



# Annual Report

1 April 2021 – 31 March 2022



Geoscience  
Society  
of  
New Zealand



### **Companies Office Registration**

Geoscience Society of New Zealand Incorporated No. 219911

Geoscience Society of New Zealand Awards Trust No. 1477708

### **Charities Services Registration**

Geoscience Society of New Zealand Incorporated: CC41125

Geoscience Society of New Zealand Awards Trust: CC35670

### **Constituent Organisation of the Royal Society of New Zealand**

#### **Report Compiled By:**

Jenny Stein

Secretary

Geoscience Society of New Zealand (GSNZ)

**Geosciences Society of New Zealand Inc.**

**PO Box 7003, Newtown, Wellington 6242  
New Zealand**

[www.gnsz.org.nz](http://www.gnsz.org.nz)

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## President's Report

Tēnā koutou,

The 2021 to 2022 year has been another year of challenges, not least due to the continuing, but ever-evolving, pressures from the COVID-19 pandemic. In spite of this, the past year has still delivered a number of successes for the Society.

Over recent years we have been building a strong relationship with Tourism New Zealand. Indeed, many of you may have seen TNZ representative exhibiting at the GSNZ annual conferences in the past. This year, this relationship has resulted in the signing of a formal Memorandum of Understanding between GSNZ and TNZ. Through this MOU, GSNZ members will have access to support from TNZ to help to bring major international conferences to New Zealand.

It was very unfortunate that the success of the 2020 conference in Christchurch could not be repeated in 2021, with the COVID-19 Omicron wave forcing postponement and then cancellation of the planned conference at Massey in Palmerston North. But the comprehensive planning and exciting programme won't go to waste, with the conference now to take place in 2022.

The cancellation of the 2021 conference forced us to move both our Annual General Meeting and our Annual Awards presentations online for the first time in GSNZ history. I'm pleased to report that both these online events were very successful, and allowed us to celebrate our Awardees and their achievements, as well as conduct important Society business from our respective locations across the motu. We may well look to facilitate online attendance at future AGMs, in order to allow those not present at the annual conference to participate.

COVID also severely limited the extent of the 2021 Hochstetter Lecture tour. Darren Ngaru King and Dan Hikuroa (our first ever dual speakers) were ultimately only able to deliver their lecture in person at 2 venues, with other scheduled slots cancelled due to the late 2021 lockdown. Once again, technology came to the rescue, with Darren and Dan giving their joint lecture online in conjunction with the online AGM and Awards events in late November.

Other developments over the 2021-2022 year include the introduction of a new Early Career membership rate, funding support for childcare expenses associated with GSNZ conference attendance, and a revamped format for the Newsletter. We have been pleased to continue our annual Hector Day Bake Off and Photo competition events.

There has been growing momentum in some of the GSNZ SIGs, with both the Palaeontology and GEOID SIGs beginning a programme of regular online talks which have been well-attended. We were also pleased to welcome a new Branch, located in Tauranga.

*“Through this MOU, GSNZ members will have access to support from TNZ to help to bring major international conferences to New Zealand.”*

*“Other developments over the 2021-2022 year include the introduction of a new Early Career membership rate...”*

*"In 2021, the Society acknowledged the passing of Jack Grant-Mackie, Life Member and driving force in the GSNZ for many decades."*

Looking ahead to 2022/2023, there are a number of major work projects underway, specifically a review of our Awards portfolio, meeting our obligations as a Te Tiriti o Waitangi partner, and revising our constitution to meet the requirements of the new Incorporated Societies Act, 2022. These projects represent a significant body of work, which will likely continue on beyond my term as President. But I am very much looking forward to contributing to them during my term.

In 2021, the Society acknowledged the passing of Jack Grant-Mackie, Life Member and driving force in the GSNZ for many decades. In August 2022, the GSNZ were privileged and honoured to receive a very generous gift from Jack's estate, the details and use of which are currently being finalised by the National Committee.

Lastly, I want to extend special thanks to my colleagues on the National Committee, who all work really hard to help keep the Society running. Extra special thanks go to our newsletter editor Janis Russell, who took over from Glenn Vallender in 2020. Janis has done amazing work with revamping the newsletter, as well as helping launch new Society merchandise. I also wish to acknowledge my predecessor, James Scott, who's terms as President finished at the end of 2021. James threw himself into the role of President and has really shifted us into a new way of working, which is engaging, and arguably more productive.

I will finish there. I hope you all join me in looking forward to what 2022/2023 will bring for our Society.

Noho ora mai, stay well,



**Kat Holt**  
**President**  
**Geoscience Society of New Zealand (GSNZ)**

## Statement of Financial Performance

My report is based on the final set of accounts prepared by Brunton Cropp, who were asked to compile and check our accounts prior to their formal audit by Dent & Heath. This additional step this year was at the request of Dent & Heath, who needed more separation from direct oversight of the GSNZ's accounts. At the time of preparing this report the officially audited figures are still not available, but the assumption is that they are unlikely to deviate significantly. Consistent with last year, the consolidated accounts report both the "Parent" (GSNZ general operating) and "Group" (Consolidated, i.e. GSNZ general operating + Awards Trust) accounts in the audit documents (see appended). This separation gives a better gauge of the Society's day-to-day operational performance versus returns on longer-term income from investments.

Consistent with previous years, the Society's income streams included membership subscriptions, sales revenue from publications, donations, interest from our investments, and any surplus made from conference registrations. Our outgoings include costs associated with the management and administration of the Society, support of the Hochstetter and Presidential lecture tours, production of newsletters to the membership, and sponsorship of selected publications. By exception, the 2021-22 financial year was somewhat anomalous because the 2021 national conference was ultimately deferred. Historically, the conference has often been a significant source of income (or expenditure). For example, very strong attendance and careful management of Geosciences 2020 hosted by Canterbury University made a \$18,280 surplus.

*"A significant component of our annual income underpins grants and awards for Tertiary Students and Early Career geoscientists"*

Aligned with our charitable status, a significant component of our annual income underpins grants and awards for Tertiary Students and Early Career geoscientists, supporting their research and opportunities to present their work at geoscience conferences and meetings. A significant proportion of this assistance is leveraged via the GSNZ Awards Trust (Inc). A total of 20 grants and awards and \$23,509 were dispersed in the 2021-22 financial year across the Society's accounts. The Society's total accumulated funds across all its accounts stand at \$887,853, a reduction of \$9,205 over last year. A detailed audit of the Society's Consolidated Accounts and those of the GSNZ Awards Trust are lodged with Charities Services.

The Society's consolidated accounts made a loss of \$9,206, of which the general operating account registered a \$2,903 deficit, a \$6,002 reversal from the previous year that was boosted by the Geosciences 2020 surplus. The \$10,252 reduction in Administration costs to \$26,250 compared to last year better reflects the GSNZ's 'new normal', having invested the previous year in a new website and membership subscription services, along with additional administration workload by our Administrator, Nicki Sayers. COVID-19 travel restrictions and the National Committee's commitment to utilise online meetings is keeping operational expenses modest. That said, we will continue to support one face-to-face National Committee meeting annually and travel expenses will vary year to year depending on the location of participants.

