Nuggets From The Prez

Oh what a beautiful morning, Oh what a beautiful day, I wonder what the day will hold for me today. So far there is a beautiful blue sky over my head. No smoke in the air that I can smell and all’s right with the world. Sounds nice, doesn’t it? I hope that’s how you see it but we all see things differently and that what makes us so interesting. I’m waiting to lose power as you are also. Aren’t we lucky? No power, no one suggesting us who to vote for but do what you feel is right. Like trying to keep your family healthy and do what you have to do to get things done.

Hope you’re going outside and enjoying the nice weather. John has been having field trips but where were you? Not that was and is a great way to see club members since we’re not having meetings. Someday we’ll have a meeting. To the tune of, "Someday My Prince will come" No? Oh well.

If you have a birthday from Dec 22 - Jan 20, you are a Capricorn which is the GOAT. Your stone is are Tourmaline, Garnet and Zircon.

If your birthday is from Nov. 23 - Dec. 21, you are a Sagittarius, the ARCHER. Your stones are Turquoise, Topaz, and Amethyst

Well, all I can say is the Goat had better go hide or run very fast because the Archer will get you with his bow and arrow. Oh roasted goat, yum. Sorry dear Capricorns I got carried away didn’t mean to hurt any feelings.

It seems that every time that I pick up the newspaper the numbers of the CODID-19 creeps up little by little. I worry that you aren’t one of those numbers. Just do what you have to do to stay safe and healthy so that someday in the near future we’ll be able to be a together society.

I know Nov. 3 is in a few days and I dread to see and hear what the outcome will be. It’s not so much about who will win and yet it is BUT will the masses' reactions will be. Remember 2016? I fear that it will be way more intense and I hope not. Not everyone can win and the losses might get awful.

I better close before I lose power.

-Edwina, oh Happy Halloween!

In this issue:
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Minutes (none for October)
November meeting
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November Birthdays – Opal
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Scottish Gold Rush?
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November Meeting

We will have a general meeting with all of the safety protocols in place which Frank offered to officiate if other officers cannot attend. Same place, same time. We must have nominations for positions emailed to Edwina before the next meeting. At the general meeting Frank will present a short mystery program and will run a mini live auction. Unclear yet if we will have a board meeting before the general meeting.

Elections for the club are THIS MONTH, PLEASE consider a position! Please take time to volunteer, step in to fill a role, if even for just one year or on a committee. If we all pitch in a little, it is not too much burden for a small few, and the club will benefit from your unique perspective and experience. Please send in your nominations to the Club President before the meeting.

Golden Empire Grange Rentals

The GEG is welcoming back those of you who feel ready to return. If you do plan on returning give me a call and I can explain our protocols.

Hope to see you soon. If I've already spoken w/your rental manager about returning you need not respond to this message. At present we have three of our on-going renters committed to a return.

Looking forward to resuming activities at the Hall.

Bruce S. Lester
530-477-9586
bvlester@att.net
Golden Empire Grange Event Coordinator

Editor’s notes

Suiseki Contest: John Dolman is looking to have a Suiseki contest at an upcoming meeting with prizes, so start looking for that winning rock now! Besides it is a good safe/solo activity! And (hint hint) he is looking to maybe do another similar for naturally-found heart shaped rocks – maybe for February meeting – who knows!

Lapidary Shop at the Grange: Frank discussed this topic at a Grange Board meeting last year. The Grange was receptive to having a small lapidary shop set up on their grounds. Are there any members who would be willing to do follow-up on looking at the feasibility of using the Grange property for a shop. Contact Frank Van Hecke @ 575-4252 for more details and a synopsis of previous discussions with the Golden Empire Grange Board of Directors.
November Birth Stone – Citrine and Topaz

Happy October Birthday to our members with birthdays in November!

Citrine Overview
November’s second birthstone, citrine, is a variety of quartz that ranges from pale yellow to a honey orange color. It takes its name from the citron fruit because of these lemon inspired shades. The pale yellow color of citrine closely resembles topaz, which explains why November’s two birthstones have been so easily confused throughout history. Citrine’s yellow hues are caused by traces of iron in quartz crystals. This occurs rarely in nature, so most citrine gems on the market are made by heat treating other varieties of quartz—usually the more common, less expensive purple amethyst and smoky quartz to produce golden gemstones.

