



# The Prospector's Quill

JANUARY 2019

VOLUME 44, ISSUE 1

## Tiny Nuggets

The amount of gold nuggets being found in the world is less than one percent.

A one-ounce gold nugget is more rare to find than a five-carat diamond.

The United States government banned private ownership of gold, which lasted 41 years; then lifted it on December 31, 1974.

Gold is the only metal that is yellow or golden.

Gold is so heavy that one cubic foot of it weighs half a ton.

**Gold Price USA  
Dec. 20, 2018  
\$1254.50**



### General Membership Meeting

### January Speaker

### "Experience of a Lifetime"

January's speaker is **Calvin Johnson** of our very own Gold Prospectors Of Colorado (GPOC). His presentation will be an accounting of his "Experience of a Lifetime" in the recovery of a quartz vein that assayed at 2281.7 ounces per ton containing crystalline (93.887 fine) gold wires. In layman's terms that equals \$2.8 million dollars per ton. The gold is in sugar quartz, which is very rare on its own. No know sugar quartz in Colorado!! This presentation should not be missed, if you are like me I'm getting gold fever just thinking about January's meeting.

Calvin will have samples for all of us to gaze upon (sorry no touching). The samples are very fragile and some crystalline gold wire falls out when handled.

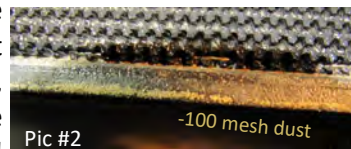
#### Pictures:

This is a sugar quartz vein specimen (Pic.#1) and is very fragile. *(It can be compared to a sugar cube you would put in a cup of tea.)* When touched some of the gold wire falls out and quartz crumbles just from handling, this gold is extremely fine and for his talk and presentation the gold it will be called "dust".

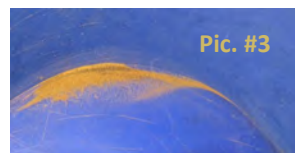


Full article on page 2

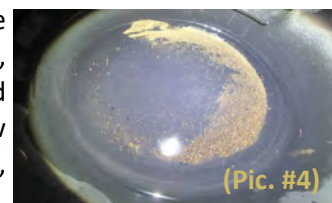
This image (Pic #2) is gold "dust" from his Gold Cube on the top edge of 1st collection tray, after running the -100 mesh "dust" from the reduced sugar quartz vein.



The gold in the blue pan (Pic. #3) is the results from -100 mesh separator and the 'super-cons' from the Gold Cube.



Earlier this year at the January 2018 "Family Geology Day" at WMMI, after the results from a "Panning Challenge" A request was made to the members, to pan the gold from the below material (Pic. #4, black gold pan.)



There was only one taker, she was the "Multi-Event Winner" and the year's "Colorado Gold Panning Champion". Righteously so, she was very upset she couldn't get the gold separated, until Calvin showed her that it was because it was still attached to tiny quartz and amethyst crystals!



The next photo (Pic. #5) is a microscopic view of a 1.837cm wire gold. If you look close you can see a small amethyst crystal (pink

pebble above the wire gold).

## Winter Writer's Nonfiction Writing Class

Come to a writing class for students and learners of all ages!

**January 26, 2019**

9:00 am to 12:30 pm

**Western Museum of Mining and Industry**

225 N. Gate Blvd., Colorado Springs, CO 80921-3004

RSVP to [rsvp@wmmi.org](mailto:rsvp@wmmi.org) or call 719.488.0880

**More info visit the website ([Click Here](#))**



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**January 26, 2019**

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**Western Museum of Mining and Industry**

225 N Gate Blvd, Colorado Springs, CO 80921-3004

719.488.0880 | Toll Free: 800.752.6558

The course fee is \$45 for adults and \$15 for students (21 and under). WMMI members receive \$5 off adult fee. CSMS and Lake George Club members receive a \$30 discount.

Are you ready to take your writing to the next level? The Western Museum of Mining & Industry provides an intimate, inclusive program in a remarkable setting. This class combines excellent instruction with valuable resources and is ideally suited for the general public, teen writers, and beginners. Immerse yourself in this intensive, half-day winter writing class designed for those who want to learn more about nonfiction writing and publishing. Writing about nature, science, history and other nonfiction subjects offers exciting opportunities to be published. Magazines, newspapers, bloggers, clubs, and schools are looking for articles to share with their audience, and this class can teach you how to publish.