Low interest rates realised \$5,348 of growth across all of the Society's accounts, down from \$16,034 the previous year, the Trust yielding just \$3,869 from its \$507,038 of reserves. A total of \$23,509 were dispersed for the 20 awards made. Total membership subscriptions rose slightly to \$38,475, another successive increase on an important source of discretionary income for the GSNZ. Sales were down at \$5,331, around half of the previous year. Modest sales of *A Continent on the Move* (2nd ed) continue, with 141 copies sold (down 124 copies on the previous year, but more aligned with 2020 sales). Significant stock remains (2,459 copies) and we continue to work with Bateman to keep the wholesale cost attractive.

A total of \$14,934 of awards and grants were supported from the general accounts, including \$4,869 in Branch Grants, \$559 towards the Hochstetter / Lecture tours, and \$5,746 for support of the GSNZ quarterly newsletter.

As raised last year, the sustained period of low interest rates (e.g. 0.85% p.a. for much of the financial year) resulted in the Trustees of the GSNZ Awards Trust electing to top-up the amounts for students to keep these prizes attractive and meaningful. Our focus was primarily to improve support 'to do research'. Dealing with this shortfall reinforced our desire to explore more productive mechanisms to generate long-term income from our investments. If the term deposits rolled-over in December 2021, as usual, the interest yields for the 2021-22 financial year would be only marginally better.

With a long-term view (5-7 years) to improve the Trust's capacity to support awards and disperse income, in December 2021 the Trustees made the decision to terminate the rolling term deposits in the Awards Trust and began the process of migrating a significant portion of the Trust's cash reserves into an Active Moderate Trust managed fund with Westpac, the GSNZ's banking provider. This level of risk was recommended by the bank and is more conservative than a balanced fund – a common option for Kiwi Saver investments. This decision was not made in haste, and we sought financial opinion from a number of sources, including our accountants and auditor. Stiff anti-money laundering (AML) requirements resulted in 6 months of documentation gathering and discussions amongst the Trustees and with Westpac. Since February 2022, global markets changed significantly, inflation skyrocketed, cash rates increased, and unit trust prices fell markedly. Ironically, this delay meant that the GSNZ would enter into a market that had already cooled, mitigating some potential losses. As details of the Trust's new investments were not finalised until June 2022, they will be reported next year.

It is timely to thank and acknowledge all those who have contributed to the Society through donations, sponsorship and their time. The Society's ongoing support of student science projects, conferences, lectures, career development and awards etc is significantly enhanced by your generosity.

*Alan Orpin*

**Alan Orpin**  
**Treasurer**  
**Geoscience Society of New Zealand (GSNZ)**

## Minutes of the Last AGM

### The 12th Annual General Meeting of the Geoscience Society of New Zealand (Inc)

**Venue:** Online, via Zoom

**Date:** Thursday 2 December 2021, 1:30pm

#### 1. Welcome and Apologies

Kat welcomed everyone to the meeting and dealt with 'housekeeping' issues around voting, which was to be conducted using 'zoom hand' raising. She explained she was Chairing the meeting as the outgoing President was away in the field. She requested that all members present to sign in using their first name and last name, so we'd have an accurate record of attendance.

Apologies were received from: Mike Johnston, Nick Mortimer, James Scott, Emily Lane and Darryl Thorburn.

#### 2. Minutes of the 11th AGM of the Geoscience Society of New Zealand

Minutes from the 11th AGM held in Christchurch in November 2020 had been circulated and taken as read. There were no matters arising from these Minutes

#### Motion 1:

**Motion 1:** That the minutes of the 11th AGM of the Geoscience Society of New Zealand, held on 24 November, 2020, Room C1, University of Canterbury, as made available to members online, be accepted as a true and accurate record of the meeting.

**Proposed:** Kat Holt

**Seconded:** Georg Zellmer

**Voting:** carried

#### 3. Acknowledgements

The meeting took a moment to remember Jack Grant-Mackie and Kel Angelsey, both prominent members who passed during 2021.

#### 4. Annual Report for the year ended 31st March 2021

The Annual Report had been circulated and was taken as read. There were no matters arising from the Annual Report.



**Motion 2:**

**Motion 2:** To approve the 2020/2021 GSNZ Annual Report.

**Proposed:** Jenny Stein

**Seconded:** Angela Griffin

**Voting:** carried

**5. Financial Summary**

The Treasurer's report had been circulated and was taken as read. Alan Orpin, Treasurer, spoke to the Treasurer's report for those who may not have read this.

The Society's total accumulated funds across all its accounts stand at \$897,058. A detailed audit of the Society's Consolidated Accounts and those of the GSNZ Awards Trust are lodged with Charities Services.

A total of 43 grants and awards and \$13,959 were dispersed in the 2020-21 financial year across the Society's accounts.

The Society's consolidated accounts made a surplus of \$3,099, and the general operating account made a small surplus of \$1,057, a \$36,036 turn-around from 2019-20. The \$18,280 surplus made by the Geosciences 2020 conference at Canterbury University was the major contributor.

Administration costs rose 61% to \$36,502, reflecting support of the new membership subscription service and database, online accounting software, audit fees and increased hours for services by the Administrator.

With COVID-19 travel restrictions from April 2020, online National Committee meetings led to a 89% reduction in expenses from the previous year. The National Committee now schedules only one face-to-face meeting annually.

2021 awards are impacted by a 60-70% drop in term-deposit interest rates over the past 18 months. Trustees ratified 'meaningful' student and ECR study awards, over and above amounts calculated from the interest yields.

The Awards Trust trustees and National Committee are exploring more productive mechanisms to generate income from our investments, namely managed funds within our current banking structure.

**Motion 3:**

**Motion 3:** To approve financial statements as appended to the Annual Report.

**Proposed:** Alan Orpin

**Seconded:** Kat Holt

**Voting:** carried

### 6. President's Interim report

The report for the year to 31st March had been circulated in the Annual Report. This interim report is for the rest of this year.

