

BOARD OFFICERS ELECTED

President	Jef Wright
Vice President	Justin Engelmeyer
Secretary	Fred Floyd
Treasurer	Toni Floyd

BOARD OF DIRECTORS (APPOINTED)

CFMS Chairperson:	Toni Floyd
Field Trips:	Melissa Takagi
Parliamentarian:	Chris Toft
Shop Coordinator:	Alan Mazzola
Program Chair	Karen Wagner
Show Chair	Michele Shepard
Newsletter Editor	Carol Hiestand
Website:	Ian Burney
Membership Chair	Lori Goodman

STANDING COMMITTEES (APPOINTED)

Facebook Page	Jeff Fox
Ways & Means	Dawn Wright
Historian	Barbara Bury
Hospitality & Good Cheer	Judy Jessup
Meeting Displays	Barbara Bury
Picnic Coordinator	Moni Waiblinger
Refreshments	Dawn Wright
Redwood Rep	Barbara Bury
Librarian	Chris Toft
Calendar	Justin Engelmeyer

NEXT MEETING:

WEDS DEC 18, 7 PM

**DITTUS HALL, REDWOOD
TERRACE**

710 W. 13TH AVE. ESCONDIDO

POTLUCK & GIFT EXCHANGE

INSTALLATION OF OFFICERS

**BRING A FOOD DISH TO SHARE, PLATE,
UTENSILS & PREFERRED BEVERAGE**

**HAPPY BIRTHDAY
TO DECEMBER
BIRTHDAY
MEMBERS!!**

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BIG THANKS TO:

**Board Officers, Directors,
Committee Chairs, and all
those who work so hard to
keep the workshop running,
give classes, contribute stories
& articles and make this such
an awesome club!!**

**2019 has been a great year and
2020 will be even better!!**

DEC PROGRAM: The new board will be installed and any business taken care of, then it's time to PARTY!

POT-LUCK DINNER & GIFT EXCHANGE

Bring a gift (value up to \$20) to exchange.

Bring something delicious to share with the club.

Bring eating utensils, plate, preferred beverage.

IMPORTANT!

If you haven't already done so, please update your email preference, or increase your inbox capacity. We get 10-15 "rejected" emails every time the newsletter is sent out. If you know anyone who isn't receiving the NL, please encourage them to call me!

WORKSHOP HOURS:

There have been several changes, please note the new schedule!

Session cost for members still \$7.00

OPEN SHOPS:

Monday 6:30-9:30 PM

Tuesday 6:30-9:30 PM

Weds. 11:00-2:00 PM

Thurs. 1:00-4:00 PM

(Closed major holidays)

Workshop address:

2120 W. Mission Ave

Suite 260 Escondido

****UPCOMING CLASSES****

Lapidary & Silversmith Workshop

2120 W. Mission, Suite S., Escondido

Cabochon/Lapidary Class & Open Workshops – *Note changes

*Monday 6:30-9:30pm

Tuesday 6:30 – 9:30 pm

Wednesday 11:00 am – 2:00 pm

*Thursday 1:00-4:00pm

Learn to cut and polish a rock into a beautiful stone suitable for wire wrapping or fabricating in

metal. A fantastic assortment of material is available for purchase on site.

The workshop is also open for general use. No prior registration needed.

Thursday 6:00 pm – 9:00 pm *METAL SMITHING only - open for to those students who have had metal smithing instruction or experience and/or have instructor approval. Those students who have attended an introductory class may continue to work on improving their skills in this weekly workshop. An experienced metalsmith will be available for consultation.*

Cost: A \$7 shop fee will be collected for regular workshop. Club membership required.



Introduction to Faceting

An informative introduction and hands-on experience in the world of gem cutting. Learn how to

create a gem out of a piece of rough, during a weekend class. No machine required. Return

students welcome with or without their own machine. Each class can accommodate 3 new

students without machines and 3 returning students with their own machines.