### Class highlights

- Work with published authors who will teach the class
- Learn about creative nonfiction, nature writing, science writing, and history writing
- Discover powerful research methods
- Identify and develop story ideas
- Practice how to outline and structure stories
- Learn potent craft tips
- Work with photos for your articles
- Understand the role of an editor in the publication process
- Discuss publication issues and learn some tips on publishing

A certificate will be awarded by the museum upon completion of the class. All other course materials will be provided including a morning reception. A writer's resource kit on digital media will be available for purchase from the instructor for \$10 to continue the training beyond the class at the museum.

### Instructor bios:

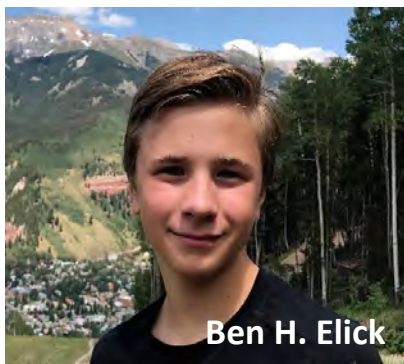
**Steven Veatch** grew up in the Pikes Peak region and earned degrees at Colorado State University at Pueblo (BSBA), Webster University (MA), and Emporia State University (MS Earth Science). He is a writer of essays, book reviews, science articles, and professional papers. He has published over 150 articles on nature and science. He has contributed chapters to these three books: Field Trips in the Southern Rocky Mountains, USA, Field Guide 5; The Paleontology of the Upper Eocene Florissant Formation, Colorado; and The World's Greatest Gold Camp: An Introduction to the History of the Cripple Creek and Victor Mining District.

He was an associate editor of Leonardo, a literary and art journal published by the English Department of Central New Mexico Community College for three years. He is a regular at a writer's retreat held in the woods of northern Michigan at the Interlochen College of Creative Arts.

**Ben H. Elick** has published a number of nonfiction articles in newspapers and magazines, notably the international Earth science magazine Deposits. He recently presented his co-authored paper on repeat photography at the Geological Society of America's North-Central Section Meeting in Ames, IA and on Cripple Creek minerals at the New Mexico Technical Institute of Mining and Technology in Socorro. This will be his third year assisting with this writing class. He is currently a student and lives in Douglas County.



**Steven Veatch**



**Ben H. Elick**



## Blast from the Past

Turret Gold Belt, Volume 6,  
Number 39, August 9, 1905

**ASSAYING**

**A. G. AURENGER**  
Has completed arrangements to open the  
**VIVANDIERE ASSAY OFFICE**  
at Turret, Colorado.  
Where he will do Assaying for the public hereafter at regular prices.  
All work of Assaying solicited and ACCURACY GUARANTEED.

### Search Your Chickens; They May Have Nuggets

Hereafter it will be well for all Lovelanders to search the "in-nards" of their chickens carefully when they are killed. They may discover gold nuggets in 'em. At any rate, John Myers, the popular butcher in the West Side Grocery, has set such a precedent. In killing a chicken and dressing it for Jack Pickett Saturday, Mr. Myers discovered a small gold nugget in the chicken's gizzard.

Now the question is, where did that chicken come from? Mr. Myers had it with a bunch of others and can't remember, so there seems small possibility of finding the trail to a gold mine without further clues.

**Don't Push**

The horse can draw the load without help, if you reduce friction to almost nothing by applying

**Mica Axle Grease**

to the wheels. No other lubricant ever made wears so long and savess so much horse power. Next time try MICA AXLE GREASE.

**Standard Oil Co. Incorporated**



## One Ton Ore Cart

The one-ton ore carts had a few names; mine cart, tramcar, and mine trolley were prevalent throughout the mining industry in the early Twentieth Century.

These carts were a type of rolling stock found on a mine railways, used for moving ore, tailings, building materials, and workers in the process of traditional mining. In modern times they were seldom used. They had been replaced by more efficient methods such as conveyor belt system, steam powered, propane and even electric carts.

Back in their hay day, these ore cars were small enough to be used in the smallest tunnels to haul rock from the deepest darkest points, to the dump piles.

The original mine railways, both the carts and the rail system was made of wood. The cart to the left was used in the early 1800's. As time pasted the use of iron prolong the life of the carts and rail, becoming the cart and rail seen above.



The early use of these carts were pulled or pushed by the men, children or animals. Gravity became prevalent and the burros and mules

pulled the empty carts back to the workings.

The use of cables to pull the heavy carts did not start until the invention of wire rope in 1840's. The use of steam power and cables displaced the humans and animals to move the ore in the larger mines.