- Committee switched to predominantly digital meetings
- New MoUs: Tourism NZ, Conference & Events, and Out There Learning
- Special interest group developments
- Photo competition
- New-look GSNZ Newsletter
- Conference cancellation
- New Society branch in the Bay of Plenty

### 7. Election of Officers and Committee for 2021-2022

Thank you to the Committee of 2021, in particular the following members who will be stepping down:

- Jennifer Eccles (Immediate Past President – on Committee since 2012)
- Phaedra Upton (co-opted member)
- El Mestel (Student representative, co-opted)

#### *Office Holders*

**President:** Kat Holt (Manawatū)

**Nominated By:** Jennifer Eccles

**Seconded:** Janis Russell

**Any other nominations:** none

**Voting:** carried

**Vice President:** Sam McColl (Manawatū)

**Nominated By:** Kat Holt

**Seconded:** Bruce Hayward

**Any other nominations:** none

**Voting:** carried

**Secretary:** Jenny Stein (Otago)

**Nominated By:** Kat Holt

**Seconded:** Alan Orpin

**Any other nominations:** none

**Voting:** carried

**Treasurer:** Alan Orpin (Wellington)

**Nominated By:** Kat Holt

**Seconded:** Sam McColl

**Any other nominations:** none

**Voting:** carried

***Five elected committee members:***

Angela Griffin (Wellington) – eligible for re-election

Jenni Hopkins (Wellington) – eligible for re-election

Alex Nichols (Canterbury) – eligible for re-election

Matt Sagar (Wellington) – eligible for re-election

Sebastian Naeher (Wellington) - eligible for re-election

**Nominated By:** Phaedra Upton

**Seconded:** Dominic Stroger

**Any other nominations:** none

**Voting:** carried

***Non-Elected Committee Members for 2021/2022:***

Immediate Past President (ex officio)

James Scott (Auckland)

***Co-opted Members and Appointments:***

To include one member from Auckland, who as a branch with more than 20 members is eligible for representation on Committee. This vacancy has arisen as Jennifer Eccles has concluded her term as the Immediate Past President and there is no other Auckland representative on the Committee. Kat had someone in mind who had indicated a willingness to stand but had not yet wholeheartedly agreed.

Under the same rule Andrew La Croix from University of Waikato would remain co-opted.

**Administrator:** Nicki Sayers

**Newsletter Editor:** Janis Russell

**Student Representative:** Steph Coursey (Manawatū)

8. **Treasurer's Honorarium**

**Motion 4:**

**Motion 4:** That upon the request of the current Honorary Treasurer there will not be an honorarium budgeted or paid for the coming year.

**Proposed:** Katherine Holt

**Seconded:** Georg Zellmer

**Voting:** carried; Scott Nodder opposed.

- Motion 5:**
9. [Appointment of Auditor](#)
- Motion 5:** To re-appoint Dent & Heath as the Society’s Auditor.
- Proposed:** Alan Orpin  
**Seconded:** Jennifer Eccles  
**Voting:** carried

- Motion 6:**
10. [Election of Geological Awards Trustees](#)
- Motion 6:** To appoint James Scott (Immediate past President) as chair, the GSNZ President (Kat Holt) and Vice-President (Sam McColl), the GSNZ Treasurer (Alan Orpin), and Catherine Reid, for the GSNZ Awards Trust.
- Proposed:** Jenny Stein  
**Seconder:** Georg Zellmer  
**Voting:** carried

11. [Annual Awards Review](#)

The Committee is planning to review the awards on offer:

- Are existing awards fit for purpose?
- Can we revise the award portfolio to better serve the membership?
- How can we improve the nominations process?
- What is the best use of funds to support students at the annual conference?

An awards review subcommittee will seek feedback from the Society membership (via a survey). They will propose a plan for any changes to the awards offerings, considering:

- any relevant clauses in the ‘Deed of Gift’ documents for affected awards
- representation of interests of the original Society which created the award(s)
- any changes required to the GSNZ Awards Trust Rules and Bylaws.
- develop a strategy to increase the appeal of the awards and increase applications.

12. [Proposal to raise annual subscription fees](#)

The proposal had been presented by James Scott in GSNZ Newsletter 35 (November 2021) and circulated with the AGM notice. The proposal also included the introduction of a new class of membership for Early Career Researcher.

Rising costs (inflation, postage, printing, travel, insurance, administrative assistance, compliance fees, and membership and financial software). We have sought to offset these costs through:

- Online committee meetings, planning spending through an annual budget, efficiencies around print and postage charges.
- Improving member benefits to make membership more attractive
- Seeking other funding sources (classified ads on the webpage, improving relationships with sponsors, sponsoring books)

We cannot sustain the benefits we currently provide in the long-term with the increased operational costs while maintaining a financial buffer to survive conference hosting and other uncertainties.

### **Motion 7:**

**Motion 7:** Beginning at the financial year commencing 1 April 2022, the Society shall introduce a new category of membership called the Early Career (EC) member. This is defined as a member within 3 years of conferment of their most recent degree. Subscriptions for Early Career members shall be \$50 per year.

**Proposed by:** Katherine Holt

**Seconder:** Jenni Hopkins

**Discussion:**

El Mestel highlighted that if the proposal to raise the fees was not passed then the EC membership would be higher than the retired subscription by \$5. This was opened up to discussion and wasn't seen as an issue.

**Motion 7 was voted on and was carried.**

### **Motion 8:**

**Motion 8:** For the financial year commencing 1 April 2022, the society shall raise the subscriptions to the following: Full members and Organisational members \$100, Student members and student group members \$40, and Retired members \$50.

**Proposed by:** Katherine Holt

**Seconder:** Sam McColl

**Discussion:**

Carolyn Boulton and Donna Ebert raised the issue of increasing student fees. Catherine Reid pointed out that students derived a great deal of benefit from the conference which was highly subsidised by the Society to keep their fees low. Steph Coursey (new student representative) thought it was a negligible small amount, other students agreed via the chat.