Instructor: Bob Johnson

Location: Club Shop

Dates & times: Saturday, December 14, and Sunday November 15, 2019 – 9am -5pm

Cost: \$80 New students. Club membership required. \$70 return students.

Contact Bob Johnson for more info or to register - 760-809-0152 or email Bob at N78532@yahoo.com

Faceting – Continuation Class

This is a class for continuing students who have completed the Introductory Class and is held once per month, from 9 to 5 on the Saturday following the general meeting, (which is always on the third Wed.)

Instructor: Bob Johnson

Location: Club Shop

Cost: \$35.

December workshop – December 21, 2019, 9-5

Contact Bob Johnson for approval and to reserve a spot - 760-809-0152 or email Bob N78532@yahoo.com

Lost Wax Casting

This is a 3-day class to introduce the student to Lost Wax Casting.

Instructor: John Raabe

Dates & times: Wednesday, December 4, 6-9 Introduction to Lost Wax Casting Procedure

Friday, December 6, 6-9pm –Investment

Saturday December 7, 1:00-? pm Burnout

Cost: \$100. Must be a club member. Returning students \$75

Materials: All required materials will be provided including one ounce of silver

Requirements: Class is limited to 4 members

****Please RSVP by November 27th** , to John Raabe @ 760-749-2749

Next class January 29, 31 & February 1, 2020

Cost: \$60 (club membership required - \$25 fee for single membership)

Materials additional – (Approx. \$30) and please bring a cabochon to set in silver or let us know if you need one.

****Call Diane Hall at (760) 741-0433 (leave message for call back) or email dianehall213@gmail.com for more info or to register.**

Introduction to Silversmithing Class



Ring by Mike Mettelka

This is a 10-hour introductory silversmith class. The students will learn to develop their designs, use a jeweler's saw to cut out a pattern, solder a bezel to a backing and add a bale or a ring shank, creating a wearable piece of jewelry. Intermediate students can work on a project of their choosing with instructor approval. At the completion of this introduction the student can continue learning in the Thursday night workshop.

Instructors: Diane Hall & Annie Heffner

Dates & times: March 28 & 29, 2020, 10-4

OLD GEOLOGIST TALES

By Gene Ciancanelli

DAYDREAMING

One of a field geologist's perks is the opportunity to work in a variety of habitats and observe nature alone without the disturbances and disruption of other people. There is a belief that wild animals are always alert and aware of their surroundings, but on several occasions, I have had close encounters with animals that were not alert. Perhaps they were daydreaming or recognized I was not a threat. Whatever the answer, here are just a few animal antidotes from my days in the field.

In 1963, while exploring for coking coal in Colorado, I'm working in a rugged road-less area comprised of dense thickets, forest, and meadowlands. My work includes surveying and building access roads for the drilling equipment. One day, I'm surveying the route for a new road, through very dense brush on a steep mountainside. It's lunchtime and I'm exhausted from fighting through the brush trying to lay out a route with a grade the drilling equipment could climb. There is no nice place for lunch; so I sit down in the brush to eat a roast beef sandwich. A few bites of the sandwich and there is an unexpected noise, which causes me to sit still. A black bear walks by passing so close that I could easily reach out and pet him. Then I notice that I'm sitting alongside a narrow game trail. The bear doesn't notice or smell either the sandwich or a sweaty geologist. I breathe a sigh of relief as the bear continues on his way down the trail. A few minutes later there is another noise. The bear returns back up the mountain and again passes close enough to touch. He apparently wasn't interested in potato chips either. Occasionally, animals behave differently than we suspect they should. Perhaps, they have something on their mind, like a girl bear? It was that time of year.

