

NUGGETS

- The most expensive gold coin ever sold at auction was the 1933 \$20
 St. Gaudens Double Eagle. The coin sold for \$7.6 million USD in 2002.
- That beat the ancient Greek gold stater that sold for \$3.8 million USD in 2015.
- Other pricey gold coins have included the 8th century gold Umayyad, which sold for \$3.7 million USD in 2011 and the Edward III Double Florin, which sold for \$0.7 million USD in 2006

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The Prospector's Quill

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SEPTEMBER 2017

What's in Those Arkansas River Concentrates?

by Calvin Johnson

In a recent GPOC Forum conversation, I posted a breakdown of one 5 gal bucket of dredge concentrates from the Arkansas River. A fellow member asked about how much "black sand" was in that 77 lb bucket of my dredge concentrates. One of these involves equipment and like many other things, no two people will set up the same piece of equipment the same. We will 'tune' and tailor our equipment to our liking and to better do what we are trying to do. Like other clubs, most GPOC members try to provide the opportunity in our outings, Forum and meetings to exchange information, not to have one solution be better than another, but to

provide ideas and options to each other and to the novice prospector. Some want to have almost no "black sand" in their concentrates they take home and that is OK. I have learned a lot from them and exchanged ideas that they later incorporated (Gold Hog mat configurations, etc.). I have my reasons for the way my machines are set up and how I run them and its ok for others to disagree. I don't want to keep all the "black sands", but I do want to capture and take home the heavy

Other items sparked by your question are: How are size (5 gal bucket full) and weight (77 lbs) related? What is "black sand"? Why does a prospector care?

Why did I start this thread about size? Many reasons, one is to manage expectations for those thinking those large nuggets found in California. Alaska, Australia and in all the magazines, books and videos are also here in Colorado. Because classification (sorting by size) is time consuming, labor intensive and sort of boring, a lot of money is made by manufacturers claiming (correctly) that you don't NEED to do much classification. The Gold Cube is a great machine, and you don't NEED to classify below 8 mesh, UN-LESS you want to get more gold! I classified down to -30 mesh in my experiment, but have researched a lot of Colorado geological studies that state 90-95% of all the GOLD in Colorado is invisible to the human eye! Good news for

My First Yeller Gold!

by Stan Gurley 2017 GPOC Vice President

A good friend of mine, who my wife called my 'girlfriend', was my fishin', huntin' and after that day, my gold pannin' buddy. He and I headed off to a place where he said he knew we could find gold. He had taken me out there one time before. So naturally, I was pessimistic. He took me to a place down on the Arkansas River called Point Bar. Most of you reading this know where I'm speaking of. Well, we went

crevacing in the bedrock and I kept hearing voices. When we pulled in, there were no cars, people, or lizard! Well, you get my meaning. I asked my partner if he heard those voices too. Of course he told me I must be having audio hallucinations from the 1960's!

We worked a bit longer and then took a break. While sitting there on our break, he said to me "Did you hear that? Someone's talkin!". I told him he must be having audio

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gpocpresident@gmail.com

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gpoctrustee3yr@gmail.com

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Claims Committee

Bud Yoder

gpocclaims@gmail.com

Championship Committee

Dermit Haley

gpocchampionship@gmail.com

Speakers

Lou Espinosa

gpocspeakers@gmail.com

Planning Committee

Mike Beaty

gpocplanning@gmail.com

The Quill—Editor

Dr. Andrew C. Hawkins

gpocquilleditor@gmail.com

Associate Editor Steven Wade Veatch



The Gold Prospectors of Colorado (GPOC) was founded around 1974 as a non-profit organization for recreational gold prospectors in the Colorado area. Our membership at any given time has grown to over 600 members and continues to grow across the Front Range, the nation, and even

GPOC Outings & Events Planner

In response to feedback from our members, we are adding a rolling three-month planning calendar to each issue of the Quill. Now you can see and plan for events months in advance—and make requests to the Planning Committee for outings and events in YOUR club! Also check the next page and the GPOC web site at www.gpoc.club for more info on events including location and start times.