**Motion 8 was voted on and carried.**

**Opposed:** Bruce Hayward

13. Any other business

*None.*

*There being no other business the meeting closed at 2.48pm*

*Nicki Sayers*

**Nicki Sayers  
Administrator  
Geoscience Society of New Zealand (GSNZ)**

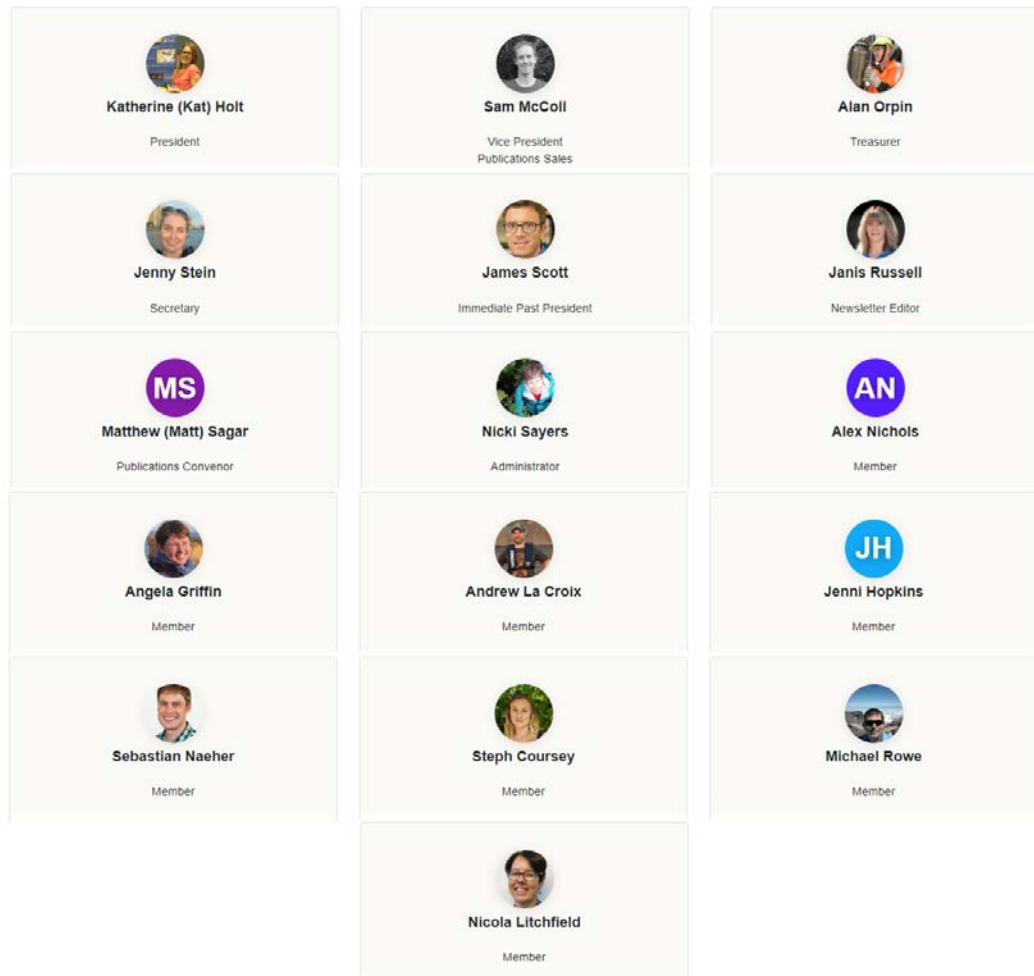
## National Structure

### Committee Members

New and continuing officers and Committee members elected at the 2021 AGM, co-opted members, and appointments at or after the AGM and ongoing members of the previous committee:

Elected Officers @ 2021 AGM	Affiliation	First Elected
Kat Holt (President)	Massey University	2021
Sam McColl (Vice President)	Massey University	2021
Jenny Stein (Secretary)	GNS Science	2020
Alan Orpin (Treasurer)	NIWA	2017
Committee		
Matt Sagar	GNS Science	2016
Alex Nichols	University of Canterbury	2018
Angela Griffin	GNS Science	2019
Jenni Hopkins	Victoria University of Wellington	2019
Sebastian Naeher	GNS Science	2020
Appointments <sup>1</sup> / Co-opted <sup>2</sup>		
<sup>1</sup> James Scott (Immediate Past President)	University of Otago	2016
<sup>1</sup> Nicki Sayers (Administrator)	(independent)	2018
<sup>1</sup> Janis Russell (Newsletter Editor)	(independent)	2020
<sup>2</sup> Michael Rowe	University of Auckland	2021
<sup>2</sup> Steph Coursey (Student Representative)	Massey University	2021
<sup>2</sup> Andrew La Croix (Branch Representative)	Waikato University	2019
<sup>2</sup> Nicola Litchfield	GNS Science	2021
Outgoing		
Jennifer Eccles	University of Auckland	2008
Phaedra Upton	GNS Science	2019
El Mestel	Victoria University of Wellington	2019

*The 2021 National Committee*



## Relationships

### Current Memoranda of Understanding:

- With Tourism New Zealand Zealand (1 Jan 2022 – 31 Dec 2022, with opportunity for annual renewal)
- With Geological Society of Australia (effective 1 August 2017 – 31 May 2020) (expired)\*
- With GNS Science regarding the New Zealand Fossil Record File database (known as “FRED”) (effective 8 August 2018 – 7 August 2021) (expired) †

*\* as of August 2022 this MoU has been reinstated for a period of 10-years.*

*† as of March 31, 2022, this MoU is being renegotiated within a wider MoU with GNS Science.*



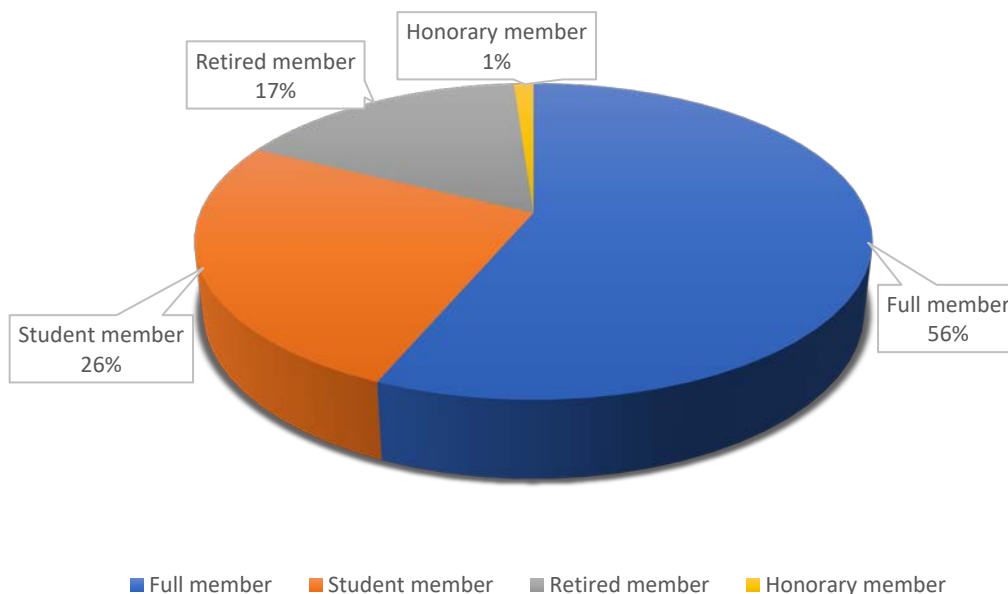
### International Union of Geological Sciences (IUGS)

Nick Mortimer is the primary contact for the GSNZ as an adhering member of the IUGS. Martin Crundwell continues his roles as the New Zealand representative on both the IUGS Subcommittee on Neogene Stratigraphy and IUGS Subcommittee on Quaternary Stratigraphy.

## Membership

As of 31 March 2022, the GSNZ had 723 individual members, an increase on the previous year. This is a good result considering the conference scheduled for 2021 had to be cancelled due to COVID-19. Membership was made up of the following types:

### GSNZ Membership 2021-22



## Honorary Life Members

In 2021 Julie Palmer was awarded Honorary Life Membership and joins a group with ten others as follows:

Year	Life Member
2021	Julie Palmer
2020	Glenn Vallender
2019	Nick Mortimer
2018	Janet George
2017	Campbell Nelson
2016	Mike Johnston
2015	Jack Grant-Mackie
2014	David Skinner
2013	Bruce Hayward
2012	Simon Nathan
2011	Bruce Thompson

## Regional Statistics

Based on self-indication of Branch membership, as of the date of this report the number of members we have in each region are as follows: (figures in brackets represent the previous year)

Region	Branch membership
Auckland	121 (110)
Waikato	56 (53)
Bay of Plenty	19*
Taranaki	15 (14)
Manawatu	43 (33)
Wellington	219 (228)
Canterbury	78 (111)
Otago	78 (77)
Overseas	61 (58)

*\* new Branch; no 2020-2021 figures.*

A summary of each branches' activities throughout the year can be found in the Branch Reports section of this report.