### "HIGH GRADING AT TONOPAH."

*Rhyolite Herald, October 28, 1908*

The arrest of four men for high grading took place at Tonopah last Friday morning as the men were coming off shift at the McNamara mine. The men arrested are William Turner, vice president of the Tonopah miners' union; Tom Conifrey, Tom Cunningham and Patrick Flanigan.

They were caught with the rich ore concealed upon their persons, and it is said that nearly a wagonload of ore was recovered from the residences of the high graders. These men have been suspected for a long time, and Friday morning the entire shift was held up and searched.

All were lodged in the county jail, and two of them have since given bail. It is announced that they will be prosecuted to the full extent of the law.

*Rhyolite Herald, October 28, 1908, Tonopah Nevada*



# GPOC Board & Committee Chairs

## GPOC BOARD

### President

Marty Allen

[gpocPresident@gmail.com](mailto:gpocPresident@gmail.com)

### Vice President

Charles Engler

[gpocVicePresident@gmail.com](mailto:gpocVicePresident@gmail.com)

### Secretary

Jo Manning

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### Treasurer

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### Two Year Trustee

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### Three Year Trustee

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## COMMITTEE CHAIRS

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### Associate Quill Editor

Steven 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 the world!

# 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. You can now see and plan for upcoming events months in advance and make requests to the Planning Committee for outings and events,

Be sure to check the GPOC web site at [WWW.GPOC.CLUB](http://WWW.GPOC.CLUB) for more info on events including location and start times.

## JANUARY 2019


### The Prospector's Quill Calendar

Sun	Mon	Tue	Wed	Thu	Fri	Sat
Dec 30, 2018	31	1	2	3 GPOC Board Meeting	4	5 WMMI Family Day Geology
6	7	8	9 GPOC Monthly Meeting	10	11	12
13	14	15	16	17	18	19
20	21	22	23 GPOC Planning Meeting	24	25	26 WMMI Writers' Course
27 	COME SEE US AT <b>WMMI FAMILY DAY: GEOLOGY</b> 1/5/19 - 10:00 a.m. & 3:00 p.m. GPOC Volunteers will be demonstrating equipment used to get gold from black sand concentrates! Click for more info			30	31	Feb 1, 2019



## FEBRUARY 2019

## The Prospector's Quill Calendar

Sun	Mon	Tue	Wed	Thu	Fri	Sat
Jan 27, 2019	28	29	30	31	Feb 1, 2019	2
3	4	5	6	7 GPOC Board Meeting	8	9
10	11	12	13 GPOC Monthly Meeting	14		
17	18	19	20	21		
24	25	26	27 GPOC Planning Meeting	28		

- **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 Meeting**. Wednesdays (two weeks after club meeting) **7 pm**, La Castia, 3725 E. Woodman Rd. 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 Ridgeway Parkway exit off I-25, south side of Denver

## MARCH 2019

## The Prospector's Quill Calendar

Sun	Mon	Tue	Wed	Thu	Fri	Sat
Feb 24, 2019	25	26	27	28	Mar 1, 2019	2
3	4	5	6	7 GPOC Board Meeting	8	9
10	11	12	13 GPOC Monthly Meeting	14	15	16
17	18	19	20	21	22	23
24/31	25	26	27 GPOC Planning Meeting	28	29	30





## WMMI News

[www.wmmi.org](http://www.wmmi.org)

### Family Day Geology

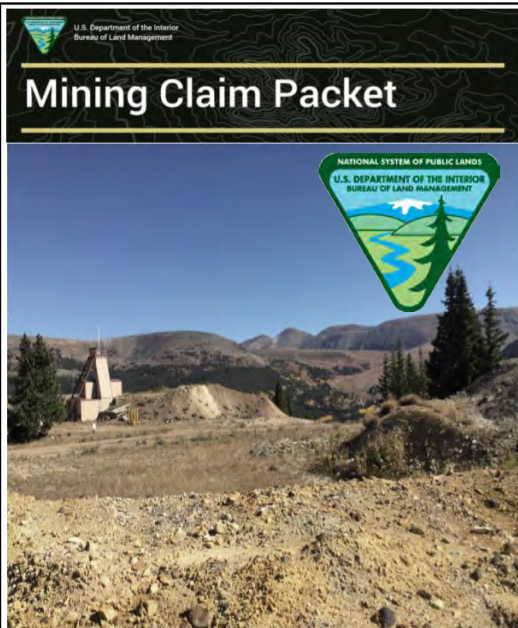
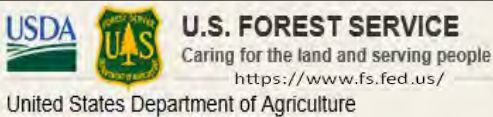
**Jan 5, 2019**

Family Day Geology is a family-friendly educational event, learn about Colorado's mineral and mining heritage, identify mineral specimens, and understand processes important to the formation of mineral deposits.