SEPTEMBER 2017

MEMBER DISCUSSION ON CLEANUP EQUIPMENT; BOARD NOMINATIONS & ELECTION RULES

l	Sun	Mon	Tue	Wed	Thu	Fri	Sat
l						1	2
	3	4 Labor Day	5	6	7 GPOC Board Meeting	8	9
	10	11	12	13 GPOC Gen. Member Meeting	14	15 Denver Gem & Mineral Show	16 Denver Gem & Mineral Show
	17 Denver Gem & Mineral Show	18	19	20	21	22 Fall Begins	23 Joint PPAL- GPOC Detect- ing, 9am @ WMMI
	24	25	26	27 GPOC Planning Comm.	28	29	30 GPOC Claims Power Season Ends

OCTOBER 2017 GPOC BOARD ELECTIONS (NO SPEAKER)							
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
1	2	3	4	5 GPOC Board Meeting	6	7 WMMI Har- vest Festival	
8 WMMI Harvest Festival	9	10	11 GPOC Gen. Member Meeting	12	13	14	
15	16	17	18	19	20	21	
22	23	24	25 GPOC Planning Comm.	26	27	28 GPOC Claims Committee	
29	30	31					

- GPOC Board Meetings are held the 1st Thursday of each month at 7 pm, Gold Hill Police Station, 955 Moreno Avenue, Colorado Springs, CO, (access from W. Moreno Ave.). GPOC Members only.
- GPOC General Membership meetings are held the 2nd Wednesday of each month at 7 pm, Elks Lodge, 3400 N. Nevada Ave, Colorado Springs, CO. The General Public is welcome!
- GPOC Planning Committee Meeting. 7 pm at Village Inn, Garden of Gods. & 125, CO Springs. GPOC Members Only.
- GPOC Claims Committee Meetings are held at WMMI at 10am, the last Saturday of the month. GPOC Members Only.
- **GPOC New Member Orientations** are held on Saturdays indicated at 10am @ WMMI. March and June are also followed by a GPOC Power Class—where you can study the GPOC Rules, Ethics, and Regulations—and earn discounts on Power Permits.
- GPOC New Member Outings are held the Sunday after New member Orientations. Meet @ 9am in the Cabela's parking lot, off the Ridgegate Parkway exit off I-25, south side of Denver

NOVEMBER 2017 SILENT AUCTION (NO SPEAKER)							
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
			1	2 GPOC Board Meeting	3	4	
5	6	7	8 GPOC Gen. Member Meeting	9	10	11	
12	13	14	15	16	17	18	
19	20	21	22 GPOC Planning Comm.	23 Thanksgiving Day	24	25 GPOC Claims Committee	
26	27	28	29	30			

What's in Those Arkansas River Concentrates? Continued

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me is that I haven't thrown away any concentrate tailings and since the 'size' experiment reported here, I have discovered that my sluices, dredges and high banker, Gold Cube and Genie all capture a good portion of it. See my post elsewhere in this forum about "smudge" gold at http://www.gpoc.club/ forum/viewtopic.php?f=123&t=103 Articles differ, but somewhere between -200 mesh and -250 mesh an individual particle of GOLD or anything else is beyond the optical capability of the 20/20 human eye.

Now about the relationship between size and weight. All gravity separation methods (panning, sluicing, high-banking, dredging, cubing, blue bowls or spiral wheels, etc.) all rely on the differences in the density of the materials we are trying to separate. For those not aware, you need to know that density is simply mass (weight) divided by size. 'Relative density' or 'specific gravity' are terms often used and are both a comparison of two different materials, in mining this is most often a mineral (pure) compared to the same volume of pure water. Pure (99.999 refinery pure or 24 Carat) gold has a relative density of 19, or 19.3, meaning that it is 19 times heavier than the same volume or size of pure water. The only denser natural mineral is Platinum at a pure 'specific gravity' of about 21. Now, how do you use this information to get your gold?

A very good set of videos about using size to maximize gold recovery in gravity separation processes (yes it all starts with panning) is Mike Pung's "FINE GOLD CHALLENGE". Mike introduces his 'Golden Rule', which is "If everything is the same size, GOLD rules!" Again I highly recommend the video

>>> Page 4 clips, check them out at: https://goldcube.net/gold-cubeuniversity/ You also might notice how many times the coinventor of the '8 mesh' Gold Cube tells you that you should always classify to at least -100 mesh when dealing with fine (very small) GOLD! For those interested, many gold rush era stamp and ball mills had a production size of -100 mesh - even the new mill at the CC&V mine produces -100 mesh material for further non-mechanical processing.

> Unfortunately, you can't use just size to extract the GOLD from your Colorado "black sand" concentrates. Why? because the other minerals in the "black sand" concentrates are also down to those same microscopic sizes. If Mike is correct about the 'Golden Rule', is there an exception to the rule? In my experience, yes. Why? Because of the specific gravity and mixtures of the minerals in the Arkansas river (and other Colorado locations) "black sand" concentrates.