## Publications

**Publication Sales (re-elected 2021):** Sam McColl (Massey University, Palmerston North)

**Publications Convenor (re-elected 2021):** Matt Sagar (GNS Science, Lower Hutt)

## Publications Projects

The following GSNZ-approved projects were in progress and/or published in the 2020-21 financial year.

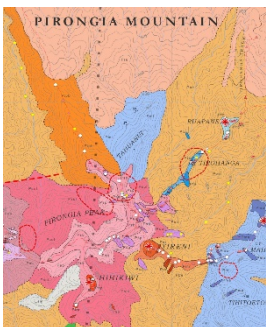
### Geology of Karioi Maunga, Aotearoa by Oliver McLeod et al.

Oliver McLeod is currently working on a new book and geological map entitled *Geology of Karioi Maunga, Aotearoa*. Dozens of patrons from across the globe pledged just over \$14,000 via the crowdfunding platform [Kickstarter](#) towards the project, believed to be the first crowd-funded geoscience project in Aotearoa/New Zealand. In April 2021, on behalf of Oliver, the GSNZ applied for \$15,000 to support this project from a WEL Energy Trust Quick Response Grant. In June 2021 \$7,500 (GST exempt) was granted for this project. Additionally, Oliver has gained funding from the MacDiarmid Institute and Royal Society of New Zealand (Hutton Award, 2021). The GSNZ will publish the map and book (approved at National Committee meeting on 3/9/21), provided the drafts receive favourable reviews. Publication in late 2022 is anticipated.

### Geology of the Pirongia Volcano by Oliver McLeod et al.

Pirongia is the North Island's largest basaltic volcano and the subject of University of Waikato PhD student Oliver McLeod's thesis. Oliver produced a book and large-format (A0) geological map detailing the geology and eruptive history of Pirongia (<https://gsnz.org.nz/publications-and-webstore/product/85>). This book and map have been hugely successful, as outlined in the 2020–21 Annual Report.

The first (200 copies, September 2020) and second (200 copies, December 2020) printings of the book and maps had all but sold out by early 2022. At the 4/3/2022 National Committee meeting, \$1,208.15 (incl. GST) was approved for a 50-copy second re-printing of the book by Graphic Press & Packaging Ltd (Levin). One hundred copies were printed by mistake. Graphic Press & Packaging generously allowed these to be kept. Extra maps to accompany the books had been previously printed in 2020.



### Geoscience Society of New Zealand Annual Conference 2021, Palmerston North, Programme and Abstracts Volume



Due to the the COVID-19 Delta outbreak, the organising committee decided to cancel the GSNZ 2021 Annual Conference. However, the conference programme was fully developed, and abstracts had been peer-reviewed when this decision was made. The programme and abstracts were, therefore, published as Miscellaneous Publication 158 ([https://gsnz.org.nz/assets/Uploads/Shop/Products/GSNZ\\_annual\\_conference/MP158\\_2021\\_Palmerston\\_North/MP158\\_2021\\_GSNZ\\_conference\\_Programme\\_Abstract\\_Volume.pdf](https://gsnz.org.nz/assets/Uploads/Shop/Products/GSNZ_annual_conference/MP158_2021_Palmerston_North/MP158_2021_GSNZ_conference_Programme_Abstract_Volume.pdf)).

#### *Bibliographic reference*

Zernack AV, Palmer J eds. 2021. Geoscience Society of New Zealand Annual Conference 2021: Programme and Abstracts Volume. Miscellaneous Publication 158. Wellington, New Zealand, Geoscience Society of New Zealand. 356 p.

#### Chuck Landis tribute

Publication of a tribute to Chuck Landis being compiled by Hamish Campbell was approved at the 5/5/2021 National Committee meeting but a draft manuscript is yet to be received.

## Publication Sales

Publications	Retail Price	Quantity Sold	Wholesale Price	Quantity Sold	Value Sold
Auckland guide	\$10.00	2	\$6.00	5	\$50.00
Central Rocks	\$20.00	7			\$140.00
Cobb Valley	\$10.00	3	\$6.00	5	\$60.00
Field Wallet	\$10.00	4			\$40.00
Flying High	\$40.00	3			\$120.00
Geyserland	\$20.00	1			\$20.00
Granite and Marble	\$15.00	0	\$9.00	5	\$45.00
Harold Wellman	\$20.00	7			\$140.00
James Hector	\$20.00*	3			\$36.00*
Karst in Stone	\$12.00*	2			\$18.00*
Mountains to Meteorites	\$20.00	0			\$0.00
Nelson Diary	\$20.00*	2			\$20.00*
Nelson First Diary	\$20.00	0			\$0.00
On the Edge	\$18.00	0	\$10.80	5	\$54.00
Pirongia	\$30.00	16			\$480.00
Queenstown guide	\$10.00	5			\$50.00
Red Rocks	\$10.00	0			\$40.00
Volcanoes	\$50.00	0			\$50.00
Wandering River	\$20.00	8			\$160.00
Zealandia Glass	\$25.00*	32			\$638.40*
<b>Total</b>		95		20	<b>\$2087.40</b>

*\*One or more sold at a GSNZ Member-only discounted price*

In addition, the following publications were sold on the Society's behalf by Bateman Books and GNS Science:

Publications	Number sold	Value Sold
A Continent on the Move	141	\$2,497.11

## Awards and Grants

### Society Awards

Awards subcommittee: Kat Holt (chair, Massey University), Jenni Hopkins (Victoria University of Wellington), Nick Mortimer (GNS Science), Andrew La Croix (University of Waikato), Lorna Strachan (University of Auckland) and Claudine Stirling (University of Otago).

### General Awards

Name of Award	Recipient	Details
<b>Honorary Life Member</b>	Julie Palmer; Massey University	For almost 30 years of service to the Society including 14 years on the National Committee, serving in all four Officer roles during this time.
<b>McKay Hammer</b>	Joshu Mountjoy; NIWA	For a seminal contribution to our understanding of New Zealand's submarine canyon systems and deep-water dispersal events. The impacts of this work are far-reaching and beyond the author's area of geoscience, attaining a new understanding of the behaviour of natural systems globally.
<b>Hochstetter Lecturer</b>	David Prior; University of Otago.	"The shear zones which hold back the ice sheets"
<b>S.H. Wilson Prize</b>	Kevin Brown; GEOKEM & University of Canterbury	Kevin was an active, long serving member of the NZ Geochemical Group, and later the NZ Geochemical & Mineralogical Society. He also served on the Board of Directors for the International Geothermal and has taught many short-courses on the environmental impacts of geothermal development, and on scaling in geothermal pipelines. He has over 50 publications and has supported the NZ Geothermal Workshop for several decades with regular invited or keynote speaking slots. He also serves on peer review panels for geothermal developments in New Zealand and Kenya. Semi-retired now, Kevin is retained as an Adjunct Professor in the School of Geological Sciences at the University of Canterbury, and has co-supervised several PhD and Masters students.