One evening, on the same project, the drillers have left for a few days off. I'm sitting on an overturned

bucket next to the rig, industriously writing up the daily report, when a badger comes by. Badgers are strange looking animals with a wide-flat shape covered with long fur and loose skin, which causes a walking badger to appear to be wearing a hula skirt as his skin and fur shimmy and shake. Badgers are intelligent, curious, and fierce animals. The badger walks right up to sniff my boots and look me over. He then walks around me in a circle several times and again sniffs. He wanders off and comes back several times for another sniff. The badger can easily injure me with his long claws and I can kill him with the geology pick. I don't think he knows what to make of me, but since I'm not edible or a threat, he decides to go about the business of looking for his favorite food, prairie dogs, gophers, etc. In the badger's world, I'm just a stinking geologist.

In 1964, I'm working in the Chilkat Mountain range evaluating the Klukwan ultra-mafic iron deposit, near the Tlingit Indian village of Klukwan, which is about 20 miles northwest of Haines, Alaska. For those of you, who are fans of the Discovery channel's television show Gold Rush, this is close to the Big Nugget gold mine, which was owned by Parker Schnabel's grandfather, John Schnabel. It is also very near to this season's other show Gold Rush White Water. I'm surveying drill hole locations along the Chilkat River. It is early morning and I'm half asleep carrying a theodolite on my shoulder and not paying much attention as I wander along through the small trees and high brush along the river bottom. A moose is coming in the opposite direction and I guess he is also half asleep. Suddenly, we both walk around a large bush and almost bump into one another such as can occur when you round the corner in a hallway and meet another person. His foul breath hits me in the face and I jump right as the moose jumps left and trots off. Moose kill more Alaskan people than do bears. I'm lucky this day and can also testify that there is not enough mouthwash in the world to cure the bad breath of one moose.

In 1970, I'm mapping a geothermal project in northern California near Clear Lake in Lake County. The mapping is in very steep terrain

choked with impassable brush that limits access to game trails and fire control roads. At lunchtime, I'm watching for a place to sit and spot a large tree trunk lying across an old fire road. A large fallen tree trunk is a perfect spot to eat lunch. Sitting there, I notice a coyote cautiously walking toward me. Sitting still, I wait until the coyote is 5 feet away and then I shout BOO! The coyote jumps six feet in the air, turns around in mid-air, and is gone out of sight in two seconds. I'm suddenly the Road Runner outsmarting Wile E. Coyote in a Looney Toons cartoon.

Geologists daydream too. Circa 1980, I'm mapping the geology of Glass Butte in southeastern Oregon. Rockhounds are familiar with Glass Butte, which is a locality famous for variegated black and red obsidian and I knew where the best quality obsidian can be found. Sitting on an outcrop eating lunch, I'm mulling over the morning's work and how it fit into the context of the geology as I then understood it. Out of the corner of my eye, something moves between my feet and for once it isn't a snake. Looking down, I see a chipmunk eating crumbs falling off the sandwich. I stop eating and watch him until he has consumed every scrap and he looks up at me with an expression that conveys his thoughts. ***"Well are you going to just sit there or are you going to share the lunch?"*** I tear off some bread and he eats it. This went on until he ate half the sandwich and walked off with his cheek pouches full of bread. He didn't show any interest in the sardines I offered to share. I guess he wasn't a Norwegian chipmunk.



Later that same day, I'm standing in a sand-covered ravine balancing my clipboard in the crook of one arm. Aerial photographs are balanced on the clipboard while I'm using a stereoscope to study and sketch the geology. I'm completely occupied in thought. Suddenly, an uneasy feeling causes the hair on the back of my neck to stand up. Looking up, a herd of wild mustangs have silently moved all around me and are standing so close that I can easily reach out and touch horses with either hand. Making eye contact should be avoided when dealing with large or dangerous wild animals. Wise geologists know this and unfortunate geologists don't. The horses are slowly and silently walking by in the deep loose sand. Each horse, including a stallion standing 15 feet away, is keeping an eye on me. The stallion is facing directly toward me; prepared to attack as he watches his mares pass on their way to a nearby waterhole.



