



**TAURANGA GEM & MINERAL CLUB INC**

**P.O. BOX 841 TAURANGA 3144**

**GEMZONE**

**May 2021**

**VILLAGE GEMS**

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

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- Fossils
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- Greenstone & Jade Carvings

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- 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  
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Ph: 07 348 8996 Fax 07 348 8621

[rotorualapidary@xtra.co.nz](mailto:rotorualapidary@xtra.co.nz)  
[www.rotorualapidary.co.nz](http://www.rotorualapidary.co.nz)

Colin & Bev Simmons

# May 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 10 May

Juniors from 6 pm – 7.30pm

Oamaru stone carving and rock ID competition

Seniors at 7.30pm:

South Island Finds

Show and tell by Graham Hill and Peter Nixon

Interest table: Field trip finds from last trip

## Committee

Wednesday 19 May at 7.30 pm.

Meet at the clubrooms.

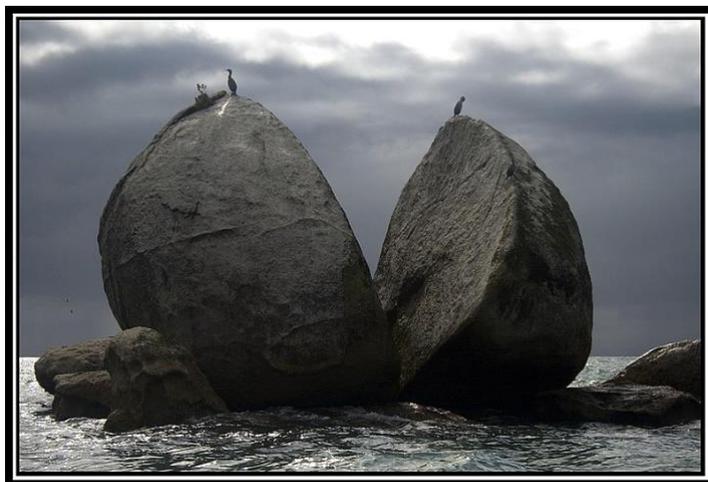
## Field Trip

Sunday 30 May Fieldtrip Te Aroha

Meet at Te Aroha Clock Tower by 9.30am. An hour walk each direction is involved with this trip. Will need a hammer and chisel **and if you are very keen** something to dig with, either a pick or shovel remember it is a bit of a walk in, and out with what you have collected.

NOTE: Contact Graham if you need to carpool. Do check your email in case of bad weather.

Graham Hill: 027 2566399 / 07 552 4496



Large South Island Concretion

**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 Last Wed Of Month

Wednesday 26 May at 7.30pm

Greg & Tania Lilly

24 Seabreeze Place , Papamoa

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

## Club notices

**Volunteers For The Gemshow NEEDED**

We need help to fill in the roster where you are able to help out at the Gem Show

**Subscriptions are Overdue**

**Your Entries Must Be Nearly Ready** for the Gemshow. Grab your favourite rock in each category and submit them for the comp, you never know.

Details later in this newsletter

TGMC Committee Members 2020 and other Club Officers		
President Shared	Graeme Dewhurst Carla van den Hout	576 7874 552 5175
Vice President Shared	Carla van den Hout Graeme Dewhurst	552 5175 576 7874
Treasurer	Johanna Raynor	072828126
Secretary Club Email	Steve Raynor sec.tgmc@hotmail.com	282 8126
Membership		
Publicity	Bryce Cooper	0276950606
Shop	Carla van den Hout Olga Nicholson	552 5175 575 2070
Shop supplies	Bryce Cooper	0276950606
Field trips	Graham Hill	552 4496
Field trip assist.	Charlie Harris	021 0409332
Workshop	Bryce Cooper	0276950606
	Raymond Schroder	576 3027
Museum display	Margaret Parker	576 2660
Facebook admin	Ian Mason	543 4951
	Kristy Pawson	
Newsletter advertising	Ian Mason	543 4951
Patron	Roger Eade	576 0117
Newsletter	Ian Mason / Gordon Sherwood	543 4951 / 0226323534
Library/Museum	Marcel Authier	572 3034
	John Clark	022 0206812
Maintenance	Bryce Cooper	0276950606
Microscopes		
Silent Auction	Ian Mason	543 4951