If you are a Colorado prospector, you've heard the stories about the short lived gold rush to the California Gulch tributary of the upper Arkansas river and the second and third rush when the prospectors learned that the mineral making it hard to separate the gold from the other minerals in the concentrates was lead and then they learned it was actually a silver-lead ore, hence the name "Leadville". By carefully researching the geologic reports about Colorado and the Arkansas river basin, you can learn that several of earth's very dense minerals occur in it and so will likely be in your "black sands". you want a shortcut? They are Platinum, Gold, Silver, Lead, Hematite and Magnetite. Another time ask me about "heavy magnetite".

Now go get some YELLER GOLD!

GARDEN OF THE GODS: A NATURAL LANDMARK

Steven Wade Veatch

The tall spires and monoliths of the Garden of the Gods have been a landmark to countless travelers and explorers. The story of these rocks starts long ago and spans many periods of geologic time. About 65 million years ago, forces in the Earth's crust resulted in the uplift of buried Pikes Peak granite and the bending and warping of overlying sedimentary rocks to a near vertical position. This uplift, called the Laramide Orogeny. formed a major fault, the Rampart Fault, that fractured rocks

in the area and caused their movement along this and other faults.

The Rampart Fault divides the Garden of the Gods Park. Rocks on the west side of the park are at an angle of 45 degrees or less. It is here that the rocks of the Fountain Formation, such as Balanced Rock, are on display. To the west were the Ancestral Rocky Mountains, formed 300 million years ago. Erosion washed down unsorted sand and pebbles of many sizes from the nearby Ancestral Rocky Mountains. By

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The Quill wants your feedback! Send us your story ideas, photos, artwork, summary of your prospecting trips, stories, and stuff you want to see published in the Quill. Got a great campsite that you want to share with your fellow GPOC prospectors? Know a nugget of Club history? Found your first nugget? Email us!

gpocquilleditor@gmail.com

GPOC Awards: 100 Day Volunteers and Frank Burns Memorial Award

GPOC Board and Members would like to thank and congratulate GPOC members John Schnaderbeck, Stan Gurley, and Nancy Gurley on achieving 100 days of volunteering! GPOC is a volunteer-run organization and volunteers do everything from keeping the books, setting up and breaking down for shows and demonstrations, and publishing the Quill. Without folks like John, Stan, and Nancy to help - we'd quickly lose our ability to get out and educate the public how to pan for gold as well as teach folks the art and science of prospecting. Thanks to John as well for being our Claims Administrator for Private Reserves!

Thank you Nancy, Stan, and John for all you have done and continue to do for GPOC! The photo below, left shows GPOC Treasurer Wayne Witkopp presenting John Schnaderbeck a plaque and lifetime membership card to thank him for his 100 days of volunteering. The photo below, right shows Wayne presenting a 100 Day Volunteer plaque and lifetime membership cards to Nancy and Stan Gurley.





GPOC also awarded the annual Frank Burns Memorial Award for the individual who displayed the most passion and commitment at the Annual Colorado Gold Panning Championships in Breckenridge, CO. This year, the award went to GPOC's own Howard Divelbiss. Howard, who also volunteers as GPOC's Claims Administrator for the Arkansas River group of claims, dropped everything to help out as mud master at this year's Championships. Howard diligently managed the mud for the skills competitions and assisted the Most Honorable 'udge Dermit with the important task of placing the secret number of gold flakes in each bucket of mud. Thanks Howard!



My First Yeller Gold! continued

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hallucinations from back in the '70s (he's 10 years younger than me!). I stood up overlooking the gravel pit. Across on the other side of the pit was a young man lying on his stomach, appearing to be talking to the ground. As we walked closer, we saw an opening about 3-4 feet in diameter. We walked up to the young man and we could see that the opening was 9-10 feet deep. Inside, at the bottom, was another young man digging around boulders that, in my mind, even the smallest would kill someone if it dislodged. I asked them "Guys, how much gold is worth your lives?" They laughed and one said "We dug out 1.5 to 2 ozt our of this hole in the last three hours!" The one young man said that they were leaving and if we wanted their hole, we could have it. We said "no thanks", and those two young men left without so much as putting even one rock back in to fill that hole.

Well, anyways, that was the first day I found some yeller gold of my own. I joined the GPAA, 'cuz my partner and I were hell bent on going up to Alaska. That is, until my wife found out the cost! A little later I joined the GPOC and have been a member ever since. I want to say that I am so very proud to be a member of GPOC and give my respect to all those who have given their time and a lot of their years to the club. It's these volunteers that keep the club alive for you, me, and generations to come. We must not lose the knowledge of our heritage! Mining is and always has been a part of our every day lives. But we must always be respectful and be safe! Yeller gold!

