



TAURANGA GEM & MINERAL CLUB INC

P.O. BOX 841 TAURANGA 3144

GEMZONE

March 2021

VILLAGE GEMS

**TAURANGA GEM & MINERAL CLUB Inc.
HISTORIC VILLAGE
17TH AVE TAURANGA**

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NOVELTIES - KAURI GUM - JEWELLERY - POLISHED FACES
MUSEUM & FLUORESCENT DISPLAY**

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SERVICES:

- Stone Cutting, Polishing & Drilling
- Jewellery Repairs & Bead Threading
- Stone Bead Necklace & Earring Making

**HOURS: Monday – Friday 9.30am to 5pm
Saturday 10am – 2pm**

Rotorua Lapidary Rock & Mineral Supplies Ltd
1120 Eruera Street, Rotorua 3010
Postal Address: P O Box 569, Rotorua 3040

Ph: 07 348 8996 Fax 07 348 8621

rotorualapidary@xtra.co.nz
www.rotorualapidary.co.nz

Colin & Bev Simmons

March Club Events

Workshop

Every Tuesday night from 6pm to 7-30pm.

Use of the workshop during shop hours:

\$2 per hour

Please pay at the counter

Club Night

Monday 8 March

Juniors from 6 pm – 7.30pm: Graham Hill to set up a showcase.

Seniors at 7.30pm: Polish Agates in the workshop.

Interest table: Field trip finds from Komata Reef.

AGM
Annual General Meeting

A.G.M. Presidents report and election of officers. Please attend everyone is welcome.

Committee

Wednesday 17 March at 7.30 pm. Meet at the clubrooms.

Field Trip

Sunday 28 March: Apache Tears. Meet in Paeroa outside McDonalds, at 9.30am.

NOTE: There will be a 1½ hour walk, so you must be fit enough to participate. Contact Graham if you need to carpool. Do check your email in case of bad weather.

Graham Hill: 027 2566399 / 07 552 4496



One Apache tear

Field Trip cancellations: TGMC takes the safety of its members seriously and has the right to cancel field trips in the event of severe weather warnings or other factors that prevent any trip from taking place. News about changes, postponements or cancellations to a proposed field trip will be advised via email and posted on the Facebook page as soon as possible.

Collection Viewing Night

Wednesday 24 March at 7.30pm

Meet at the home of Dean Morman, 11 Emery Place, Papamoa Beach. Ph: 572 3184. Dean will demonstrate freeforms.

Please bring a plate to share for supper and any rocks or fossils for identification or discussion.

Club notices

Subscriptions are due by 31 March

Please pay your subs before 31st March 2021. Tauranga Gem & Mineral Club's financial year ends on 31st December.

NEWSLETTER EDITOR WANTED

To compile the newsletter most of the work can be done on your computer at home. A few hard copies need to be printed as well using the printer at the clubrooms. It's a once monthly task and is often very interesting, especially if you decide to add some extra articles.

Please contact Carol (sec.tgmc@hotmail.com) or phone Sue on 544 4878 if you are interested. Otherwise find out more at the A.G.M.

TGMC Committee Members 2020 and other Club Officers		
President	Graeme Dewhurst	576 7874
Vice President	Carla van den Hout	552 5175
Treasurer	Naera Wilton	07 864876
Secretary Club Email	Carol Cunningham sec.tgmc@hotmail.com	578 1639
Membership		
Publicity	Bryce Cooper	027 6950606
Shop	Carla van den Hout	552 5175
Shop supplies	Olga Nicholson Bryce Cooper	575 2070
Field trips	Graham Hill	552 4496
Field trip assist.	Charlie Harris	021 0409332
Workshop	Bryce Cooper	
	Raymond Schroder	576 3027
Museum display	Margaret Parker	576 2660
Facebook admin	Ian Mason Kristy Pawson	543 4951
Newsletter advertising	Steve Raynor	282 8126
Patron	Roger Eade	576 0117
Newsletter	Sue Millman	544 4878
Library/Museum	Marcel Authier John Clark	572 3034 022 0206812
Maintenance	Bryce Cooper	
Microscopes		
Silent Auction	Ian Mason	543 4951

New Zealand Events

20-21 March: Whangarei Rock & Gem Club, Vintage Car Clubrooms, Kiwi North Gate 2, SHW 14 Maunu, Whangarei

30 April – 2 May: Tauranga Gem & Mineral Club Show, Tauranga Racecourse, 1383 Cameron Road, Greerton.

15-16 May: Northshore Rockhounds Club Mini Show, Milford Senior Citizens Hall, Kitchener Road, Milford

National Show: 15-17 October, Mineral Club of Hutt Valley & Wellington, Lower Hutt

2022 – National Show. To be hosted by the Canterbury Mineral & Lapidary Club.