Brazil is the largest supplier of citrine. Other sources include Spain, Bolivia, France, Russia, Madagascar and the U.S. (Colorado, North Carolina and California). Different geographies yield different shades of citrine. With a hardness of 7 on the Mohs scale, citrine is very durable against scratches and everyday wear-and-tear—making it a lovely option for large, wearable jewelry.

Citrine History
Citrine quartz has been adored since ancient times. The name "citrine" was used to refer to yellow gemstones as early as 1385, when the word was first recorded in English. However, since the gemstone’s color closely resembled topaz, these two November birthstones shared a history of mistaken identities. Quartz and topaz are actually unrelated mineral species. But before these differences were clear, many cultures called citrine (the yellow variety of quartz) by other names like gold topaz, Madeira or Spanish topaz—contributing to the confusion between these yellow gemstones.

In ancient times, people believed that citrine gemstones could calm tempers, soothe anger and manifest desires, especially prosperity. To leverage these powers, Egyptians used citrine gemstones as talismans, the ancient Greeks carved iconic images into them, and Roman priests fashioned them into rings.

A key discovery gave citrine a boost of popularity in the mid-18th century. Mineralogists realized that amethyst and smoky quartz could be heat-treated to produce lemony and golden honey hues of citrine, contributing to an abundance of affordable enhanced gemstones on the market. Once citrine was distinguished from topaz, it quickly became popular in women’s jewelry as well as men’s cufflinks and rings. Today, it remains one of the most affordable and frequently purchased yellow gemstones.

Topaz Overview
Through much of history, all yellow gemstones were considered topaz and all "topaz" was thought to be yellow. Topaz is available in many colors, and it’s likely not even related to the stones that first donned its name. The name topaz derives from Topazios, the ancient Greek name for St. John’s Island in the Red Sea. Although the yellow gemstones famously mined there probably weren’t topaz, it soon became the name for most yellowish stones.
Pure topaz is colorless, but it can become tinted by impurities to take on any color of the rainbow. Precious topaz ranges in color from brownish orange to yellow and is often mistaken for smoky quartz or citrine quartz, respectively—although quartz and topaz are unrelated minerals. The most prized color is Imperial topaz, which features a vibrant orange hue with pink undertones. Blue topaz, although increasingly abundant in the market, very rarely occurs naturally and is often caused by irradiation treatment.

The largest producer of quality topaz gemstones is Brazil. Other sources include Pakistan, India, Sri Lanka, Russia, Australia, Nigeria, Germany, Mexico, and the U.S. — mainly California, Utah, and New Hampshire. Measuring 8 on the Mohs scale, topaz is a very hard and durable gemstone. Its perfect cleavage can make it prone to chipping or cracking, but when cut correctly, topaz makes very wearable and durable jewelry.

**Topaz History**

Yellow gems have been called variations of the name topaz for thousands of years — long before mineralogists determined that topaz occurs in a range of colors, and that many yellowish gemstones actually belong to other mineral species. Ancient texts from the Greek scholar Pliny to the King James Bible referenced topaz, but because of this longstanding confusion, they likely referred to other yellow gemstones instead. During the Renaissance in Europe, people believed that topaz could break spells and quell anger. Hindus deemed topaz sacred, believing that a pendant could bring wisdom and longevity to one’s life. African shamans also treated the gemstone as sacred, using it in their healing rituals. Russia’s Ural Mountains became a leading source of topaz in the 19th century. The prized pinkish orange gemstone mined there was named Imperial topaz to honor the Russian czar, and only royals could own it. Since the discovery of large topaz deposits in Brazil in the mid-19th century, topaz has become much more affordable and widely available for all.

Processes were developed in the 1960s to turn common colorless topaz blue with irradiation treatment. This variety has since flooded the market, making it one of the least expensive gemstones available. Light blue varieties of topaz can be found in Texas, though not commercially mined there. Blue topaz became an official gemstone of Texas in 1969 (“Lone Star Cut”, above right), the same year Utah adopted topaz as its state gemstone.

