THE GOLD NUGGET

Sept 2022

The Prez Sez! by Joe Johnston



September is upon us and summer is coming to a close. Prospecting opportunities are getting fewer with each passing weekend. The harvests are coming in and their bounty will be coming available at the Farmers Market sites across the country. I am looking forward to the Palisade Peaches, Delta sweet corn, pickling cucumbers, Rocky Ford melons and multitude of other farm products coming our way. The work of canning can provide sustenance through the Fall, Winter and Spring when we will again renew our prospecting efforts. If you have a special recipe, consider sharing it with your fellow club members. Now is a good time to get out and seek that yellow mineral that we all love and spend a little time with nature while relaxing by the water. Soon the hills will be covered in their Fall Colors and sightseers will be heading out to view their splendors.

Events to remember:

- Sept 8,9,10 Highlands Ranch Festival panning demo 9:00 a.m. 2:00 p.m.
- Sept 17 Beginner panning class at Arapahoe come out and help pass on the knowledge and gain a few tips.
- Sept 24 members Lake Gulch outing.
- Sept 24 National Public Lands Day, Clear Creek Cleanup 8:00 a.m. 2:00 p.m. sign up online <u>https://offero.jeffco.us/Calendar</u> click on the bottom link for the 24th (Clear Creek Trail Head) this is for Arapahoe Bar.

May your detector hover over that find of a lifetime and the bottom of your pan glisten with that yellow GOLD. I can be reached at cjoej1@peoplepc.com or my cell: 303-888-5417

Vice President's Corner! by Mike Stevens



In last month's newsletter I talked about being prepared for hot temperatures and exhaustion by making sure to hydrate, wear sunscreen and take breaks. On our last dig at Clay County mine the need to be prepared for an emergency became a reality and made me think of things we should have in place. This was the first incident I recall where we had to call 911 on an outing. Everyone went off to dig in their own area and shortly after we heard shouts to call 911. One of our members disturbed a wasp nest in the ground while digging and was stung. A quick thinking club member ran to their vehicle to get Benadryl from their first aid kit while others called 911. Paramedics, fire and rescue, and police all responded quickly. Before transporting our member to the hospital the paramedics mentioned that administering the Benadryl was helpful. As the ambulance drove off I realized how important preparation is. We

all need to be responsible for ourselves, but when it's another member we need to step up for, that's when our preparedness is really tested. We can start by making sure we all have well stocked first aid kits that are readily accessible. Making sure my kit has Benadryl is on my to do list. On outings we should have a list where participating members write down their names and an emergency contact number. Thankfully this situation turned out well and our member was later released from the hospital, but if someone is unconscious we need to know who to call. This could happen to any of us. So let's borrow the Boy Scouts motto and Be Prepared! Golden Smiles for All!

From the Treasurer/Secretary Ledger by Joe Kafka



It was nice to see everyone at the August meeting. The Club remains in the black and members may request to see the financial report at any time which I have at my table in the back whenever you wish to see it. Hope to see you all at the next meeting in September when we will again be giving away nine more gold nuggets, the largest of which is around 2.4 grams....!! Don't forget to buy your 'Special nugget tickets as well. See you all in September!



<u>From Your Library</u>

Thank you Earl Simpson for donating eight books to our library as well as numerous maps and other gold and mineral publications! A lot of pertinent and interesting information on a wide variety of topics. Nice additions to our current inventory!

Newly donated books are:

- The \$3 How To Gold Pan Book by Sam Radding,
- Minerals of the World, a guide to field identification, by Sorrell Sandstrom
- A Field Guide to Rocks and Minerals by Frederick H. Pough
- Treasure Hunting for Fun and Profit by Charles Garrett
- Introduction to Geology, Physical and Historical 2nd addition by William Lee Stokes, Sheldon Judson and M. Dane Picard
- Stake Your Claim! How to Find Gold and Stake a Mining Claim by Mark S. Silva
- Gold Occurrences of Colorado, Resource Series 28 by Mark W. Davis and Randall K. Streufert
- Where to Find Treasure by Dick Stout
- Colorado Ghost Towns and Mining Camp by Sandra Dallas

Stop by the table if you have any prospecting books you would like to donate. We would appreciate adding your books to the club collection to share with others.