**RSVP to [rsvp@wmmi.org](mailto:rsvp@wmmi.org)**  
or (719) 488-0880

225 North Gate Blvd.,  
Colorado Springs, CO 80921  
(719) 488-0880

*Event Hours*  
10:00 am - 3:00 pm  
Saturday Jan 5, 2019



## Updated BLM Mining Claim Packet

*Revised September 10, 2018*  
4.8MB, pdf formatted, 91 pages

For a copy Click on the link below;

**[Mining Claim Packet](#)**

The above link will bring you directly to the BLM site to start the PDF Download.

*Last months article was about  
"Field Testing, Why Bother?"  
Why it was important.*

## Metal Detector

**Using a Metal Detector to find Gold**

### Bad Swing, Equals NO Nuggets!

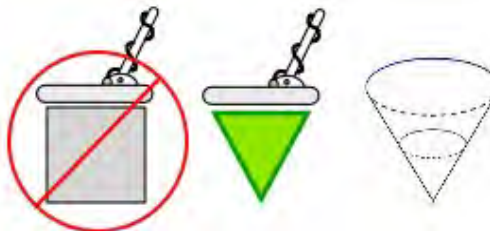


So, what's the big deal... my swing is off just a little. If we were talking golf... no big deal, but were not. If your swing is off while hunting for gold nuggets, you may have a very poor recovery day.

Lets start off with depth, and how deep your detector can "See" into the ground and how a swing with a "smile" can cost many hours of time. As a rule of thumb, depth is equal to diameter of coil.

The signal that a metal detector send into the ground and then receives back is not in the shape of a cylinder but more of a cone shape (see pic below). The reason this shape is important for us to visualize is, the deeper

the signal goes into the ground the less of an area the metal detector will be able to detect a gold nugget. This cone shape is just part of the battle. I like the term "Swing Smile," it's a style of swinging your detector that leaves gold

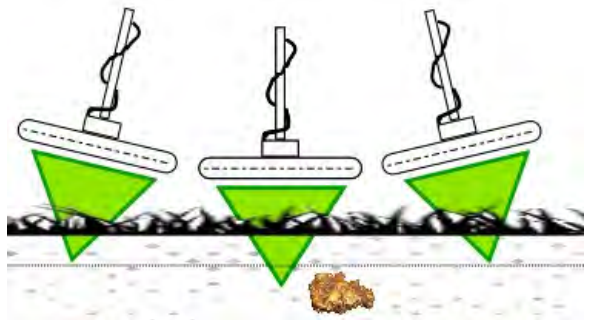


nuggets for me to find following right behind the areas you just covered, it makes me "Smile." Looking at the picture below there is a faint dashed line where the nugget can just be seen (middle green triangle) by your detector.

The two outside triangle will not see this nugget. Because the ends of your swing are higher above the ground than in the middle (that is one of the "Smiles" of your swing).

There is another important smile and this is how well you overlap your swing as you move forward. I

try to practice a 50% overlap. This is not because I am anal but because of the cone shape that our detector sees. The 50% overlap will give a far better coverage of the ground, the two green triangle below are 50% overlapped, yet still have blind areas as you sweep the ground.



**Over lapping from 25%  
to 50% is ideal.**

One final thought is the depth that your detector will "See" will not be deeper than the diameter of the coil you are using. This info was based on a concentric style coil, there are other types of coils that give different patterns, one of the more popular is the "Double D" aka DD. This style is significantly different and may be addressed in a different article if requested.

*Contact the newsletter editor at;  
[gocQuillEditor@gmail.com](mailto:gocQuillEditor@gmail.com)*