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**Eye Safety**

*Article written by Bill Buckner, AFMS Safety Chair, copied from the February 2003 AFMS Newsletter.*

“Our eyes are important to us in order to experience much in our world. There [sic] are many things we cannot do without them so let’s think about their safety. It is safer if we wear safety glasses when we hammer, dig, saw, cab, facet, silversmith, cut wire and almost everything we do in lapidary and many other activities. The sun can do damage to your eyes, so good sun blocker glasses can help when we must be in the sun. Some recent medical research tells us even wearing tight collars and ties can cause glaucoma (a serious eye disorder). So fellows, you might want to loosen your collar and tie a little. Eye problems also often accompany diabetes. According to what I have read, both genetics (which we cannot control) and overweight (which we can control) have an effect on diabetes. The next time you pig out just remember you may be asking for trouble with your eyes. Too strong or very bright lights can do damage to your eyes as can light that is to dim. Let us all care for our eyes by protecting them at all times. Have a great life and enjoy the beauty of our hobby.”
Gold Rush in Scotland?

From “Gold prospectors on a treasure hunt in Scotland’s streams”, Dan Sanderson, The Telegraph October 10, 2020

Before he became fascinated by gold and mineral deposits, Danny Weir could count the number of books he had ever read on one hand. Now, when he is not searching for treasure in Scotland’s streams, burns and glens, the 52-year-old’s days are consumed with reading about gold panning and learning about geology.

He is among a rising number of enthusiasts who have begun searching for gold in the UK, with more free time as people were put on furlough, and the appeal of a socially-distanced hobby, increasing interest. The recent surge in panning has caused some to hail the onset of a new Scottish gold rush, coupled with growing interest in commercial-scale exploitation, with the country’s first gold mine, to the north of Loch Lomond, set to start production next month.

“People talk about gold fever - it’s a real thing,” Mr. Weir, from Irvine, North Ayrshire, said. “That first bit of color, once you see that, it’s all over. What a feeling. I could take you to the exact spot where it first happened for me.”

He starred as an “armchair panner” eight years ago, watching TV programs and researching techniques on the internet. Two years later, he tried it out for real. Mr. Weir says for most UK panners, they will find up to two grams of gold a year “if they are lucky”, although he discovers significantly more. The very remote chance of striking it rich by discovering a significant nugget, though, is only part of the attraction. “I love the research, the looking at maps, reading old books about gold panning, the geology,” he said. “You go up there and you see nobody, it’s so quiet and still, the air’s fresh. “Every summer you get an influx of panners, and with furlough and people having more spare time that’s increased. “I’ve been out there in some really crazy weather, but that’s half of the fun to me. Once I was out in Leadhills and the police walked up the hill to ask if I was ok. The policeman said ‘you know it was minus 16 out here this morning.’ But you dress for the occasion. “There’s never been a diamond found and confirmed in mainland Scotland, but I’ve done loads of research, so I’m going looking this year. That’s the dream.”

Small online communities of UK panners have grown to a few thousand strong over recent years, with members sharing their finds and discussing promising hunting grounds over Facebook. Mark Wiseman, another amateur panner, from Banff in Aberdeenshire, says that it is the enduring lure of gold that keeps him coming back. Like many, he first got into the hobby after watching the Gold Rush reality show on the Discovery Channel, which follows the fortunes of family-run gold mining companies. “I started in 2010 and didn’t find one single speck for four or five years,” the 28-year-old said. “But you have more than a chance to find something if you have the patience and dedication. “I don’t go out these days and come home with nothing, albeit it’s sometimes not a lot.”