<b>New Zealand Geophysics Prize</b>	Donna Eberhart-Phillips; GNS Science and co-authors	Heterogeneous material properties—as inferred from seismic attenuation—influenced multiple fault rupture and ductile creep of the Kaikoura Mw 7.8 earthquake, New Zealand, as published in Geophysical Journal International.
<b>Werner Giggenschbach Prize for Geochemistry</b>	Terry Isson; University of Waikato	For the paper Evolution of the Global Carbon Cycle and Climate Regulation on Earth, published in Global Biogeochemical Cycles.
<b>Hayward Geo-Communication</b>	Oliver McLeod; University of Waikato & Victoria University of Wellington	In recognition of his sustained efforts to engage in geoscience communication with community groups in the Waikato region and beyond through his publication of the Geological Map of the Pirongia Volcano and the speaking tour that he undertook to promote this publication.
<b>Wellman Research Award</b>	Ella Nisbet; Massey University	Paleo-history of large, soft-rock landslides in the Manawatu/Rangitikei Region including development of a landslide dating tool.
<b>Kingma Award</b>	Sacha Baldwin; University of Canterbury	Geosciences education is significantly enhanced with exceptional management of field trip logistics, and cosmogenics research is able to proceed due to her commitment, hard work and considerable expertise.
<b>Harold Wellman Prize</b>	(not awarded)	
<b>Pullar-Vucetich Prize</b>		<i>(awarded only every two years so this award was not on offer during this reporting period)</i>
<b>Alan Mason Historical Studies Fund</b>	John Griffiths	For research into Displaying New Zealand’s Mineral Wealth at International, National and Provincial Exhibitions 1851-1990.
<b>Young Researcher Travel Award</b>	(not awarded)	

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Student Awards

Name of Award	Recipient	Details
<b>Jim Ansell Geophysics Scholarship</b>	Eleanor Mestel (VUW)	Detailed characterisation of local seismicity and ambient noise tomography to investigate the current state of the magma system and volcano-tectonic interactions at Taupō volcano.
<b>John Beavan Geodetic Fieldwork Fund</b>	(not awarded)	
<b>Hornibrook Award</b>	(not awarded)	
<b>NZ Sage Scholarship</b>	(not awarded)	
<b>S.J. Hastie Scholarships</b>	University of Auckland: <b>Emā Nersezova</b> University of Canterbury: <b>George Young</b> Massey University: <b>Susan McLachlan</b> University of Otago: <b>Zoe MacClure</b> Victoria University of Wellington: <b>Jessie Schuler</b> University of Waikato: <b>William Starzynski</b>	

\*\*\*\*

A number of other awards, prizes and grants are awarded by individual branches of the Society. See the Branch reports for these.

A selection of comments from this year's award recipients are as follows:

### *Wellman Research Award*

*"The funding from the Wellman Award will allow me to expand my study area and enhance the dataset for this (landslide dating) tool, by obtaining absolute ages from landslides along the Whanganui River which is a site of cultural and geographical significance."*

-- Ella Nisbet

### *Werner Giggenbach Prize for Geochemistry*

*"I am delighted to be the recipient of this award. This has come as a pleasant surprise, considering that I am relatively new to the system. My geoscience journey here so far has been nothing short of exciting. I would like to thank GSNZ for the warm welcome and recognition for this paper."*

-- Terry Isson

### *New Zealand Geophysics Prize*

*"I'm honoured to receive the New Zealand Geophysics Prize with my co-authors for our paper on the Kaikoura Earthquake. I've always been motivated to have models of seismic velocity and attenuation be useful for other things like rheology and fluid properties, in addition to crustal structure. This paper demonstrates that with the contribution of Susan Ellis showing the role of the ductile lower crust under the multiple faults."*

*I'm also very grateful to my colleagues at GNS in both Dunedin and Avalon, for many interesting discussions and for helping me understand the geology and multiple types of rupture models that have been proposed. I'm grateful to Martin Reyners and other colleagues at UC Davis, for always pointing out the need to have the context within the big picture of plate tectonics and lithospheric deformation. Thanks again."*

-- Donna-Eberhart-Phillips

### *Jim Ansell Geophysics Scholarship*

*"I'm hugely flattered to have been awarded the Jim Ansell Geophysics Scholarship by GSNZ in 2021. I've felt very welcomed by the geoscience community here over the first two years of my PhD and I've really enjoyed being involved. I'd like to thank all of my colleagues at the ECLIPSE programme and around the Tāupo region who have worked with me on my project, in particular my supervisors, Martha Savage and Finn Illsley-Kemp, who nominated me for this award."*

-- El Mestel

*"I'm grateful to Martin Reyners and other colleagues at UC Davis, for always pointing out the need to have the context within the big picture."*

### *Alan Mason Historic Studies*

*"I would like to thank the Geoscience Society of New Zealand for the Alan Mason Historic Studies award for 2021. My proposal is to examine the way that NZ's mineral wealth was displayed at international and national exhibitions that were staged at the approximate dates of 1880 through the 20<sup>th</sup> Century. I'm interested to explore who was behind the display of mineral wealth at these exhibitions, who were the key individuals, which minerals were being displayed, and I'm also interested in looking at whether the displays had an impact in terms of demands for the minerals and the effect on particular mineral industries. I'm hoping to work this up into a journal article which may appear in a geographical or historical journal...I'm looking forward to embarking on this when we get out of this current impasse with the lockdown."*

-- John Griffiths

*"The Kaikoura Earthquake was such an exceptional event, something I never thought I'd see in my career."*

### *McKay Hammer*

*"The Kaikoura Earthquake was such an exceptional event, something I never thought I'd see in my career. There's a huge amount of people involved in this paper. Jamie Howarth deserves special mention for the effort he put in, and I'd also like to say a special thanks to Phil Barnes who's been my mentor and guided through my career as a marine geoscientist at NIWA. Thanks a lot for this; it means a huge amount."*

-- Joshu Mountjoy

### *Honorary Life Member*

*"It's my absolute pleasure to say 'thank you'. Thank you so much for awarding me an honorary membership of the Geoscience Society of New Zealand. Gosh, I was so surprised. It's a huge honour to be recognised by fellow geoscientists across the country."*

*When I joined the society in the 1970's it was for the conferences and field trips—much like the students join the society today. Attending monthly branch meetings was something else we did regularly because we thought it was a requirement, because as students we were told that we could have exam questions based on those talks. So we all went along diligently. But in doing so we met lots of people and we started to network and we soon discovered the importance of having these networks, and eventually made some lifelong friends. That was a really important part of the active membership of the Society."*