## New Zealand Events

**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

**Gemfest, Sat 24 and Sun 25 July 2021**  
Cairns Mineral & Lapidary Club  
Cairns Youth & Recreation Centre  
Grounds, 129 Mulgrave Rd, Cairns City  
QLD, Australia

**GEMKHANA 24 - 25 Sep 2021**  
Hawkesbury Showground, Clarendon,  
Australia

**Carlingford Gem And Mineral Expo 27-28 Nov** 645 Pennant Hills Rd, Carlingford  
NSW, Australia



**Maratoto Quartz** collected by Andrew Oliver



2021 Tauranga Gem & Mineral Show

# Auction

**Join us for a fun evening  
Everyone Welcome**

Food and drinks will be available

## **Highlights Include**

Huge Golden Cross Calcite

Petrified Wood from Table Mountain

Indian Zeolites

Minerals from New Zealand & Overseas

Some lots at NO reserve

**Auction starts Saturday 1<sup>st</sup> May from  
5pm**

Register to bid at the show entry prior to the auction

**ARE YOUR ENTRIES READY?**  
**Grab your favourite NZ Rock or Mineral**  
**For each Category and enter them**  
**You may be very surprised**



**Gemshow Competition Categories**  
**Get Your Entries Ready - All NZ Sourced**  
**Mineral,**  
**Rough Rock,**  
**Carving,**  
**Polished Article,**  
**Fossil.**

You may have more than 1 entry per category/per person.  
There will be a senior and a junior section with the same categories in each

# LANDSLIP HILL

Landslip Hill is located on the boundary of Southland and Otago, in the South Island of New Zealand, between Tapanui and Pukerau. It is a debris flow feature associated with the Manuherikia Group of fluvial quartz sandstones. Geologists have described the fossil-bearing rocks as forming part of a sequence of "siliclastic fluvial deltaic sands, conglomerates and silty clays"

## Fossil Beds

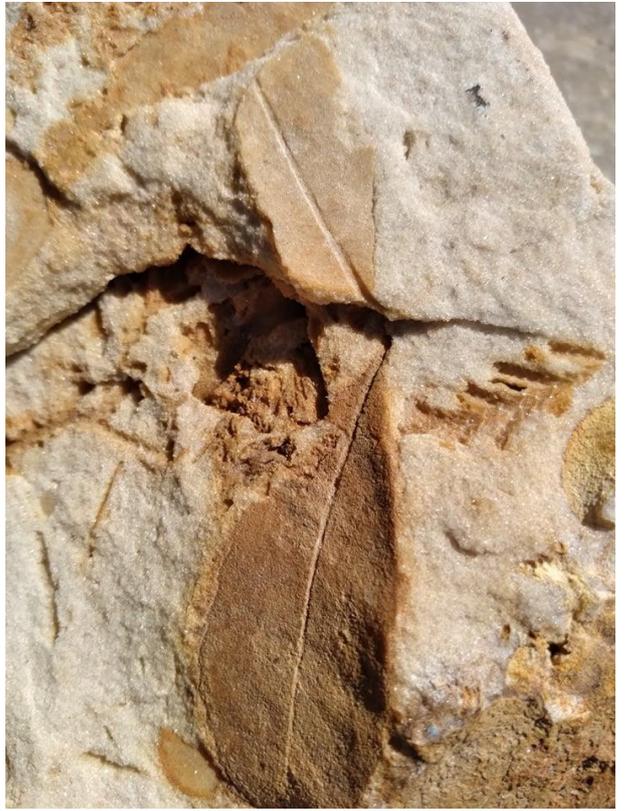
The formation is well known to botanists for its prominent plant fossils of Late Oligocene to Miocene age. The first collection was made at Landslip Hill in 1862 while Sir James Hector was the director of the Geological Survey of Otago. Hector returned to the Landslip Hill deposit in 1869 to make further collections, and in 1884 he proposed the name 'Landslip Hill beds' for the quartz arenite, which is now regarded as being related to the Gore Formation following the work of Lindqvist (1983) and Pocknall (1982) "The plant remains include uncompressed three-dimensional logs, stems, roots and rootlets, and a variety of fruits, some of which can be assigned to modern New Zealand taxa, and others which are no longer present in the local flora". Recent finds include fossils of the genus *Casuarina*.