Over the last decade, he estimates that he has found around 4oz of gold, worth around £6,000 at current rates, although technically, panners are supposed to obtain permission from the Crown Estate in most locations to take it home. Mr Wiseman said the archaic laws still governing the rights to gold from panning, which date back to the seventeenth century, puts many off and is limiting the potential growth of the pastime. “The appeal for me was the hunt for treasure,” Mr Wiseman said. “There’s always been some sort of lure when it comes to gold. There’s that, along with the thought of finding my millions and retiring early, which is a dream that still lives on.”
It is not just the amateurs, though, who want to strike it rich on the back of Scottish gold. With prices currently high, there is more effort being put into making new discoveries by commercial companies while deposits that were known about and were previously seen as unprofitable may become viable. Scotland’s first commercial goldmine, at Cononish near Tyndrum, is hoping to begin production next month with companies exploring other sites in Scotland and Northern Ireland. Gold was not discovered at the Cononish site until the 1980s. “Much of Scotland and Northern Ireland is quite prospective for gold, particularly in small quantities,” Dr. Clive Rice, Emeritus Senior Lecturer at the School of Geosciences at the University of Aberdeen, said. “Of course Scotland is a very small country so our slice of mountain chain is very small. That reduces the chances of finding something big but it doesn’t mean it’s impossible. “We already have one significant gold deposit, very close to going into production. I think it’s possible that there might be other small, high grade deposits. It will take quite a lot of work to find them, but encouragement to carry out that exploration could come from the success of the Coronish deposit, or uncertainty on the world stage. When conditions are uncertain, people want to find gold.”

He said there had always been a “hardcore” of Scottish panners, with previous “gold rushes” noted in Sutherland in the late 1860s, and in Kinnesswood, in eastern Scotland, in 1852. He said he would hesitate to use the term to describe the current situation, and that the days in which significant finds could be made regularly by amateurs are “long gone”. “It’s quite a solitary band, not everyone wants to go panning up in the mountains every day, it’s bloody hard work,” Dr. Rice said. “But now and again someone finds a significant nugget, and that encourages all the rest, but I suspect it will stay at that sort of level.”

The UK’s largest gold nugget was found as recently as 2018, by a man lying face down in a Scottish river. The anonymous amateur found the 85.7g (3.02oz) lump of gold through an alternative to panning known as sniping, in which a snorkel is used to search the riverbed. The value was estimated at around £50,000, given its rarity. “It is true to say that over the past few years, there have been a number of small companies carrying out exploration across Scotland and Northern Ireland, so I’m encouraged something more can be found,” Dr. Rice added. “As long as the price of gold is high, you can be pretty sure there will be people out there, looking.”

Richard Jemielita, a geological consultant from Glasgow in the mineral exploration industry, has searched for gold all over the world. He said the resource had been exploited in the UK since at least the Roman era, but that at least half a dozen companies are currently scouring Scotland for new deposits. “Scotland is relatively well endowed with gold in a European sense, but compared with Australia, Russia, Canada, the US, it’s not on the same page at all,” he said. “The Coronish mine for example, is planning to produce about 175,000 ounces, whereas many of the mines in places like Australia, Canada, it’s multi-millions. “So it’s a different ball game, but the mining company has suggested there could be a goldsmithing industry in which Scottish gold would sell at a premium. On the open gold market, it’s just gold, but if a Scottish jeweller marketed it properly, I think it would sell at a premium. “I’m part of a community of exploration geologists worldwide, and a lot of us are Scottish. One grew up in Callander, two grew up in Cumbernauld. It’s always interesting to me that there are so many of us that have gone from the relative backyard of Scotland to worldwide exploration.”
NCGMS 2020 Field Trips (*please double check before the trip to ensure it is still planned*):

<table>
<thead>
<tr>
<th>Trip</th>
<th>Trip Leader/Contact/Notes</th>
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<tbody>
<tr>
<td>Is there anyone that wants to Dig local rocks ie: Yuba Blue, Argillite Petrified Wood? Send me an email.</td>
<td>John Dolman</td>
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2020 Cancelled Earth’s Treasures Show – looking to 2021. . .

As show chairman, I waited until the last possible moment to be able to successfully mount the show before pulling the plug. Unfortunately it had to be cancelled. A tailgate sale possibly in May might be something the club may consider. You may also call me 575-4252 if you have any ideas.

-Best regards as always, Frank Van Hecke

California Federation of Mineralogical Societies Updates

CFMS has been pretty quiet due to COVID-19, but will have their first Zoom board meeting in December.

Please keep clipping any used stamps from your mail. Long time CFMS member Dick Panky, Contra Costa Gem and Mineral Society, collects bags of stamps from member societies at the annual CFMS Directors meeting, in November. These stamps are donated to the Easter Seal Society, which sells them to dealers and collectors as a fund raiser for Easter Seals. Please bring your stamps to any future meeting and give them to Frank Van Hecke.