*But the thing that I find about the Society is even though I've got involved with the national society and on the national committee, and taken a number of different roles on that committee over a long period of time, it was just the way that the Society is really so relevant to our day to day lives. I've enjoyed talking to students. I've enjoyed seeing them go on to wonderful careers, blossoming, and some of them have gone on to do teaching and supervising themselves."*

*"I can see that geoscience has got a really relevant role in society today."*

*And now I can see that geoscience has got a really relevant role in society today. It's important to help us solve some of the issues that we're facing into the future, and so*

*it's with this role that I'm hoping that I'll continue to have lots more years of work with the Society. As I near retirement age, maybe my involvement can be increased. That would be really nice. But most importantly I just want to say 'thank you'. It's been a great honour to work with the Society and I look forward to having a lot more years to come."*

-- Julie Palmer

*"This type of work is never a solo effort and I acknowledge all of my colleagues at university and in the geothermal industry because together we've done some pretty amazing stuff."*

### *S.H. Wilson Prize*

*"It is indeed an honour to receive the S.H. Wilson award from the New Zealand Geoscience Society and I sincerely thank the Society and those who nominated me. The award is for a lifetime's service in geochemistry and there are a couple of people in particular that guided my early career. The first is Peter Rothborne of the old DSIR, and I thank him for diverting me away from X-ray crystallography and into geothermal geochemistry at Wairakei. The second is Patty Brown for guiding me into, around and through all of the worm holes that is the university system and geothermal institute. This has been, and still is, an immensely interesting and satisfying career that has enabled me to travel to many different corners of the world and meet a host of fine people. I can recommend it to budding geochemistry students everywhere.*

*This type of work is never a solo effort and I acknowledge all of my colleagues at university and in the geothermal industry because together we've done some pretty amazing stuff. Finally, thanks to my extended whānau who have always supported me behind the scenes. Thank you."*

-- Kevin Brown

*"Sincerest thanks to...the GSNZ for believing in my work and advocating tirelessly to make the speaking tour a success."*

### *Hayward Geo-Communication*

*"I'm very happy to receive this award from the Society. I have great memories of that time, travelling around the Waikato region, meeting many, many interesting people who appreciated the research I was doing. I would like to offer my sincerest thanks to staff at the University of Waikato, Adrian Pittari, Professor Tom Roa of Ngāti Maniapoto, and especially the Geoscience Society of New Zealand for believing in my work and advocating tirelessly to make the speaking tour a success. Thank you."*

-- Oliver McLeod

## Student Travel Grants

As COVID-19 led to the cancellation of the 2021 conference until 2022, there were no annual conference prizes awarded in the 2021-2022 financial year.

## Annual Conference Prizes

As COVID-19 led to the cancellation of the 2021 conference until 2022, there were no annual conference prizes awarded in the 2021-2022 financial year.

## Events

Following an overhaul and streamlining of national committee member responsibilities in the previous financial year, El Mestel took on the role of team leader of a GSNZ events team consisting of other National Committee members. Following El Mestel stepping down from the National Committee at the AGM in December 2021, Angela Griffin took over as events coordinator.

### Photography Competition

Since 2020 we have held an annual photography competition for all members of GSNZ to show off their photographic talent. This year we had three categories: indoor, outdoor and comedy geoscience. Comedy geoscience was an open category, while indoor and outdoor geoscience had three separate divisions: adult, tertiary student and school student. Prizes were as follows:

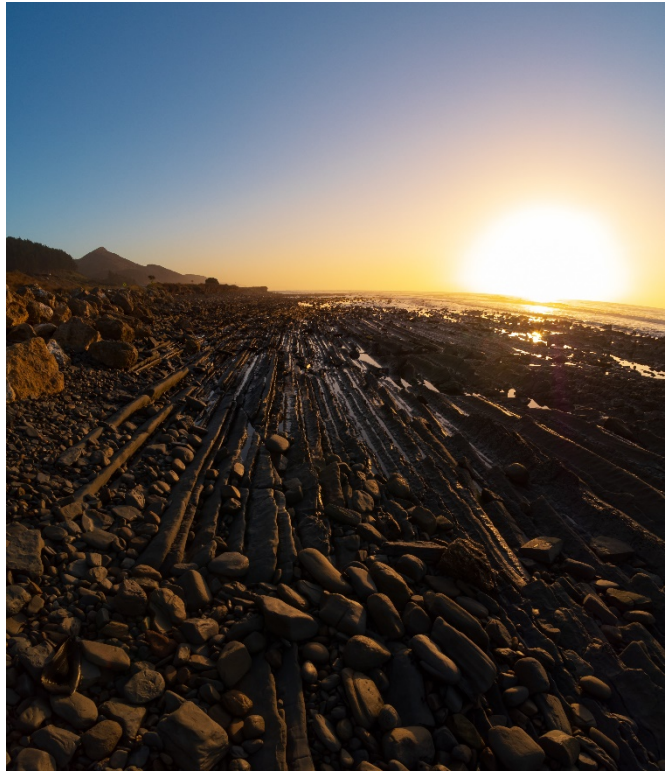
	<i>Adult</i>	<i>Tertiary Student</i>	<i>School Student</i>
<b>Outdoor Geoscience</b>	\$50	\$50	hand lens
<b>Indoor Geoscience</b>	\$50	\$50	hand lens
<b>Comedy Geoscience</b>	"magic" heat-changing mug printed with winning photo		

A total of 43 photographs were submitted by 35 people, across the seven categories and divisions:

	<i>Adult</i>	<i>Tertiary Student</i>	<i>School Student</i>
<b>Outdoor Geoscience</b>	11	17	3
<b>Indoor Geoscience</b>	3	2	0
<b>Comedy Geoscience</b>	7 entries (open category)		

Winners of the 2021 GSNZ Photo Competition:

**Outdoor Geoscience (Adult):  
“Tilted parallel lines of Strata”  
by Joseph Baxter**



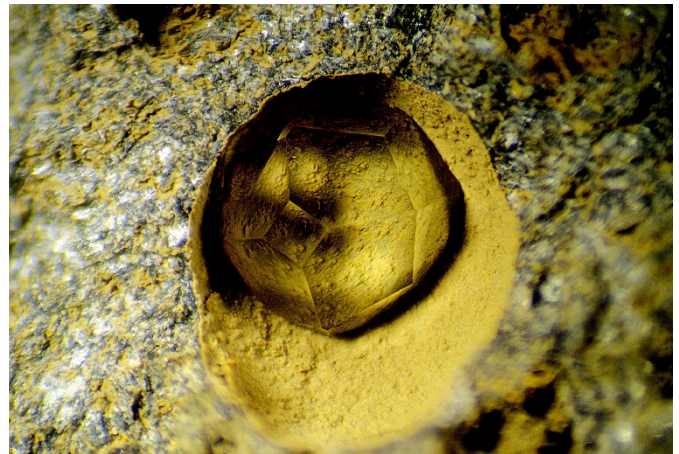
**Outdoor Geoscience (Tertiary  
Student): “A view of Mt  
Taranaki” by Yarub Alkindi**