Australian events

2-5 April, 2021, Gemboree, Tasmania

15 -19 April 2022 Gemboree Mudgee, NSW

WE NEED NEW COMMITTEE MEMBERS

Could you spend a little bit of your time to join our Committee?

Meetings are the third Wednesday of each month - 7.30pm to about 9pm

The current Committee has ushered in so many successful initiatives under its leadership, so we are excited to find the next crop of members who can continue bringing good ideas to the group!

We are a very relaxed group and meetings are quite informal.

Please email Carol at sec.tgmc@hotmail.com or better still come to the AGM on March 8th and meet us.

We look forward to working with you to make this year the best yet!

**SUBSCRIPTIONS ARE DUE
BY 31 March 2021**

IMPORTANT

If you are paying by online banking
PLEASE return this form – or email your details.

SUBSCRIPTION PAYMENT FORM 2021

Tauranga Gem & Mineral Club, PO Box 841, Tauranga 3144

[Email: sec.tgmc@hotmail.com](mailto:sec.tgmc@hotmail.com)

Surname.....

Christian Name.....

Other Names for Family Membership.....

Junior members.....

Address.....

.....

Post Code.....

Phone: Home.....Mobile.....

Email.....

I wish to receive my newsletter: (1) by email ,

(2) pick up from clubrooms , (3) posted out (\$12 extra)

Financial year ends 31st Dec. Subs due for payment by 31st March.

If sub unpaid by 31st March all Club privileges lapse, including newsletter

Subs: Family \$35. Individual \$25.

Subs can be paid to Westpac Bank a/c no. 030435 0467603 00

Use your name as reference. Please still fill out this form and return by
email or send to club to ensure your payment is recognized.

New member? Renewing member? Any Junior members?

Office use only: Payment Newsletter M/S List



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and crystals.

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MT MAUNGANUI
07 575 3851

WANTED TO BUY

Wanted to buy: I am looking to buy any lapidary equipment. I am most hoping to find any slab / trim saw 8" or 10" or larger. Any equipment for cabbing & grinding. Contact: kathy.gott@gmail.com

Wanted to buy: Collections of Minerals, Crystals and polished faces. Large or small, part or all. Contact Greg 575 3851.

Wanted to buy: Bob Vear is looking for NZ Fossils Ammonites and Trilobites or any interesting fossils. Location identified preferably. Contact Bob (07) 543 0660.

Wanted: Please drop off any surplus egg cartons at the shop for Ian Mason.

Wanted to buy: Gold, silver, any old or unwanted jewellery made of gold or silver for scrap. Top scrap prices paid. Contact Graeme on 07 577 1979 or 027 4496 960; email carver.petersen@xtra.co.nz



7 tips on how to ethically fossick for greenstone

Chantal Tumahai from Ngāi Tahu reveals the secrets to finding New Zealand pounamu.

Turns out there are many things to discover about New Zealand pounamu – and where to find it is just one.

Chantal Tumahai, Ngāi Tahu's Pounamu Lead, can not only recount its many colour variations, she knows where on the West Coast it washes up, the way it's managed and how New Zealand's market compares with pounamu (or jade) found overseas in places like China.

managed and how New Zealand's market compares with pounamu (or jade) found overseas in places like China.

“I grew up in a family of traditional Māori pounamu fossickers,” Tumahai says “We call my nanny, Taua Gay, ‘the walking pounamu bible’. She’s a tiny woman. Short and lean. But she’s a total animal when it comes to finding pounamu and getting it home. “A while ago she lugged home a piece weighing 50kg (it’s tradition to take only as much as you can carry). It was unbelievable. Taua Gay’s in her late 60s, but her knowledge and passion for pounamu is pretty much superhuman.” Tumahai, Ngāi Waewae, runs the pounamu programme on behalf of Ngāi Tahu.

In 1997, the tribe became the legal owner and guardian (kaitiaki) of all New Zealand pounamu. The role means Ngāi Tahu are the only people in the country with legal permission to extract pounamu from the wild for either tribal or commercial use. As owners, they authenticate and buy pounamu accidentally extracted by mining companies. They sell raw stone to registered pounamu carvers throughout New Zealand and they sell and market products like tiki pendants made from authentic Ngāi Tahu pounamu. They’re also responsible for protecting the integrity and sustainability of New Zealand pounamu.