-Submitted by Frank Van Hecke, CFMS Director

CFMS SHOWS 2020 ([https://www.cfmsinc.org/](https://www.cfmsinc.org/))

All cancelled club shows removed. Those listed were still planned as of 29 Aug 2020

### Fall

**November 14 – 15: YUBA CITY**

Hours: Sat. 10 – 5, Sun. 10 – 4
Sutter Buttes Gem & Mineral Society
Yuba-Sutter Fairgrounds
442 Franklin Hall, Yuba City, CA 95991
Contact: (916) 677-6696, horita@comcast.net
Show web site: http://sutterbuttesgemmin.org
29th Annual Festival of Gems & Minerals: Raffle, silent auction, kids table, door prizes, exhibits and 14 dealers.

### 2021 Shows

**March 13-14, Arcadia CA**

Pasadena Lapidary Society
"Inspiration Uneath", 62nd Annual Tournament of Gems
Arcadia Masonic Center, 50 W. Duarte Rd.
Hours: 10-5 Daily
Contact: Ellen Ferrell 1-727-512-0381
Email: ellenbf207@aol.com
Website: pasadenalapidary.org

**February 20-21, Antioch**

Antioch Lapidary Club
Jewelry, Gem & Rock Show
Contra Costa County Fairgrounds, 1201 West 10th St., Antioch
Hours: 10 am – 5 pm daily
Admission $6, Children 12 and under/Scouts in uniform – Free
Active Military with ID – Free
Contact: (925) 301-6957, brenda.miguel@yahoo.com

**February 27-28, Vallejo**

Vallejo Gem & Mineral Society
56th Annual Gem & Mineral Show
Solano County Fairgrounds, McCormack Hall, 900 Fairgrounds Dr.
Hours 10 am-5pm
Contact: (415) 254-1506, dduhonvgms@gmail.com

Check websites or call to ensure shows and field trips are still planned during the 2020-21 COVID-19 crisis
November Meeting, Newsletter, and Membership Updates

The Golden Empire Grange (where we meet) is open under COVID conditions. The meeting space is big enough for all to maintain distance, and masks please! The November meeting is important, election of officers. Yes, this has been a "crappy" year for all of us, and the club, as well.

We hope to be going strong next year, PLEASE consider an officer position! We need a secretary, and most other positions filled, if you can stay awake during meeting and take notes you can do this for OUR club. Thank you.

As always, when new newsletters arrive they are posted to the website (certain officer and chair information, such as email addresses and phone numbers is omitted). We keep newsletters going back a year.

Membership Update

Due to COVID-19, the club has not had meetings since April, and a few field trips. However, the newsletter continues to be published and sent to the membership list.

The board has decided to automatically extend all paid-up members in 2020 for the year 2021. An email letter will be sent to you.

For members who may not have renewed for 2020 due to COVID-19, I will be sending an email asking for confirmation that our records are correct, and if so, inviting you to renew for 2020/2021 or perhaps make a contribution to the club.

For members who (per our records) did not renew for 2019 nor 2020, asking again if our records are correct, and if so, asking you to renew for 2020/2021.

The club carries insurance on each member via the "Federation" (California Federation of Mineralogical Societies) at a cost to us, so it is important that we maintain a roster of paid up members, and Life Members, as our list of those members so insured.

- Regards, Charles Lindquist Membership Chair, NCGMS
Hubble telescope gives closer look at rare asteroid worth $10,000,000,000,000,000,000

There's an extremely rare metallic asteroid lurking between Mars and Jupiter, and it's worth more than the entire global economy. Now, the Hubble Space Telescope has given us a closer look at the object, which is worth an estimated $10,000 quadrillion.

A new study this week in The Planetary Science Journal delves deeper than ever before into the mysteries of the asteroid 16 Psyche, one of the most massive objects in the solar system's main asteroid belt orbiting between Mars and Jupiter, about 230 million miles from Earth. It measures about 140 miles in diameter — roughly the size of Massachusetts.