First Gold From Private Reserves North, continued

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run. At this time, I decided Stan was warding off the bears well enough and Calvin was leading us safely out of the forest with his GPS—so I put on my head phones and started swinging my detector. Calvin had brought his pinpointer with him, and luckily so. As we trekked down the wooded slope, not 20 yards from the rock piles, when my detector (Garrett AT Gold) started binging. I narrowed the spot down, and grabbed my spade. Calvin brought out the pinpointer—and as I dug, he scanned the soil. About



4" down, we struck gold! Well, almost! It was an old cufflink, perhaps brass but gold plated and still shining! I pulled it out of the hole and wiped away the years of soil. When I placed it on a nearby stone, Calvin and Stan put down some coins for reference. As we pulled out our loops, we noticed the cufflink had some elegant engraving. "IML" or "TML". This made me wonder, was this a miner or prospector looking to strike it rich on this land? Was it a hiker out enjoying a picnic lunch on a beautiful summer's day in the mountains of the Park? Or was this gentleman an investor from back East looking to check up on a mining operation he and his colleagues invested in some time ago? I may never know. But this beautiful piece of history, and a little yeller gold, was the first gold found on the Private Reserves North claim. And we had a



Gold Prospectors of Colorado

PO Box 1593

Colorado Springs, Colorado 8090 I

Phone: 719-651-7930

E-mail: membershipgpoc@gmail.com

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GARDEN OF THE GODS: A NATURAL LANDMARK continued

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250 million years ago these mountains were eroded away, leaving behind sediments piled up as gravels in layers that formed the Fountain Formation. This rock unit, up to 4,500 feet thick, has a dark red color from the chemical alteration of iron minerals.

Rocks east of the Rampart fault have been tilted more than 90 degrees from their original, horizontal position, such as the North



A view of the Garden of the Gods. Pikes Peak is in the background. South Gateway Rock (left) and North Gateway Rock (right) are eroded features of the Lyons Sandstone. A Ute encampment is seen at the base of North Gateway Rock. Antique postcard from the S.W. Veatch collection.

Gateway Rock, which is formed from ancient sand dunes when the area was much drier and windier 280 million years ago when all the continents were joined into one giant landmass known as Pangaea. Today, geologists call this rock formation the Lyons Sandstone which is composed of uniform sized grains of sand. The Lyons Sandstone was deposited largely in a desert environment, and oxidation of iron to hematite caused the red color.

Archaeologists tell us people have visited the Garden of the Gods for over 3,000 years. Before the advent of settlers and their occupation, the plentiful game, wild plants, and nearby water, made the park a good camping site for the Ute people and other Indian tribes.

Starting in the 1800s, explorers spread the word of the scenic wonders there. The 1850s and 1860s brought gold prospectors through the region and others who stayed and farmed and raised cattle in this area.

CONTINUED IN THE OCTOBER ISSUE OF THE QUILL!



The Prospector's Quill Summer Edition

VOLUME XLII, ISSUE IX

SEPTEMBER 2017

First Gold From Private Reserves North

by Andrew C Hawkins

In late August, several GPOC members met up on the Private Reserves claim in Park County for an outing. The plan was to hold the annual Long Tom outing and educational experience to relive the days of old, when miners worked that area in the 1800's. That didn't quite pan out—as only a few folks showed. However, we made a day of it anyways! A few folks dug some dirt in the creek. Calvin brought his Spanish Needles and I got to give those a try for the first time! I ended up finding a bit a trash, but at least we cleaned up the place. Soon, Stan and Nancy Gurley showed up and we had a small posse to go walk the bounds



of the new claim, Private Reserve North.

Calvin brought his GPS while Stan was out spotter (hey, there could be bears up there) and I had my detector and headphones. Calvin lead us to the "Bearing Tree" (yup, that's a thing—see photo), which lead us over to the official survey marker that helped us locate one corner of the claim. From there, we only need walk a line, of some few hundred or was it few thousand feet, in a southerly direction to find the other corner. Of course, the land was wooded with aspens and pines and did I mention it was over I I,000 feet in elevation? Well at least we had Stan scouting for bears!

A decent hike later, we did find the other claim corner. On the way back, we came across a line of rocks, which could have been an old ditch or perhaps an old sluice

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