“It’s in diminishing supply around the world. So, this is an important part of what we do,” Tumahai says. “In China, where they’ve been extracting jade for nearly 8000 years, supply is running out. But, here in New Zealand, we haven’t extracted our pounamu for anywhere close to that length of time nor at the same rate.

“We live by different rules, too. We don’t sell our raw stone to overseas buyers. And we ask all commercial miners who accidentally discover pounamu to authenticate it with us and not to offer it up to the black market.”

Ngāi Tahu set up an authentication scheme in 2010. “It’s a simple online scheme that allows people to check their raw or carved pounamu is the genuine article and not a rip-off from overseas or a black market product.” Carvers and retailers can join the scheme too. “It’s a way everyone can support a sustainable industry.”

So, what’s the deal when it comes to finding pounamu for yourself? Is pounamu completely off limits, or is there a way to fossick ethically?

Tumahai explains: “Anyone is welcome to fossick for pounamu – provided they follow a couple of simple rules about where and how to find it.”

Chantal Tumahai’s tips on fossicking for New Zealand pounamu

1. Fossick on the West Coast beaches between Greymouth in the north and Milford Sound in the south.
2. Look for pounamu pebbles and stones on the beach only.
3. Go after a good rain or not long after the rivers have flooded – that’s when deposits of pounamu dislodge and move with river currents to the coast.
4. Keep an eye out for a stone that’s dark green in colour. Also look for yellow and orange flecks or pearly white tones. Raukaraka pounamu, for example, takes its name from the yellowish tinges found in the leaves of the karaka tree.
5. Avoid getting duped. Steer clear of serpentine – pounamu’s equivalent to fools’ gold. Similar to greenstone in colour but not in strength, serpentine crumbles when dropped.
6. Take only as much as you can physically carry. Then choose to gift it to someone else, keep it or have it carved into a keepsake (as is the cultural practice of Ngāi Tahu).
7. Get the full immersion pounamu fossicking experience by joining a registered Ngāi Tahu member on a hosted tour of the Arahura River, one of the country’s richest and most sacred pounamu regions.

Strange Rocks from Flying Lava: Pele's Hair and Pele's Tears

The volcanoes of Hawaii produce many spectacular, dangerous and frightening sights. Sometimes they erupt lava fountains that spray incandescent lava hundreds of feet into the air. Sometimes they produce lava flows that cascade over a cliff into the ocean. And, sometimes an especially vigorous eruption will spatter lava over the surrounding landscape. In each of the above situations, where molten lava flies through the air and when the conditions are right, strange eruption products are formed. Two of the most interesting are known as "Pele's Hair" and "Pele's Tears". Both are named after the legendary Pele, the goddess of Hawaiian volcanoes.



A cluster of Pele's hair from Hawaii, with a hand lens used for scale.



Above: Pele's hair is blown by the wind and usually accumulates in front of and behind obstacles to the wind. Here piles of Pele's hair have accumulated along a curb in a parking lot. This hair was fallout from a plume that rose from the Halema'uma'u crater. Photo by the United States Geological Survey.

<https://geology.com/volcanoes/peles-hair/>

Pele's Hair is the name given to hair-like strands of volcanic glass that are stretched from still-molten masses of lava as they are launched or fall through the air in a lava fountain, a lava cascade, or lava spatter. Pele's hair can form as a flying globule of molten lava separates into two or more pieces and thin strands of lava stretch between the pieces after their separation. The strands solidify into glassy strands and accumulate downwind from their source. There the ground and vegetation can be covered with thin, lustrous, hair-like strands of glass. The strands are known to have been carried up to several kilometres from their source by the wind. Strands of Pele's hair are very thin, almost always under $\frac{1}{2}$ millimetre in width. They range in length from tiny broken pieces up to strands as long as 2 meters. Their appearance can be similar to coarse human hair with a golden-brown colour. Geologically, Pele's hair is a mineraloid formed from basaltic lava. Pele's hair should be considered a hazardous material. The thin strands of glass are very sharp, very brittle, and break easily. If handled they can penetrate human skin, break in the wound, and break again into even smaller pieces when extraction is attempted. In areas where Pele's hair is forming, tiny sharp particles can be carried by the wind or remobilized when dust on the ground is disturbed. These tiny particles can cause severe eye injury. The tiny razor-sharp fragments can also cause respiratory injuries if inhaled.