Most asteroids are made of rocks or ice. But 16 Psyche is dense and mostly made of metal, possibly the leftover core of a planet that never succeeded in forming — a so-called "protoplanet," which had its core exposed following hit-and-run collisions that removed the body of its mantle.

The study marks the first ultraviolet (UV) observations of the celestial object. New data reveals the asteroid may be made entirely of iron and nickel — found in the dense cores of planets.

"We've seen meteorites that are mostly metal, but Psyche could be unique in that it might be an asteroid that is totally made of iron and nickel," lead author Dr. Tracy Becker said in a statement. "Earth has a metal core, a mantle and crust. It's possible that as a Psyche protoplanet was forming, it was struck by another object in our solar system and lost its mantle and crust."

Scientists studied the asteroid at two points in its rotation in order to view the details of both sides completely at UV wavelengths. They found the surface could be mostly iron, but warned that even a small amount of iron would dominate UV observations.

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Polishing Sunstones in a Tumbler

Start with #60 or #80 grit, 1 tablespoon per pound of stones. Tumble 3 days. Check for size and shape. If desired, tumble for a few more days and check again.

Wash and clean stones and the tumbler. Put in the same amount of #220 grit and tumble 4 days. Be sure all edges are smooth. Wash and clean thoroughly.

Put in #600 grit, 2 tablespoons per pound. Tumble for 1 week. Wash and clean thoroughly.

Put in Tin Oxide, 4 tablespoons per pound. Tumble for 1 week and check for desired polish.

If not satisfied run for another week. When desired polish is reached, wash and clean.

Put in thick, creamy solution of non-detergent soap and burnish for 1 week. Wash and clean.

- Pasadena Lapidary Society
Nevada County Gem & Mineral Society
P.O. Box 1686, Grass Valley, CA 95945

2020 Elected Officers

PRESIDENT
Edwina Swenson
VICE PRESIDENT
Keven Clark
SECRETARY
Vacant
TREASURER
Frank Van Hecke
DIRECTORS
Christie Harris
Eric Trygg
Christy Busch

2020 Committee Chairpersons

FEDERATION DIRECTOR
Frank Van Hecke
TREK LEADER
John Dolman
HISTORIAN
Beverly Glenn
HOSPITALITY
Vacant
LIBRARIAN
Beverly Glenn
MEMBERSHIP
Charles Lindquist
JUNIOR PROGRAM
Vacant
CLUB PICNIC
Lori Woodhall
REFRESHMENTS
Birthday Honorees
SUNSHINE
Lori Woodhall
NEWSLETTER EDITOR
Blaze Baker (Acting)
WEBMASTER
Charles Lindquist
2020 SHOW ORGANIZER
Frank Van Hecke
Dan Chaplin
SCHOLARSHIP
Joyce Emerson

* Call if sending email

Nevada County Gem & Mineral Society Meetings
The Nevada County Gem and Mineral Society meets monthly with few exceptions. Membership is informed of exceptions at meetings and through Rock Writings. You are welcome to attend any meeting.

General Membership Meeting: First Tuesday of the month, 7:00 p.m.
Executive Committee Meeting: First Tuesday of the month, 6:00 p.m.
Golden Empire Grange Building, 11363 Grange Ct., Grass Valley, CA

NCG&MS is a non-profit organization with the following objectives:

• To promote the study of mineralogy, geology & fossils
• To encourage the collection of minerals and gems
• To foster the study and practice of the lapidary arts
• To provide field trips to mineral localities
• To promote good fellowship, education and recreation

Membership Information
Yearly membership dues for NCG&MS are $25.00 for singles and $30.00 for families. *Deduct $5.00 if you receive your newsletter via email* For information or an application, email our Membership Chairperson Charlie Lindquist at gvrunner99@yahoo.com

Check out our website at: http://www.ncgms.org
First Class Mail

Program: Mini Program & Board Elections
First Tuesdays Monthly at 7:00 p.m.
(no meeting in July - Picnic)
Golden Empire Grange Guild
11363 Grange Ct., Grass Valley

** Bring a Friend! **

2020 Membership dues
Yearly membership dues for NCG&MS are $25.00 for singles and $30.00 for families. Deduct $5.00 if you receive your newsletter via email. Dues are annual and payable in January.