A sunbathing chuckwalla

Chuckwalla's are large fat lizards, about one and a half feet long, that live in the Sonora and Mojave deserts. In 1964, I am mapping the structural geology of thrust faults in western Arizona. Hand over hand, I'm climbing up a steep limestone cliff face measuring structural elements preserved in the rock. As I reach the top of the cliff face, I meet a chuckwalla coming from the opposite direction. Our faces are suddenly about four inches apart. Chuckwalla's are not warm cuddly animals but big ugly black lizards. Startled, I lurch back, but have the presence of mind not to let go of the rock. When startled, a chuckwalla goes into a rock fissure and inflates his body to wedge himself securely to the rock. That is what this chuckwalla did making a hissing sound as he inflated. Indians ate chuckwallas and would spear the inflated chuckwalla to let the air out to pull them from the fissure. It is quite disconcerting to be face to face with an ugly lizard's head and then hear an ominous hissing sound as he inflates. That was a startling animal encounter and one for which I was completely unprepared. I have been stalked by a jaguar, charged by various large animals, been struck at by rattlesnakes, been shot at four different times, and had bears pass close to me and even give warning growls, but that chuckwalla was right up there in getting my adrenaline flowing.

In 1962, Al Buck and I are camped on a deserted Mexican beach on the east side of the Sea of Cortes. There is an extinct volcano nearby and I decide to look at the geology. Up on the volcano,

I'm hammering away on a rock outcrop when a very large black scorpion walks across the rock. I bash him (*this was years before people were environmentally conscious and killing scorpions, rattlesnakes, centipedes, wolves, etc. was the accepted practice*) then look down to see dozens of scorpions walking around me and up my boots. Hammering away has riled them up and dozens are crawling out of cracks in the rocks. Time to leave, as I crunch a few scorpions under my boots. Walking back to camp, I'm crossing a wide dry riverbed, when something moves to my left. I turn and see a large jaguar keeping an eye on me as he walks parallel about 150 feet away. My protection is a geology pick, but I suspect the jaguar won't charge, because jaguars are ambush predators. Sure enough, as we approach the wooded thicket on the riverbed's north side, the jaguar runs ahead disappearing into the brush. He may be setting up an ambush; so, I cross the riverbed back to the other side. I follow the riverbed to the sea and walk back to camp along the beach. No Italian dinner for the jaguar.

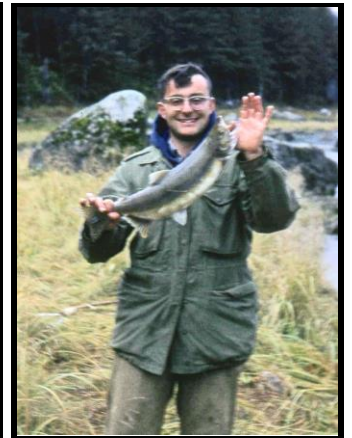
The first year of marriage, Betty and I are living in Haines, Alaska. I'm working alone evaluating an iron deposit in the Chilkat Mountains. If you go on an Alaska cruise and sail into Glacier Bay, there is a large glacier at the end of the bay surrounded by high mountains. If you travel about 45 miles inland that is the area where I was working. We are renting a small apartment owned by forty-year-old John Schnable. Fifty years later, 90+ year old John Schnable is the loveable gold-miner grandfather of young Parker Schnable the miner on the Discovery channel television show Gold Rush. We are poor college students and food is very expensive. The town's tiny grocery store doesn't sell meat or fish, because local folks shoot moose and catch fish. It is not moose season and we eat fish. Each evening, we drive our jeep up a dirt road to the Chilkoot River, to catch salmon or trout. Brown bears are the only other fisher-folk on the river and we keep an eye on them and try not to get nearer than 100 feet. We catch and release a fish on almost every cast until Betty says, "**Gene my arms ache; can't we quit? I catch one last**