Board Meeting Minutes From Aug 2022

Σ	Joe Johnston	Х	Andy Doll	Х	Robert Ahr	Х	Gordon Smith
Σ	K Mike Stevens	Х	Joe Kafka	Х	Kathy Lemuel	Х	Mike Hurtado
2	K Bobby Manning	X	<u>Chris Kafka</u>		Kevin Singel		James Long

Quorum Present: _Yes.

Call to Order by: _Pres Johnston_ at _6:00_pm. **Reading and Approval of Minutes**: Corrections:

none Approved as read/corrected: _Yes__.

<u>Treasurer's Report</u>: Questions: _none_

Approved: _Yes__.

<u>Correspondence</u>: phone calls _0_ e-mails _6_ mail _3___

Webmaster: Total hits __162177__ Hits in last 30 days _204_.

<u>Committee Reports:</u> Outings planning remains ongoing.

<u>Unfinished Business</u>: The Tri-fold Flyers progress has stalled and will be reassigned. Speakers for August will be the Colorado Division of Reclamation, Mining and Safety. In September, Kevin Singel will speak on prospecting in Puerto Rico.

<u>New Business</u>: Turn Over Folders: each committee position to make one up for that position detailing what is done by that position to facilitate smooth turnover to the next chair in the future. Have it ready for review in August. Housekeeping: we will begin review of the ByLaws at a future meeting. Member packet: would like to have one for new/existing members (bylaws, awards, general introductory info.). Pumpkin carving contest will be in October. We will also accept Nominations for Offices and the Board in October. We have a donated high Banker which will be used for our Club Outings.

<u>Planned Outings</u>: The Outing Schedule has been pretty much established and Andy has published it with the Newsletter. We will continue to schedule as opportunities arrive.

- Sept 8,9, 10 Panning Demo at Hylands Ranch, see sign-up at front table.
- Sept 17 Panning Class being planned by Kevin Singel, at Arapaho Bar.
- Sept 24 Prospecting Outing in Lake Gulch, Black Hawk.

QUESTION OF THE MONTH

A medical study in France during the early twentieth century suggests that gold is an effective treatment for rheumatoid arthritis....true of false..??

Mike Stevens **Secretary/Treasurer** Joe Kafka

2022 GPR Board of

Directors Members

Joe Johnston

Vice President

President

- **2 Year Board Members** Bobby Manning (2023)
- 1 Year Board Members Andy Doll Chris Kafka Robert Ahr Kevin Singel Kathy Lemuel Gordon Smith Mike Hurtado Past President
 - James Long



• Sept 24 Clear Creek Cleanup, 8a – 2p

Board Members Items of Discussion: BM Manning has purchased a new 'Special' nugget which is valued at over \$2000. BM Ahr reports the Membership List has been edited and is ready to print, would like a sign-up for the Christmas Potluck, discussed issues with discrepancies in member payments, brought up non-members buying tickets 9which will cease), asked who 'Meeting/Recorder' is (which is Pres. Johnston, and asked for a final vote on the tri-folder which will be done in October. BM Hurtado discussed the Ken Barker Award Nominations

There were no further Items discussed and the meeting was adjourned.

Tonight's General Meeting Program:We have the Colorado Division of Reclamation, Mining and Safety.Announcements:Next Board Meeting__09/21/22_ at 6:00pmNext General Meeting:__09/21/22_ at 7:00pmAdjournment:Meeting stands adjourned at__6:59_ pm.