## Claims of Impact Origin

Some have claimed that Landslip Hill is an impact crater; but reliable sources categorically deny this. Duncan Steel, of the Anglo-Australian Observatory and the University of Adelaide, has suggested that the feature is the remnant of a bolide (asteroid or comet) impact that occurred about 1200 CE. Steel supports his hypothesis with a Māori lament that, he claims, centers on raging fires from the sky, accompanied by tempestuous winds and upheavals in the earth. Others have described the feature as "600 by 900 meters wide and 130 meters deep, and surrounded by a zone of fallen trees, 40 to 80 kilometers wide, dating from eight centuries ago".

However, James Goff, Keri Hulme and Bruce McFadgen, after considering the arguments put forward by Steel and others, find 'no evidence, either Maori or geological, for a 15th-century meteor impact in New Zealand'. They make the point that 'invoking legends or particular translations of Maori place-names to "fit" a known event must be undertaken with considerable care and suitable provisos', and characterise this type of reasoning as 'attempts to creatively rewrite New Zealand's cultural and tectonic past'. They also deal with the Māori lament quoted in Steel & Snow, disputing both his translation and his interpretation.





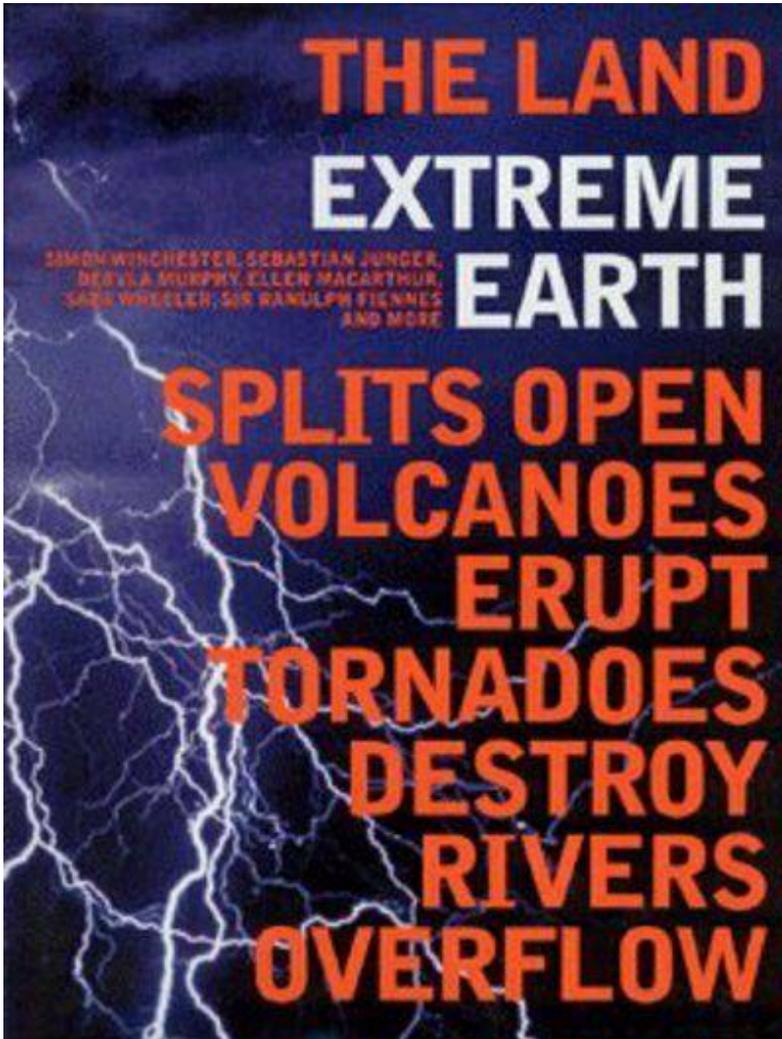
Fossils from Landslip Hill



## BOOK REVIEW

Book Reviews for the newsletter can be emailed to Ian Mason  
[imn.mason@hotmail.com](mailto:imn.mason@hotmail.com)

### Extreme Earth written by George.W. Stone



#### Book Review by John Clark

This book is a stunning sometimes chilling, portrait of the planet's most beautiful and terrible places. Using landscape photography, satellite images and other modern visualisations of natural phenomena, extreme earth takes you to the planet's most active volcano, the bluest landscape, the driest desert, the tallest wave, the greatest coral reef, and hundreds more untamed and untameable places.

This book is a must read for anyone interested in Geology.

Cheers John Clark Tauranga Gem & Mineral Club  