fish for dinner and we return home.” On our 50th wedding anniversary, we return to Haines to fish the Chilkoot River. The town has grown and changed. The former dirt road to the Chilkoot River is now paved with a yellow centerline. We stay in a small lodge, built by a Tlingit Indian lady on the hillside above the river. We’re the lodge’s only guests and still have the river to ourselves. Fifty years on, the fishing is still great. We fish a couple of hours each day and over five days catch and release about 70 salmon. One day, I’m fishing and Betty is sitting on the riverbank behind me. Suddenly she says, ***“Gene move back quick!”*** I get back about 5 feet and stop, still holding the fishing pole with the line still in the river, as a mother bear and cub pass so close in front of me that the tip of the fishing pole is above her head. She does not make a sound as she passes by walking on four feet and her hump is even with my face. She ignores me, because her mind is focused on catching fish and feeding her cub. Once again, the Bear God has looked with favor on this Canadian Micmac Indian. I remember as a child, my Micmac Indian great grandmother telling me stories that the animal spirits would protect me. I guess she was right.

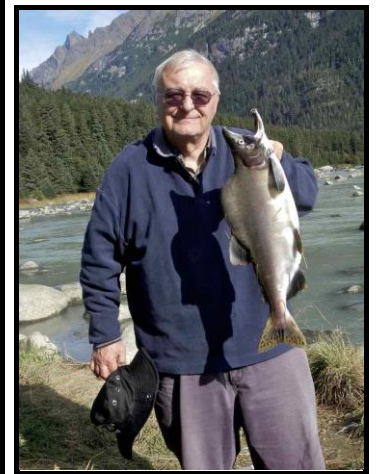


The mother brown bear with her cub, who walked close in front of me.

She walked into the river and caught a salmon for her cub.



Us young folks in 1964



Same couple, same place, now old folks in 2014

The Dresden Green: The Most Historic Green Diamond

Posted by [Tony Cathaway](#) on 3/14/19 10:08 AM

- Share

Every holiday has a unique theme and coloring surrounding their festivities. Apart from their spiritual value, these celebratory events that come around once every year help us leave the routine of our everyday lives behind, and “feel the moment” with our loved ones.



Perhaps one of the most iconic holidays, especially for those living in the Irish diaspora, is Saint Patrick's Day. On this day, hundreds of thousands dress up in green or

wear shamrocks to commemorate Ireland's foremost patron saint.

Aside from the fun and commercialized elements, this holiday holds significant meaning and value for the Island of Éire. What better way for us to celebrate this historic event than with one the most historic [green diamonds](#) of all time; the [Dresden Green](#).



The Diamond's Impressive Characteristics

The Dresden Green is a truly magnificent pear cut diamond with shaping characteristics such as general facet, small table, and large culet commonly associated with old European styles of modification. Despite the stone being secured in a bezel prong mounting, [GIA](#) evaluators managed to weigh the stone at 40.7 carats, deeming it the largest natural green diamond to have ever been discovered up to date.

Even though it was cut prior to 1741, the quality of the diamond's finish is very impressive, receiving a “very good” even by today's rigid diamond grading standards. Another characteristic that managed to impress the GIA was the stones clarity. Despite its considerable thickness, it is fairly transparent, a very rare characteristic among diamonds. Further, since the stone has very few inclusions, it was given a VS1 grading.



According to the GIA, the diamond's color is its most intriguing feature. Using their Colored Stone Grading nomenclature, they concluded that the gem is of a medium shade of green with a grayish tone. Being slightly limited by the mounting of the stone, the GIA Gem Trade Laboratory system gave this diamond a Fancy Green grading. Finally, as the stone is nearly free of impurities caused by nitrogen, it was given an IIA grading, a characteristic given to only 2% of naturally colored diamonds.

The Tale Behind The Dresden Green

Although great speculation has surrounded the origins of the Dresden Green, it is believed to have come from the Kollur Mine in India. The diamond's history however is well documented from as early as 1741.

The first mention of the stone is in the Inventory Book no.16 located in the Green Vaults of Dresden, Germany. It states that the gem was sold by a merchant named Delles to the King of Poland, Augustus III, during the 1741 Great Annual Easter Fair at Leipzig. A year later the diamond was set as part of a badge fashioned for the Order of the Golden Fleece. In 1746, by King's order, a new setting was created, this time incorporating numerous small colorless diamonds as well as another one of his famous diamonds, the Dresden White.