General Meeting Minutes From Aug 2022

- 1. Meeting was opened at 7:10 pm by Pres. Johnston with the Pledge of Allegiance.
- 2. Pres. Johnston then announced that the evening Program was the Colorado Division of Reclamation, Mining and Safety, delivered by Russel Means.
- 3. Pres. Johnston then gave the Metals Report: Gold_1781.40, Silver_20.28, Platinum_938.00, Palladium_2084.00, Rhodium _13100.00.
- 4. Web hits for last month was <u>204.</u>
- 5. Treasurer Joe Kafka advised that the Club remains in the black. Report is available for review for anyone who wishes to see it. Also, don't forget to buy tickets for tonight's 9 nuggets drawing, the largest being 2.4 grams. We have a new 'Special Nugget' so buy lots of tickets.
- 6. Robert Ahr and Shelly Zornes reported that we had 44 members in attendance. There were 2 guests present tonight. The total meeting attendance was 46.
- 7. Pres. Johnston read the 'Question of the Month', which was "...Gold nanoparticles are used in the COVID-19 antigens and antibody tests...true or false...? The Winners will receive an extra ticket to the gold nugget drawings later during the evening program.
- 8. Pres. Johnston advised that there was time to enter items at the break for the 'Finds of the Month' table and that the monthly winners from tonight will need to be saved for the Finds of the Year competition in November, 2022. A reminder to all that their gold submissions need to be weighed dry and only one submission per person per category. Be sure to fill out the entry cards completely. Only finds found within the last 30 days may be submitted.
- 9. Gordon Smith announced the 'Cache Clue # 8'. You must be present at the meeting in order to get the Cache clues
- 10. Jenni Dehmlow advised that the Club Store had numerous items for sale. Be sure to drop by at the break and support your Club by buying something. We have some more of our gold bags also.
- 11. Pres. Johnston informed the membership that the Schedule of Outings has been completed and posted in the Newsletter. There is room to add more Outings as the Year progresses. Volunteers are needed for the Clear Creek Cleanup on September 24. See Pres. Johnston if you can help.
- 12. There was a reminder to be sure to vote on the Finds of the Month and to answer the Question of the Month during the break Members who check things out of the Club Library are reminded to return them promptly. Don't forget to donate to the Refreshment Table. There was nothing added from the Floor.
- 13. Pres. Johnston announced the break at 8:15 pm. Meeting was called back to order at 8:30 pm.
- 14. Pres. Johnston announced the winners of the 'Question of the Month'. The answer was, "...True...! There were a total of 44 winners who received an extra ticket for the upcoming gold drawings.
- 15. Pres. Johnston announced the winners for the 'Finds of the Month' for May 2022. Those were:
 - Best Coin John Olson with an 1890 Liberty Dime he found while metal detecting in Leadville, Colo..
 - Best Jewelry Shelly Zornes with a gold necklace she found in Rocky Mtn. Nat'l Park.
 - Best Mineral Connie Cantrell with a pyrite sample she found near Lathrop, Colorado.
 - Best Artifact John Olson with an old mule horseshoe he found while metal detecting in Leadville, Colo..
 - Best Bottle There was no entry in this category for this month.
 - Most Raw Gold Mike Stevens with 0.94 grams of gold he found on the Black Hawk dig.



- Largest Raw Gold There was no entry in this category for this month.
- 16. Pres. Johnston concluded the evening with drawings for the numerous door prizes donated by the GPR, JJ Long, and followed by the drawing for 9 gold nuggets. Pres. Johnston also wants to remind that holders of drawing tickets for the Regular gold drawings who did not win and want to redeem those tickets may present them at the end of the Meeting and they will be reimbursed at .01 cents on the dollar, or they shall be considered to have been donated back to the Club. Assisting Joe Kafka in the drawings was John Olson.
- 17. Pres. Johnston then held the drawing for the 'Special Nugget' and the winner was Mike Stevens. Congratulations to Mike.
- 18. Pres. Johnston reminds the members that sometimes during the meetings, The President's time is overwhelmingly taken up by the many who wish to speak to him and he apologizes if anyone ever feels like he is unavailable. It is not his intent to be inaccessible and he encourages anyone with questions to contact him by e-mail or phone outside the meetings at any time. His e-mail and phone number are on the web site.
- 19. Pres. Johnston thanked Greg and Nancy Knerl and all those who contributed to the Refreshment Table. All members are encouraged to chip in and add to the spread each month. Don't forget the 'tip jar' also, which helps to defray costs. This really helps the folks who run the table and those who volunteer up front each month. The Club appreciates the efforts of each and every one of you to make the refreshment table enjoyable.
- 20. The September Meeting Program will be a presentation by Kevin Singel on his Prospecting Trip to Puerto Rico. Having nothing further at this time, remember to prospect safely, and we will see you all at the next get together.
- 21. . Meeting was adjourned at 9:00 pm.