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EXTREME EARTH celebrates the most dramatic and often the most dangerous places on the earth. Big in format and scope, it is a gorgeous and fascinating portrait of the natural wonders of our planet.

EXTREME EARTH is the book that will make earth sciences sexy and is destined to be the must-buy gift book of the Christmas season. It is aimed at any reader who is interested but not necessarily schooled in science and our environment, making the subject beautiful, accessible and entertaining.

The book is divided into four chapters: Earth, Fire, Air and Water. Each section celebrates the natural

world's most astonishing phenomena: the most active volcano, the highest waterfall, the bluest landscape, the driest desert, the deepest lake, the highest tsunami, to name but a few. Photographs include little-seen landscapes, satellite images and other contemporary views of the planet. They are supported by state-of-the-art, informative text written in spirited language and peppered with thought-provoking quotes. EXTREME EARTH combines topics that other books have tackled individually in one awe-inspiring package that celebrates the power and fragility of our planet.

**Only take what you  
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## 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](mailto: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](mailto:carver.petersen@xtra.co.nz)

**What are the Birthstones  
for May?**

**Emerald**

**Agate**

**Chrysoprase**



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**THE 2021 NATIONAL  
ROCK &  
MINERAL SHOW**

Discover the exciting and colourful world of  
Gems, Crystals, Minerals, Rocks and Fossils

• Bring your Rocks and Fossils for expert identification • Dramatic displays  
• Fun and interest for all the family • Sales tables, Jewellery, Rock art, Exotic Specimens

Expressions Whānau Arts and Entertainment Centre / 536 Ferguson Drive / Upper Hutt City  
Friday 19 Oct - Sunday 17 Oct 2021 / 9am - 5pm Friday and Saturday / 9am - 4pm Sunday

Proudly hosted by The Mineral Club of Hutt Valley & Wellington Inc.