The green diamond, along with the rest of the contents of the Green Vaults, was moved to the Konigstein Fortress for safe keeping during the Seven Year War (1756-1763). As you may recall from history, Saxony was defeated, and so the Golden Fleece was dismantled with the part containing the Dresden Green being set as part of a hat ornament during 1768 (in which it currently resides accompanied by other colorless diamonds).



[Source](#)

The diamond was made available for the public to admire up until the start of World War II. During the years of war, the entire collection of the Green Vaults was stored in Konigstein Fortress until they were transported to Moscow in 1945 for safekeeping (as Dresden was almost completely destroyed). The vaults' contents were returned during 1958, and in 1959 they were put on display for the first time since 1942.

During 2000-2001, the Dresden Green diamond was showcased alongside the [Hope Blue](#) in the Harry Winston Gallery of the Smithsonian Institution. By 2004, Dresden's Palace was also restored along with its Green Vault. This meant that the royal jewels (along

with the Dresden Green) were officially “home”, and have remained for public display up to this day.



DECEMBER BIRTHSTONE



If you had to pick one December birthstone, which would it be: tanzanite, turquoise or zircon? From the blue to bluish purple of tanzanite, to the intense blue and green of turquoise, to the rainbow varieties of zircon – there’s a color for everyone. If blue is what you’re looking for, all three December birthstones have their own unique take on this favorite hue. Whatever your color, style or

budget preferences may be, we can help you pick the right December birthstone for you or a loved one.

JUMP TO:

[TURQUOISE](#) [TANZANITE](#) [ZIRCON](#)

TURQUOISE BIRTHSTONE

TURQUOISE BIRTHSTONE MEANING & HISTORY

Turquoise is a semi-translucent to opaque gem that ranges from blue to green and often has veins of matrix (remnants of the rock in which it formed) running through it. This December birthstone has been cherished for millennia. The pharaohs and other rulers of ancient Egypt adorned themselves with it. Chinese artisans carved it more than 3,000 years ago.

The turquoise birthstone was thought to possess many beneficial powers, like guaranteeing health and good fortune. From the 13th century on, it was believed to protect the wearer from falling (especially off horses), and would break into several pieces at the approach of disaster. Hindu mystics maintained that seeing a turquoise after beholding the new moon ensured fantastic wealth.

This turquoise birthstone also played an important role in the lives of Native Americans. The Apache thought turquoise could be found by following a rainbow to its

end. They also believed that attaching the December birthstone to a bow or firearm made one's aim more accurate. The Pueblo maintained that turquoise got its color from the sky, while the Hopi thought the gem was produced by lizards scurrying over the earth.



A 46.28 ct medium green blue turquoise free-form cabochon Photo: Robert Weldon/GIA

This December birthstone adorns the funerary mask of King Tut, who ruled Egypt more than 3,000 years ago. It also appears in jewelry belonging to more modern royalty: Wallace Simpson (1896–1986), Duchess of

Windsor (the woman for whom King Edward VIII gave up his throne), wore a famous [amethyst and turquoise necklace](#) made by Cartier. Turquoise is also the gem of the [11th wedding anniversary](#).

In European tradition, the gift of a turquoise ring means “forget me not.” Turquoise is considered a national treasure in Tibet, where it is believed to grant health, good fortune and protection from evil. December's birthstone also imparts peace to those who wear it.

WHERE IS TURQUOISE FOUND?

Turquoise has been mined in the Nishapur district of Iran for more than 1,000 years. The prized even-colored, intense blue turquoise from this region is dubbed “robin’s egg blue,” “sky blue” and “Persian blue.” Trade professionals now use these terms to describe turquoise of this color – regardless of the source.