.<mark>A Miner's Laugh</mark>

The son of a local miner well known for his ornery behavior, got onto a bus and took a seat next to a man reading a black book. He noticed that the man had his collar on backwards. The little boy asked him why his collar was on backwards. The man, who was a priest said, "I am a Father." The little boy replied, "My daddy is also a father but he doesn't wear his collar like that." The priest looked up from his book and answered, "I am the Father of many." The boy said, "my father has 4 boys, 4 girls and two grandch8ildren and he doesn't wear his collar that way." The priest now getting rather impatient,



said, "I am the Father of hundreds", and went back to his book. The little boy quietly thought about that for a few minutes, then leaned over and whispered, "Maybe you should wear a condom and put your pants on backwards instead of your collar..!" Apparently, the apple does not fall far from the tree in this mining family!! (*Taken from the internet and revised just for all us 'old miners'*)

The finds of the Month Aug 2022:

Contest runs from November 2021 thru October 2022. We will be looking forward to seeing what you folks have found since last November. The following submissions were made at the July meeting.

- Best Coin John Olsen with a 1890 Mercury Dime he found while metal detecting near Leadville, Colo.
- Best Jewelry Shellie Zornes with a gold necklace she found in Rky. Mtn. Nat'l Park.
- Best Mineral –. There was no entry in this category for this month.
- Best Artifact John Olsen with an old burro horseshoe he found near Leadville, Colo.
- **Best Bottle** There was no entry in this category for this month.
- Most Raw Gold Mike Stevens with 0.16 grams of gold he found in Black Hawk, Colo..
- Largest Raw Gold There was no entry in this category for this month.











Be sure to bring any Finds that you have found in the last 30 days since the last meeting. You must list the date that you found the item and the area you found it when you submit it. Each monthly winner must save your winning Find and submit them in **November of 2022** for the **Find of the Year** in each category.

August Gold Dig Outing

Our monthly gold digging party took place up on the mountain on August 20. The attendees had some good weather for the day and there was plenty of good gold to be found. This trip ended poorly for one of our members when he dug up a bee's nest and wound up getting stung some twelve times. He subsequently suffered a reaction to the stings and we had to call an ambulance for him. Another member had some Benadryl in his first aid kit and gave it to him. The first responders from Black Hawk showed up in force and provided additional treatment before taking him down to Lakewood for additional treatment. The paramedics said that the Benadryl was a major help in alleviating the situation. He was later released around 3pm, alive and well but with a bad memory of that trip. This is the second incident that has happened in the last 12 years in this area. We had a rare flash flood about ten years ago about a half mile below where we are working now and had a member who was very hard of hearing digging in the middle of the dry creek bed. It started raining and we put a lookout above the workers just in case. Sure enough, a flash flood occurred and the lookout warned everyone it was



coming in time for us to get our stuff out of the way and to

higher ground, all except this gentleman who couldn't hear. Suddenly, he found himself in rushing water just above his knees and before anyone realized he hadn't gotten clear. We quickly responded and got him out of there but spent the next hour looking for his equipment. As I recall, we got it all back with the exception of 1 bucket and a small scoop. So to say that nothing ever happens would not be true, but fortunately, we have never had anybody hurt any worse than Mark's bee stings. Fortunately, there were plenty of folks around and we were within a mile of the first responders so we were lucky from that stand point. Prospecting can be dangerous. Danger can come in many forms and that is why we always stress not to go by yourself and if you do, please let somebody know exactly where you are going and when you will be back. Sometimes your life can depend on it. Bee stings can be life threatening to anyone who is allergic to them. Glad you are doing okay, Mark..! Anyway, the rest of the guys and gals finished their digging and retired to the lower canyon to run their buckets and collect their concentrates. Those who work hard and know what they are going are pulling in a half gram plus of gold each trip up there. Just sayin'....Thanks to Jack Meineke and Bobby Manning for the photos..!

Scientists Search for Dark Matter in Old US Gold Mine By Brian Lynn

Researchers have begun a new search in the United States for the mysterious material known as dark matter. Scientists believe dark matter makes up most of the mass of the universe. But they have not yet directly observed the material. Astronomers have theorized that dark matter exists because of gravity's observed effects on galaxies and groups of galaxies.

The search is happening in a former gold mine in the mid-western state of South Dakota. The experiment aims to **isolate** dark matter inside a tank that is about one-and-one-half kilometers underground.

Scientists have designed the experiment to block out nearly all **cosmic rays** and particles believed to move through our world every day. The hope is that by blocking these materials, dark matter particles will show up in the isolation tank.

The experiment, called LUX-ZEPLIN, is being carried out in the Sanford Underground Research Facility. If it succeeds, the team said, dark matter





will produce a reaction involving the element xenon. The researchers said dark matter would produce a flash of light and be seen by a device called a "time projection **chamber**." Scientists recently announced that the five-year, \$60 million search effort finally got started after delays caused by the COVID-19 pandemic. Members of the search team said the device has not yet identified dark matter. But the equipment does appear to be keeping out most of the background radiation the researchers had hoped to block.