*for this or any other articles of interest.*

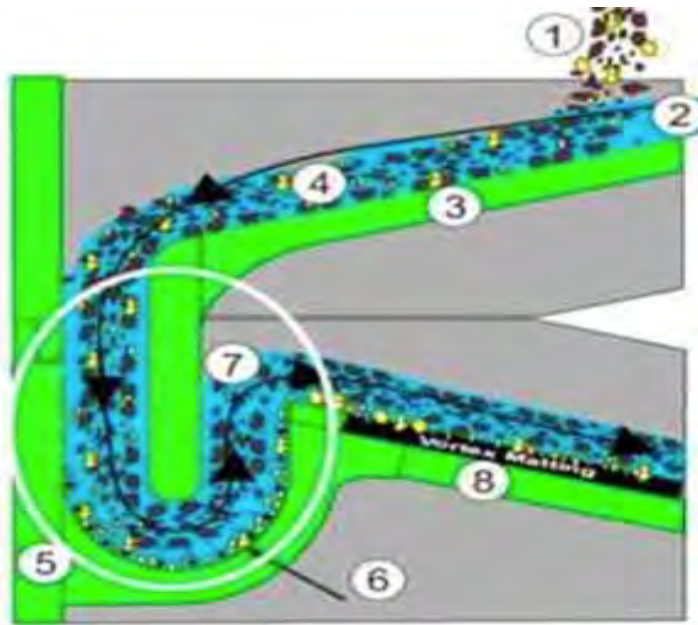
## GPOC Forum

Colorado's Premiere Gold Prospecting Club

### How the Gold Cube works.

by cjJohnson » Tue Aug 09, 2016 9:02 pm

Whether you have a "3-stack", "4-stack" or have a Trommel or Gold Banker, or the Gold Cube. It's basis is three different and complementary methods of gold separation. It starts at the top with the "slick plate", a fluid table that liquefies the material into a slurry and spreads it evenly across the Cube. The slick plate tray drops the material into the first "G-force separator" and it then goes across the "collector trays" covered with vortex active matting. Although Gold Cube sells a separate "nugget trap," the "G-force separator" catches nuggets very well!



#### Gold Cube- How the G-Force separator works.

The (1) process starts with 8 mesh or smaller gold bearing material is added to the water flow. This material is added on the (2) slick plate. The process continues by (3) creating a slurry. This slurry (4) drops into the G-Force separator. The (5) slurry accelerates around the bottom of the trough and the centrifugal force helps move the gold outward. As all the (6) material leaves the G-Force separator, high volume of water carries the light material (7) up and away. The gold is then dropped into the beginning of the (8) vortex mat. This process is repeated in each of the gold cubes separation trays

The Vortex mat is the third step in the Gold Cube concentrator process and is very efficient. I think this mat was a brilliant idea to add to the Gold Cube because of the Vortex mats ability to recover fine gold.



#### Vortex mat is a gold getting machine!

The Vortex mat collects gold in each of its small cavities like a gold attracting magnet. I also like how easy the Vortex Matt is cleaned. The Vortex Matt cleans up in just minutes. The combination of the three intelligent gold separations together allow the gold prospector to process large amounts of material down to just a cup of super concentrates in just a few minutes.

Vortex matting: the gold cubes Vortex matting works because water-flow interacts with a combination of very small pillar walls and cavities (about 7,056 of them per mat).

Just like a tornado, the spinning creates low pressure zones in the center of each of the cavities. This passing gold will be trapped and forced to the bottom of the vortexes and held in place by a lighter material. As gold laden material is introduced into the Vortex mat, it will displace and replace the lighter materials. This will create about a cup of super concentrations at cleanup.

It's truly amazing, Calvin Johnson, GPOC

# Gold Cube

[www.GoldCube.net](http://www.GoldCube.net) 1-800-649-0256







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## Gold Prospectors of Colorado

PO Box 1593

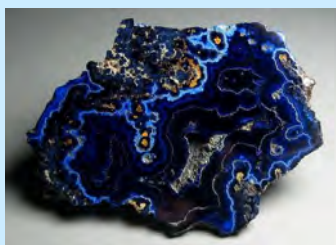
Colorado Springs, Colorado 80901

Phone: 719-651-7930

E-mail: [MembershipGPOC@gmail.com](mailto:MembershipGPOC@gmail.com)

Visit us on the web! <http://www.gpoc.club>

**Prospecting Colorado since 1974.**



## WMMI

### Family Day Geology

**Jan 5, 2019**

**10:00am and 3:00pm**

Family Day Geology is a family-friendly educational event, learn about Colorado's mineral and mining heritage, identify mineral specimens, and understand processes important to the formation of mineral deposits.

Have you ever picked up a rock while hiking and wondered what it was? On Saturday January 5th, bring that geologic discover and curiosity down to the Western Museum of Mining & Industry for a day of geologic exploration! Try your hand with "Keep What You Find Gold Panning" and take part in some hands-on mineral identification. Join WMMI, the Florissant Fossil Beds, the Pebble Pups, Gold Prospectors of Colorado, RB Excavation & Demolition, Richard Sweeney, and more for a fun and educational experience for the whole family.

The event will take place between 10:00am and 3:00pm and is included in normal museum admission prices.

**225 North Gate Blvd., Colorado Springs, CO 80921 | Exit 156 and East from I-25**

Gold Prospectors of Colorado  
PO Box 1593  
Colorado Springs, Colorado 80901

