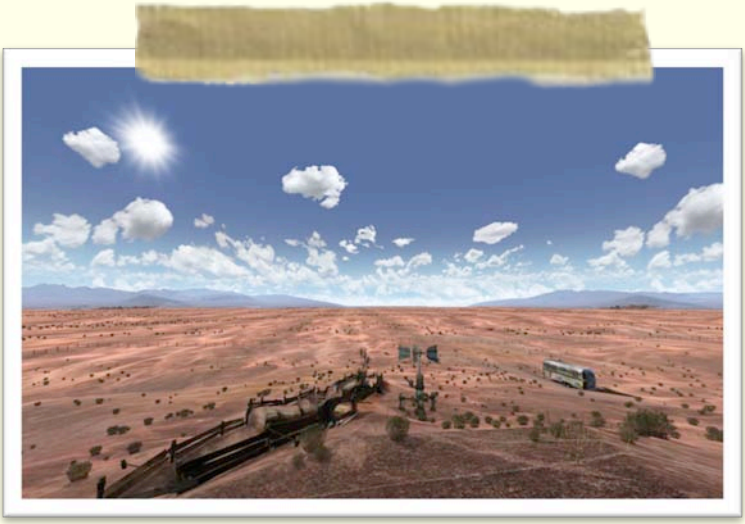


The same view of the caldera on a rainy day.



First view of the Cleft, sunny day.

Same view of the Cleft, rainy day.



A different view of the Cleft, sunny day.

The same view of the Cleft, rainy day.

A third view of the Cleft, sunny day.

The same view of the Cleft, rainy day.

The comparison photos are very helpful, for they show clearly that not only is the time of day different for each, but also the season is different. I believe it is morning in both situations, with the sun still in the process of rising from the east.

If this is the case, then the tree-end tip of the Cleft would be pointing roughly southeast, with the windmill side facing roughly southwest...

This would put Orion's path at a fairly obtuse angle to the Cleft fissure, which would make it visible for a decently long time period during January through April.

In continuing my comparison of the book's descriptions with what we see today, there is another strange disconnect. Anna is described as walking around a great arm of rock, which hid the Cleft from view of the trade route. And the drawing by Atrus of the caravan route is surprisingly close to the Cleft itself. I cannot see how the Cleft could possibly have been hidden visually from the traders.

Plus I can find nothing remotely like an arm of rock at the Cleft now; this "arm" presumably offered Atrus the opportunity to watch the traders while remaining safely hidden from their eyes. Yet it is quite flat here. The caldera cinder cone is fairly uniform rather than rugged and the nearest rock formations are mountains several miles away in any direction. Another puzzle...

Saturday 9 Mar 2013

I'd been planning to do a great deal of writing today but became waylaid by the need to defragment my hard drive. It took about eight hours all told and I'm finally able to write. But while waiting, I used the opportunity to re-read the early chapters in the Book of Atrus and have come to an inescapable conclusion: the book was written by someone who had never actually visited the site.

There are simply too many inconsistencies with the actual lay of the landscape and the layout within the Cleft itself. I can only suppose that David Wingrove wrote everything up based on his notes from interviewing Rand and Robyn (who have actually visited the Cleft and the

Cavern and likely learned Atrus's history either by talking with him directly or by talking with Yeesha). It's anyone's guess why so many errors were allowed to be published, but perhaps there were time constraints; and it could be that since the book was published back when the DRC was first restoring the Cavern, they may have felt the errors would provide a measure of security, being red herrings for the readers...

I know that RAWA has complained more than once about the inconsistencies that were allowed into publication, but I hadn't realized they were so numerous or serious. So I suppose I can treat BoA as a resource about the Cleft and caldera by not as an authoritative one.

Some examples:

- It's mentioned that the lip of the caldera can be seen from inside the Cleft, which is not true
- The caldera lip is described as being a mile away from the Cleft, which again is not true
- There are stone stairs described inside the Cleft in places where they do not exist
- The kitchen window is described as square

And I'm not sure how much to trust Atrus's drawings in the book either. Presumably they are genuine, yet there are some things about them as well that seem inconsistent, doubtful. The illustration of the caravan route passing so close to the Cleft itself is at odds with the descriptions in the text. I would be very surprised if a trade route passed in such close proximity to the Cleft myself. Trade routes

must follow the natural resources needed by the travelers, and there are none to speak of anywhere near the Cleft...

It is far more likely that Anna had to walk a significant distance to meet them. Back in those times, the travelers likely would have either followed a river or moved from water resource to water resource. If Anna had been near a known spring or had a reliable well of her own, then the traders undoubtedly would have stopped nearby. But the only source for water at the Cleft is the seep at the bottom of the Cleft itself and there is no mention of a well or natural spring anywhere else nearby.

Interestingly, inside the caldera, we find a stagnant pond, plus just below in the natural

cave, there is an active water source. So there definitely must be an underground spring of some sort that feeds all three of these.

* * * *

If I instead ignore the details from the Book of Atrus and base my theories only on what I can observe myself at the Cleft, then I think it's far likelier that Atrus was sitting just outside the kitchen doorway when he was stargazing. I have always felt the sun locations we see are basically southward...