"To search for this very rare type of interaction, job number one is to first get rid of all the **ordinary** sources of radiation, which would **overwhelm** the experiment," said project member Carter Hall. He is a physicist at the University of Maryland. The researchers said they expect only a few signs of dark matter to appear a year. The team of 250 scientists estimates the operation will produce 20 times more data in the future. During the experiment, the chance of finding dark matter with the device is "probably less than 50 percent, but more than 10 percent," said Hugh Lippincott. He is a physicist and spokesman for the project.

Kevin Lesko is a physicist at the U.S. Department of Energy's Lawrence Berkeley National Laboratory in Berkeley, California. He told The Associated Press that finding dark matter is far from a sure thing. But Lesko said the scientists "need a little

enthusiasm" to keep going. "You don't go into rare search physics without some hope of finding something."

Another team member, physicist Aaron Manalaysay, explained the importance of xenon to the experiment. He said the element will permit researchers to see whether particle collisions that happen in the tank hit a xenon electron or its nucleus. If something hits the nucleus, it is more likely to be the dark matter that everyone is looking for, Manalaysay said.

The scientists tried a similar, smaller experiment at the same place years ago. After that experiment produced no dark matter, the scientists decided to go much bigger. Another large experiment is currently being carried out in Italy. The scientists running that project have not yet announced any results.

Manalaysay explained that even with a small chance of success, it is important for scientists to keep searching. He said this is because it will be nearly impossible to fully understand the history and development of the universe without identifying dark matter.

Mining Town told to Stop Yelling at Tourists Denver Gazette July 15. 2022M

In Jerome, Arizona, police see about 1 million tourists annually. But they have issued a warning to the residents to stop yelling at those tourists/visitors or they could face harassment charges. Jerome, population about 450, was once home to one of Arizona's largest copper mines and is now a hub for artists. Tourists take in its scenic views and visit the local stores and bars along the winding mountain road that passes through it. But Jerome police said on Facebook this week that it "has come to our attention that some people passing through our town on short visits and using lawful short term parking passes are being yelled at or having notes left on car windshields by our local residents". And the police warned that "Yelling at, or leaving notes could, in some cases, constitute harassment under Arizona Revised Statutes." Jerome is about 110 miles north of Phoenix and was designated a National Historic District in 1967. Residents who think people may have violated parking regulations were asked to contact the police first before taking action on their own.

Miners in Angola unearth pink diamond believed to be largest found in 300

<u>years</u> Collected from various internet news sources

Miners in Angola have unearthed a rare pure pink diamond that is believed to be the largest found in 300 years, the Australian site operator announced Wednesday, July 27, 2022. A 170 carat pink diamond - dubbed The Lulo Rose - was discovered at Lulo mine in the country's diamond-rich northeast and is among the largest pink diamonds ever found, the Lucapa Diamond Company said in a statement to investors. The "historic" find of the Type IIa diamond, one of the rarest and purest forms of natural stones, was welcomed by the Angolan government, which is also a partner in the mine. "This record and spectacular pink

was welcomed by the Angolan government, which is also a partner in the mine. "This record and spectacular pink diamond recovered from Lulo continues to showcase Angola as an important player on the world stage," Angola's Mineral Resources Minister Diamantino Azevedo said.



The diamond will be sold at international tender, likely at a dazzling price. Although The Lulo Rose would have to be cut and polished to realize its true value, in a process that can see a stone lose 50 percent of its weight, similar pink diamonds have sold for record-breaking prices. The 59.6 carat Pink Star was sold at a Hong Kong auction in 2017 for \$71.2 million. It remains the most expensive diamond ever sold.

Zimbabwe Pushes its 'gold plan' to fight inflation ByAnna Golubova

Zimbabwe, which has been trying to tame inflation by selling gold coins, is now going a step further. It wants to incentivize the nation's biggest gold miners to produce above the state-planned targets.

Back in July, Zimbabwe's central bank started selling gold coins to get inflation under control by providing a store of value to the country's plunging currency and giving the population an alternative to the U.S. dollar. One week after kickoff, the country saw strong demand, with the country's central bank selling 1,500 gold coins and planning to release 2,000 more.