This is the view on the way to the Nishapur district of Iran. Courtesy: Dr. Edward J. Gübelin Collection

Although New Mexico was the largest producer of turquoise in the U.S. until the 1920s, today most of the U.S. production of this December birthstone comes from Arizona and Nevada. Mines have evocative names like Dry Creek, Easter Blue, Emerald Valley and Fox. The Kingman mine in Arizona is a historically important source that is known for producing intense blue turquoise. Now closed to turquoise mining, Arizona’s Sleeping Beauty mine was a prolific producer for more than four decades.

Today, China is the world's largest producer of this December birthstone. Hubei Province, in central China, is the source of most of the gem-quality turquoise currently being mined there.

TURQUOISE BIRTHSTONE CARE & CLEANING

Some turquoise is treated to improve its durability (it has a Mohs hardness of 5 to 6), appearance and polish. Turquoise can be dyed or chemically enhanced by adding an epoxy or acrylic resin for greater hardness or better color. Also seen are cavities filled with a metal-loaded epoxy to imitate pyrite inclusions.

Turquoise is generally stable to light, but high heat can cause discoloration and breakage. Your turquoise birthstone can be damaged by acids, and it can be discolored by certain chemicals, cosmetics and even skin oils or perspiration. It's safe to clean turquoise jewelry with warm, soapy water, but this December birthstone should never be cleaned with steam or ultrasonic cleaners. Heat or solvents can damage the treated surfaces on some turquoise.



The intense blue turquoise beads in this necklace came from Arizona's Sleeping Beauty mine. Photo: Robert Weldon/GIA. Courtesy: Somewhere In The Rainbow

MORE ABOUT TURQUOISE TURQUOISE BUYER'S GUIDE

TANZANITE BIRTHSTONE

TANZANITE BIRTHSTONE MEANING & HISTORY

Tanzanite may be a relative newcomer to the world of colored stones, but it was one of the most exciting gem discoveries of the 20th century. Blue stones emerging from Tanzania were identified as the mineral zoisite in 1962. Not until 1967, though, did prospectors locate the primary source for this December birthstone: the Merelani Hills. It was eventually named tanzanite in honor of its country of origin. The tanzanite birthstone is often described as “velvety,” mostly because of its deep and saturated color, which ranges from a pure rich blue to violet, with the blue considered most valuable.

Tiffany & Co. believed that tanzanite had international appeal and became its main distributor. In 1968, Tiffany launched a major advertising campaign to promote it. With its vivid colors, high clarity and potential for large cut stones, tanzanite quickly became a sensation. Today, it is not only a December birthstone, but it is also the gem for the [24th wedding anniversary](#).



This 5.59 carat (ct) oval tanzanite is surrounded by 28 tapered baguettes and 12 round brilliant cut diamonds. Courtesy: EraGem.com

WHERE IS TANZANITE FOUND?

The Merelani Hills of northern Tanzania is the only place on earth where tanzanite is mined commercially. Grass-covered hillsides, scrub brush, rocky soil and an occasional tree form the local landscape. In the major mechanized operations there, thousands of workers recover tanzanite from mines dug over a 100 meters (more than 300 feet) deep into the earth. North of the mines tower the snow-covered slopes of Mount Kilimanjaro.



Emerging from the clouds is the domed summit of Mount Kilimanjaro. Tanzanite is mined in its shadow.
Photo: Eric Welch/GIA

TANZANITE BIRTHSTONE CARE & CLEANING

This December birthstone (6 to 7 on the Mohs scale of hardness) is resistant to the effects of normal heat, light and common chemicals. Still, the December birthstone may crack if exposed to very high temperatures or sudden temperature changes, and it abrades easily. It can be attacked by hydrochloric and hydrofluoric acids.

Most tanzanite begins as brownish zoisite that is heat treated to produce the blue to violet hues that characterize this December birthstones. The resulting color is permanent, and there are no additional durability concerns.

Your tanzanite birthstone is best set in earrings or pendants. While not recommended for daily wear in a ring, with a protective mounting and some care this December birthstone can be an attractive special-occasion jewel.