## Facebook Groups To Follow

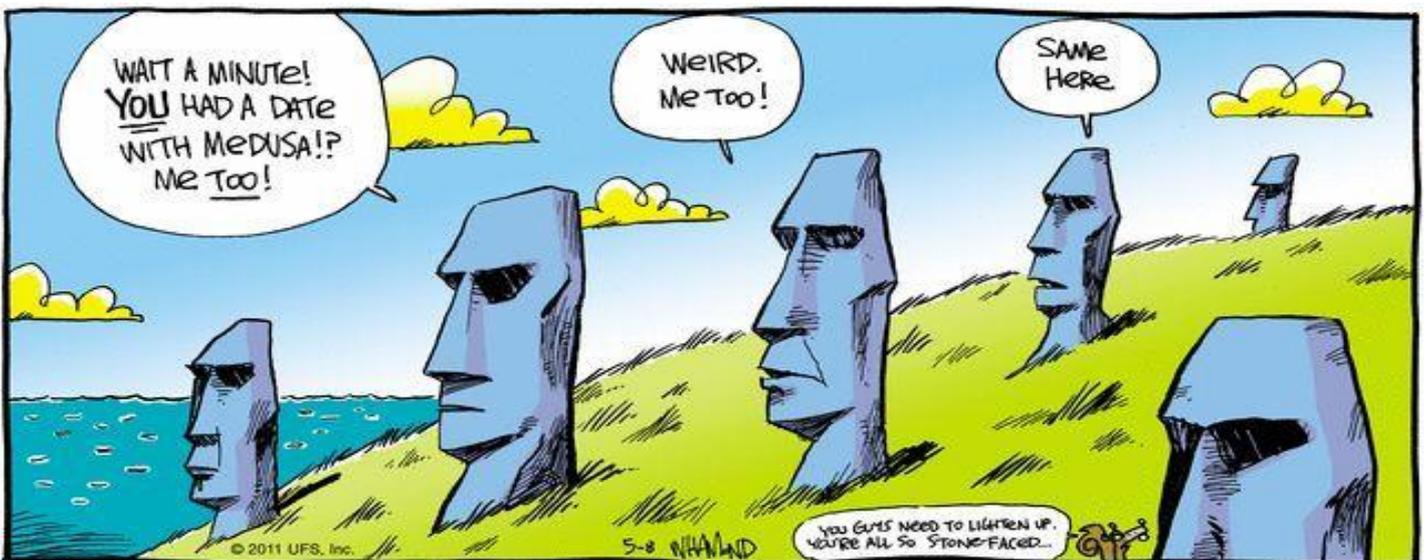


[Tauranga Gem & Mineral Club](#)

[New Zealand lapidary, Rocks, Minerals, Fossils](#)

[NZ Rocks, Fossils, Crystals Buy Sell & Exchange \(Only NZ nothing imported\)](#)

[Coromandel Peninsula Rockhounds](#)



## Update More information on the Maratoto Obsidian Tears

Edited Extract from the June 1975 Volume Eight No4 Rockhunter magazine.

Pg 14-17 **OBSIDIAN FROM MARATOTO** by Keith Durrant

This material is regarded by collectors as being of good quality and I have seen some beautiful pieces of jewellery created from it.

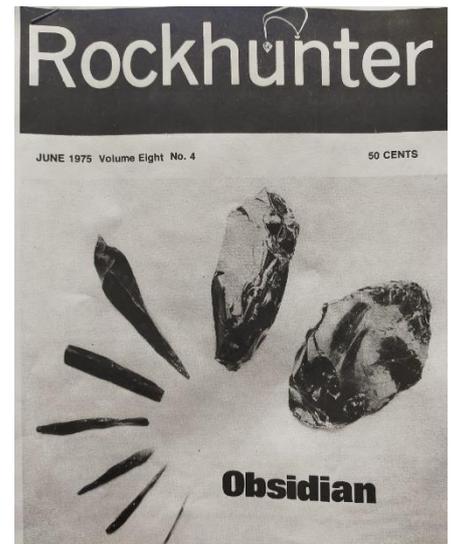
It is not generally known that this obsidian, which I for one do not like to call Apache Tears, but would rather call Maratoto obsidian, can be found in other areas besides that mentioned above. About four years ago while on a tramping trip along the backbone range of the Coromandel peninsula I was fortunate in finding three other locations of obsidian. These locations and the material in which the obsidian was found has left in my mind no doubt as to its origin.

When I first collected the obsidian at the top of the Wires Track many years ago I was shown by the Sages whom I accompanied at that time, a volcanic looking peak above us and told it was commonly agreed amongst rockhounds that this was the source from where the obsidian was erupted. I was green at that time and accepted this revelation. But However, it was on this tramping trip that I first discovered the obsidian in a matrix. My first find of the material which was laying exposed on an erosion slide was of small pieces barely 1 cm in size. As I followed them up and came nearer to the source of their dispersal the sizes increased and one particular specimen measured 10 cm x 6cm.