Large miners are now being encouraged by the government to produce more gold. And those who exceed their targets can receive 80% of the payment for the additional output in foreign currency, Bloomberg quoted Deputy Mines Minister Polite Kambamura as saying. The current payment plan is a 60-40 split between foreign and local currency payments. The country's gold miners see a larger share of foreign currency earnings as a benefit to sustain their operation costs. Gold exports are currently the third top foreign currency earner, followed by platinum and remittances.

To help the mining industry out, Zimbabwe has selected two local lenders to provide \$1 billion worth of funding over the next five years. Production increases are already being planned by some gold miners, including state-owned Kuvimba Mining House Ltd., which is looking into a fivefold increase in production at its Shamva Gold mine by 2023. Zimbabwe's gold output is already up 47% this year, with the government looking for gold mining to account for a third of 2023's overall mining industry targeted \$12 billion revenue, according to Kambamura.



The deal with gold coins is that the gold coins being minted and sold by the central bank are one troy ounce 22-carat gold coins and are called 'Mosi-Oa-Tunya.' The name means "Smoke that Thunders," referencing Victoria Falls. Each gold coin has a serial number and can be purchased with local currency, the U.S. dollar, and other foreign currencies. The price is set based on the international price of gold and production costs. The owners of the gold coins can convert them into cash or trade them whenever needed. The gold coins could also be used for transactional purposes and as a security for loans.

The government's plan is to use these coins to lower the demand for U.S. dollars following the collapse of the Zimbabwe dollar. Surging inflation and currency devaluation have made things difficult for Zimbabwe's population. The country's annual inflation surged 256.9% in July from 191.6% the previous month.

In response to the crisis, Zimbabwe's Central Bank was forced to more than double its policy rate from 80% to 200%, a new record. Zimbabwe also announced plans to adopt the U.S. dollar as legal tender for the next five years to stabilize the country's exchange rate. But there is a severe shortage of dollars. This is the second time in more than a decade that Zimbabwe is legalizing the greenback as legal tender.

The Deepest Gold Mine in the World: Moneng Mine

Location: Guateng, South Africa Depth: 2.5 miles below the surface

Popular culture has created a very specific preconception of what people imagine a mine to look like. Mines are often thought of as these crude, makeshift structures held up by rickety wooden beams and lit by gas lanterns. While not as pretty as a skyscraper, or as innovative as a zero-gravity living space, modern mine shafts are none the less comparably complex pieces of engineering that don't get enough credit. The Mponeng gold mine stands out among others of its kind for being the deepest gold mine in the world and demonstrates the pinnacle of mining related engineering.

Transportation and Structural Integrity

The tricky thing about mine shafts is that the raw amount of overhead rock grows as depth increases. Even if a mine shaft isn't very impressive to look at, the fact that it manages to support the weight around it, is what deserves consideration. The tunnel walls of Mponeng are standard concrete (more specifically, shotcrete) walls, supported with steel rebar. What





stands out is the use of artificial diamonds which are used to create mesh netting that further supports tunnel integrity. The Mponeng gold mine has a vertical depth of more than 2.5 miles, which is approximately half of the vertical distance by which Everest extends upwards. Transfers between multiple high-speed elevators are required to descend, with the lowest reaches of the mine requiring on foot hiking. A trip to the bottom takes more than an hour to complete.

To go back to the skyscraper comparison, mines do have one design consideration in common with the monolithic metropolitan towers- elevators. Speed, load yield, safety, all factors which must be taken into consideration in the design and maintenance of an elevator. Mponeng, and in fact most mines, differ in the size of the elevator. In order to sufficiently transport more than 4,000 miners, who work in the depths of Mponeng, the elevator cage is sufficiently large to accommodate larger groups of miners and their accompanying weight.

Solving the Temperature Problem

Think back to elementary school and one will recall that the earth is comprised of layers, much like a cake. There's the crust, which comprises the solid land we live on, the mantle, which is a hyper compressed sea of magma, and the core, which is the incredibly dense, metallic focal point of our planet. The further down one traverses the crust, the closer they come to approaching the mantle. Go deep enough into the deepest gold mine in the world, and eventually one will experience drastic changes in temperature due to the increased proximity to the mantle.

The rock at the lowest levels of the mine can reach temperatures up to 150 degrees Fahrenheit. To put this into perspective, the minimum temperature required to cook an egg is 130 degrees Fahrenheit.