Warm, soapy water is the best way to clean this December birthstone. [Ultrasonic and steam cleaners](#) are never recommended for tanzanite.

MORE ABOUT TANZANITE TANZANITE BUYER'S GUIDE



In this beautiful special-occasion ring, a 4.91 ct tanzanite is protected by eight prongs and a regal frame of diamonds. Courtesy: 1stdibs.com

ZIRCON BIRTHSTONE

ZIRCON BIRTHSTONE MEANING & HISTORY

The origins of the word “*zircon*” have elicited colorful debate. Some scholars believe it comes from the Arabic word *zarkun*, meaning “cinnabar” or “vermilion.” Others think the source is the Persian word *zargun*, or “gold colored.” Considering the broad color palette for this December birthstone – red, orange, yellow, brown, green and blue – either derivation seems possible. Colorless zircon is known for its brilliance and flashes of multicolored light, called fire, which have resulted in centuries of confusion with diamond.

During the Middle Ages, this December birthstone was thought to lull one into a deep sleep and scare off evil spirits. In the Hindu religion, zircon alternates with hessonite garnet as one of the nine [gems of the *navaratna*](#). When worn together, the nine gems protect the wearer and bring wealth, wisdom and good health.

Victorians had a fondness for blue zircon. Fine specimens can be found in English estate jewelry from the 1880s.



Sri Lanka's wealth of gems is legendary: Sapphire in various colors, [ruby](#), [alexandrite](#), [spinel](#), [tourmaline](#), [moonstone](#) and quartz are some of the gem minerals unearthed there. So is the December birthstone zircon. Elahera, a region in central Sri Lanka, is one of the country's most productive areas. Mountains, jungles and restless streams make for a dramatic landscape.

Zircon comes in a wide array of attractive colors. Photo: Robert Weldon/GIA. Courtesy: Dr. Edward J. Gübelin Collection

WHERE IS ZIRCON FOUND?



An artisanal miner searches for gems in the Elahera region of Sri Lanka. Photo: Vincent Pardieu/GIA

birthstones in yellow-brown, orangy brown, pink and purple. Go there and you'll see open savannahs, dry stream beds and low-lying hills that meet the horizon. Zircon Hill is where this December birthstone is mined. The nearby city of Alice Springs is known for its outback culture, aboriginal art and quirky sporting events like a regatta race held in a dry river bed.

This December birthstone is often located near sapphire sources. In addition to Sri Lanka and Australia, countries where the two gems overlap include Myanmar, Vietnam and Cambodia.

ZIRCON BIRTHSTONE CARE & CLEANING

Zircon ranges from 6 to 7.5 on the Mohs scale of hardness. It is commonly heat treated to produce blue and colorless varieties, as well as orange, yellow and red. The gem is generally stable when exposed to light, but some heat-treated stones may revert to their original colors (usually light brown) after prolonged exposure to bright light. Exposure to heat can alter the color of some zircon. This December birthstone is stable when exposed to chemicals.

Because zircon tends to abrade, it is best to avoid wearing it in rough conditions, such as while gardening, playing sports or doing dishes.

Clean your zircon using a soft brush and mild soap in warm water. Ultrasonic and steam cleaners are not recommended for this December birthstone.

Australia's Harts Range is known for producing zircon



This blue zircon and diamond ring is handcrafted with a 6.59 carat emerald cut blue zircon center stone, accented by 0.76 carats of emerald cut tsavorite garnets, and 0.14 carats of brilliant diamond rounds set in 18K white gold. Courtesy: Omi Privé

Turquoise, tanzanite and zircon – you can choose from so many shades of blue when you’re born in December. You’ll also be able to pick gems that are bright red, yellow, green, purple and brown. Have fun looking for the perfect December birthstone that reflects your personality. When you are ready to shop for your December birthstone, be sure to take our [Tanzanite Buying Guide](#), [Turquoise Buying Guide](#), and [Zircon Buying Guide](#) with you when you go!