Assorted shapes of Pele's tears from Mauna Ulu with U.S. dime for scale in lower right.

Pele's Tears aka Apache tears: A tiny teardrop-shaped globule of black volcanic glass similar to obsidian is sometimes attached to the end of a strand of Pele's hair. These usually break free from the hair and fall close to the vent that ejected the lava. Apache tears fall between 5 and 5.5 in hardness on the Mohs Scale.

Wikipedia suggests the name "Apache tear" comes from a legend of the Apache tribe: about 75 Apaches and the US Cavalry fought on a mountain overlooking what is now Superior, Arizona, in the 1870s. Facing defeat, the outnumbered Apache warriors rode their horses off the mountain to their deaths rather than be killed. The wives and families of the warriors cried when they heard of the tragedy; their tears turned into stone upon hitting the ground.

Shapes: Trapped within the glass droplet are bubbles of gas and particles called vesicles. The shape of a vesicle can provide an indication of the velocity of the eruption. When vesicles form within the lava they are spherical in shape. If the eruption is turbulent the vesicles will deform and become elongated in shape. If the velocity is low they will retain their spherical shape as in the case of Pele's tears.

Right: Apache tears from the Maratoto area gathered by the Hill family





New Zealand's oldest rock found at Lake Wānaka

New Zealand's oldest rock has existed for 2.7 billion years – but has spent the past five years sitting in a drawer at the University of Otago.

Associate Professor of Geology James Scott made the find while gathering peridotite rock from known sites around New Zealand. The goal was to better understand the composition of the mantle below the crust of the continent of Zealandia by collecting ancient peridotite rock.

I knew that these rocks were there on the shore of Lake Wānaka, but nobody had ever done the dating of them.” However, he was surprised with the result after it went through isotope dating analyses in Canada in 2015 and its age was revealed. Previously, the oldest known rocks in New Zealand were found in Nelson and were about 500 million years old. The discovery led to a shift in thinking about New Zealand in geological terms, Scott said.

The Zealandia continent was geologically believed to be young in comparison to other parts of the world but this rock was comparable to the world's oldest rocks, found in parts of Africa and Canada. The rock normally sits about 30 kilometres under the Earth's crust. It is believed to have made its way to the surface via a series of extinct volcanoes underneath Lake Wānaka, which would have thrown out the rock in an explosion about 23 million years ago.

Samples of the rock had been noted along the shoreline, near Mt Albert Station, in the 1980s, but nobody had looked into it any further, Scott said. I assumed it was still there, so we went and had a poke around.” It was “incredibly fortuitous” to find the green, magnesium-rich rock. Most of the sample he took was crushed into powder to allow the age testing to occur and only a fragment of about 2cm by 2cm remained.

Amateur geologists could search for more of the rock but it was not abundant and you needed to know what you were looking for, Scott said.

Debbie Jamieson, Dec 02 2020

<https://www.stuff.co.nz/science/123576670/new-zealands-oldest-rock-found-at-lake-wnaka>

A poster for 'THE 2021 NATIONAL ROCK & MINERAL SHOW'. The title is in large, bold, white letters against a dark blue background. Below the title, it says 'Discover the exciting and colourful world of Gems, Crystals, Minerals, Rocks and Fossils'. The central image shows a large, colorful pile of various rocks and minerals. At the bottom, there is a list of activities: 'Bring your Rocks and Fossils for expert identification', 'Dramatic displays', 'Fun and interest for all the family', 'Sales tables, Jewellery, Rock art, Exotic Specimens'. The venue is 'Expressions Whairaki Arts and Entertainment Centre / 336 Fergusson Drive / Upper Hutt City'. The dates are 'Friday 16 Oct. - Sunday 17 Oct. 2021 / 9am-5pm Friday and Saturday / 9am-4pm Sunday'. There are logos for the Mineral Club of Hutt Valley & Wellington Inc. and the show's website.

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Facebook groups to follow

Tauranga Gem & Mineral Club



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TAURANGA	corner elizabeth & glasgow sts (OPEN 7 DAYS)
MOUNT	37 hewletts road. (beside the flyover)
GREERTON	1231 cameron rd (next to super liquor)
FRASER COVE	corner of fraser & brook streets
OTUMOETA	95 ngatai road (near the otumoetai golf club)