The shapes like the sizes varied. Some were tear-shaped and others were any shape but this. Some had conchoidal fractures, others small holes in them. Some were dense and some were like smoky quartz. Most exciting to me was the later as I became more interested in geology and studied the subject more fully on my tramping trips and research, it was no revelation to realise that the obsidian could not have possibly come from what I know now is andesite of the Omaha formations.

This particular incident contributed to the growing thought that the successful hunter of gemstones must have a knowledge of geology or he will join the ranks of those who merely follow in the trail of those who make the first discoveries. Finding of some pieces which could only be described as needles. They varied from approximately 2 mm in width up to 9 mm in width and varied in length from 1 cm up to 7 cm. I would not doubt that even longer ones could be there for the finding.

As I climbed higher up the erosion face I noted that the ground material had changed from a brownish to whitish coloured clay, and then exposed by the earth slide was the matrix in which the tears were encased. It was like a dike running diagonally across the side of the hill. I chipped at it with my hammer and exposed more obsidian. I remember sitting and looking at it. I could not from that moment onward



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TAURANGA	cnr 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 ngatal road (near the otumoetai golf club)

believe that Apache Tear obsidian was erupted by vulcanian types of eruption to be scattered over the surrounding country.

This initial find started me thinking that perhaps the obsidian was formed in the magma chamber or apart of the magma chamber and then carried by the rhyolitic material now encasing it to the surface or near the surface. Weathering of the matrix had reduced it to a clay, the build up of humus had assisted in changing the colour, and the obsidian was freed to be moved by weathering or slumping and other natural movements. I suggest this is what has occurred at the sight where the obsidian is found on the Wires Track.

The first vulcanism in the Maratoto area is the Beesons Island Volcanics. These are massive and brecciated flows of andesite with some dacite flows, and there is hydrothermal alteration. They are of Miocene- Pliocene age. Overlying this are the rhyolitic rocks of the Whitianga Group Volcanics and it is this group that must be explored when searching for the obsidian.

At the lower level a rhyolite can be found which varies in colour from grey to white and having narrow parallel bands. This is overlaid by the massive rhyolite flows which form the greater part of the Whitianga Group not only at Maratoto but wherever else it occurs on the peninsula. The upper part of the group is a brecciated rhyolite and can be identified by its colour. The age of the Whitianga Group is Pliocene Pleistocene. I have also seen sedimentary layers incorporated in the upper Whitianga Group. The time factor would place their formation at possibly one of the glacial periods of the Pleistocene and I would imagine the sediments were laid down as the beds of either lakes or tarus which could have existed at the time when the climate was wetter than it is now.

The third group of volcanics, the Omaha Volcanics, form the highest peaks in the Maratoto area and are composed of andesite as stated previously. They are not altered by hydro-thermal action and their age is Pleistocene.

On one occasion I was following a stream up a particularly rough stretch and stopped for a brief rest. While I ate a piece of chocolate I scanned the rhyolite boulder on which I stood. Obsidian was protruding from it. I knocked a piece of the boulder with my hammer, then another and another the obsidian was right through it like sultanas or raisins in a cake. The banding of the rhyolite showed it to be from a massive flow, What was more, there appeared to be no other inclusions of any type in the boulder.

How could the obsidian be erupted from a vent, then picked up in a following flow of massive rhyolite as the only inclusion? It doesn't seem possible. The only answer would appear to be that the obsidian was included in the flow when the material was erupted from the magma chamber.

The white-grey matrix which surrounds the obsidian I first found is perlitic. A very fine hair like, glassy material in its structure and surrounding the obsidian in flow patterns and encasing it something like a build up of tightly compacted tentacles. Some of the matrix is quite dense and does not contain any obsidian at all. None of the matrix contains any other type of material than the obsidian.

To my mind Maratoto, or if you persist, 'Apache Tear' obsidian is not erupted into the air but is carried by effusive flow from the magma chamber.

Perlitic Matrix that Maratoto Tears Erode From



Translucent Maratoto Tears