In order to sustain prolonged work, and not cook their miners alive, the mine requires some serious cooling. Because of this, a system was created which pumps ice down the length of the shaft. This, coupled with internal insulation, cools the tunnel air down to a surprisingly livable temperature of around 80 degrees Fahrenheit. Even with the cooling, working at the bottom of Mponeng is still a grueling experience as the miners excavate more than 5,400 tons of rock per day.

Why All The Trouble?

A writer for BBC News once reported that Warren Buffett estimates that all the gold in the world that has been mined so far would be able to fit in a square cube with walls 67 feet long.

While this statistic is highly controversial, gold is understood to be a rare resource, and many fail to realize just how rare. While a 67 foot cube might seem rather large if it was sitting right in front of you, think of that amount spread across the entire world and the rarity of gold becomes clear.

Despite all of this, the mine only needs to retrieve 0.35 ounces of gold, the equivalent of a handful of paperclips, per ton of rock excavated, in order to turn a profit. So, while it might seem like an unnecessarily extreme structure to create, it shows that humans are willing and able to create just about anything so long as there's a good enough reason to justify it.

Niti Aayog, India, to Identify Potential Gold Mines By Yogima Seth Sharma & Kirtika

Suneja

"The key recommendations of the study include providing incentives to small explorers to take up mining of gold in India," an official said, requesting anonymity. "Besides, some policy tweaking could be done to make gold mining cost-competitive."

The Centre will soon lay out a detailed roadmap to boost gold production in the country with private participation amid a surge in imports of the yellow metal and rise in its prices. The plan will identify potential gold-bearing regions to be developed by 2030 and the policy interventions needed to attract private investment into gold mining, a senior government official told ET.

Niti <u>Aayog</u> has conducted an extensive study to identify potential gold mines in the country and proposed a pan-India exploration program over the next 10 years. "The key recommendations of the study include providing incentives to small explorers to take up mining of gold in India," the official said, requesting anonymity. "Besides, some policy tweaking could be done to make gold mining cost-competitive."

India is the world's second biggest consumer of gold, after China. India's gold imports rose 33.41% to \$46.16 billion during 2021-22 from \$34.6 billion in the previous year, a key reason behind widening of the trade deficit to \$192.41 billion last fiscal from \$102.62 billion in FY21. Gold is among the 102 priority items that the commerce department has identified whose imports are high and need immediate interventions for domestic production opportunities. Gold accounted for 7.53% of India's total inbound shipments in FY22. In April-July, gold imports rose 6.39% year on year.



Hutti Gold Mine, the only gold mining company in the country located in Raichur district of **Karnataka**, has produced some 84 tonnes of gold since 1947.

As per National Mineral Inventory data, total gold ore reserves in the country have been estimated at 501.83 million tonnes. The largest resources of primary gold are located in Bihar (44%) followed by Rjasthan (25%), Karnataka (21%), West Bengal (3%), Andhra Pradesh (3%), and Jharkhand (2 %).



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The Gold Nugget

Gold Prospectors of the Rockies PO Box 150096 Lakewood, Co 80215-0096

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Commercial Ads

3.6" x 2.0" Two Column Inches (Business Card Size) \$6
3.6" x 4.3" Four Column Inches \$12
7.5" x 4.3" Eight Column Inches (Horizontal) \$24
3.6" x 9.3" Nine Column Inches (Vertical) \$24
7.5" x 9.3" Eighteen Column Inches (Full Page) \$48
For information to publish your "Ad" in The Gold Nugget,
please contact the Editor. COPY DEADLINE is due to the
editor by the 25th of the month for publication in the following
months' issue of the Newsletter.

Contact the GPR President

(Layout Design Subject To Additional Cost)

Coming Announcements and Special Events for Oct 2022 (WMMI - Western Museum of Mining & Industry, 225 North Gate Blvd. Colorado Springs, CO 80921 (https://www.wmmi.org/) (Free to GPR Member with badge)													
SUN	MON	TUE	WED	THU	FRI	SAT							
						1							
2	3	4	5	6	7	8							
9	10 Columbus Day	11	12	13	14	15							
16	17 Boss's Day	18	19 GPR Club Meeting	20	21	22							
23/30	24/31 <u>31 Halloween</u>	25	26	27	28	29							