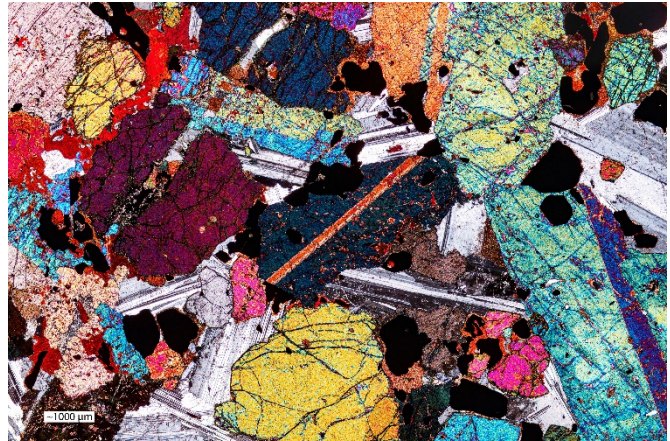
**Outdoor Geoscience (School Student): “No Kina 4 Dinner”  
by Jamie Stockley**



**Indoor Geoscience (Adult):  
“Analcime Crystal” by Tim  
Saunderson**



**Indoor Geoscience (Tertiary Student): “Sample XY - Olivine Gabbro” by Kamen Engel**



**Indoor Geoscience (School Students): (no entries)**

**Comedy Geoscience (Open):  
“Help” by Skye Naude**



## Geobake

Each year we run a Geobake on 16 March to celebrate Hector Day (New Zealand’s annual national geosciences day held close to the birthday of pioneering NZ geoscientist, James Hector). The Geobake is initiated by the National Committee, but the intention is to encourage social interaction at a local level. Branches or other community groupings are encouraged to meet informally to celebrate Hector Day and consume the baking.

People design and bake something edible and tasty with a geoscience theme, to share with their community or eat at home. They then email details (including a photograph) to us for the national judging. This year there were four entries and the winner (see below) won a free one-year subscription to GSNZ (2022-23).



Winning entry in the 2022 Geobake competition: "Sampling Lava" by Kirsty Vincent



*Volcanologists sampling fresh lava to gain information on its chemical properties.*

**Angela Griffin**  
Events Team Leader

## Communications

### Newsletter

#### Content

*“It would be good to see more submissions from younger members who benefit greatly from GSNZ funding and general support.”*

During late 2021-mid 2022, a general air of weariness, frustration, and uncertainty flowed across the country and the keenly anticipated 2021 GSNZ conference was cancelled due to COVID-19. It is possible that this combination, and a reduction in the novelty factor, impacted the number of contributions submitted and resulted in a marked decline from the previous year’s bumper issues.

Despite survey feedback from the GSNZ membership, that suggests the newsletter is an important and well-received benefit to members, the overall percentage of contributions to its content is low. There is a small, but dedicated, group of regular contributors, the majority of which are older members of the society. It would be good to see more submissions from younger members who benefit greatly from GSNZ funding and general support.

Annual differences in member contributions to the GSNZ Newsletter:

Issue	Articles/Features	SIG Reports	Other reports*	Number of pages
NL33 (March 2021):	10/4	0	1	98
NL34 (July 2021):	8/3	2	8	94
NL35 (November 2021):	6	5	0	66
NL36 (March 2022):	7	4	1	58
NL37 (July 2022):	3+2	2	1	54

*\*These include reviews and reports from the general membership but not general reporting of regular matters e.g. award winners or event/survey results.*

The increase in use of different media platforms (Newsflash & Social Media) for timely, and engaging, information bites may also have contributed to the fall in contributions to the longer format Newsletter. For NL37, the articles were so few that the editor contributed 2 feature articles (7pp) to avoid a newsletter with a page count that was half of the previous year’s ones. There has been limited response, in general, to calls for articles for the feature section (or promised but fallen through at the last minute) and the editor has contributed the bulk of these. If there is little further response for the next few issues, then calls for feature articles beyond NL41 in November 2023 will cease.

### Design Updates

*“A new name and design for the Newsletter cover was selected and voted upon... the GSNZ Newsletter will be known as Geoscientist Aotearoa from issue NL38 (Nov 2022).”*

The editor was notified that one of the fonts used in the original redesign would no longer be supported from 2023. Consequently, that font was replaced with another (as close to the original as possible). Given our regular use of te reo Māori, there were constraints on which fonts could be used as substitutes, as support for specific macrons was essential. This resulted in a slightly smaller apparent font size which is currently being revised as part of the project to increase readability. That will be implemented from the March 2023 issue.

A new name and design for the Newsletter cover was selected and voted upon at a national committee meeting. After seeking feedback from the membership, the GSNZ Newsletter will be known as *Geoscientist Aotearoa* from issue NL38 (Nov 2022). The dual name, Aotearoa/New Zealand, appears on the front of the publication and the GSNZ logo has moved to the back cover. However, the informal abbreviation (NL) in correspondence is likely to continue.

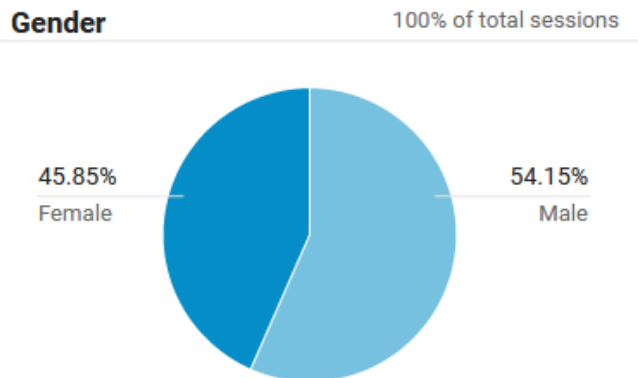
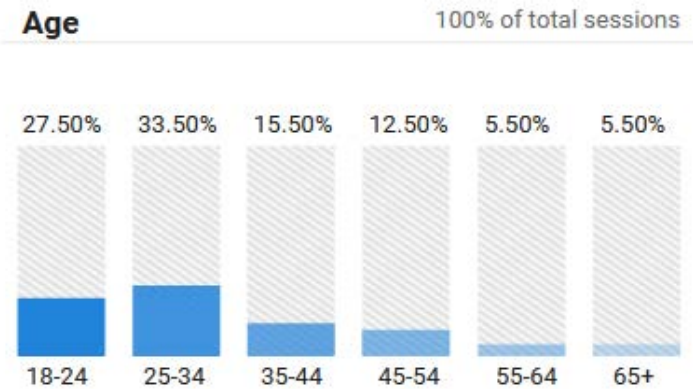
### Deadlines and Guidelines

The introduction of new deadlines to the first of each month preceding the month of publication has had mixed results. Some contributors have made the transition while others are still requesting major extensions that are untenable if publication dates are to be adhered to. In addition, the NL guidelines, have been revised for clarification. The responsibility of authors to move towards increasing use of te reo Māori in submissions, particularly in regard to place names, will be highlighted.

**Janis Russell**  
**Geoscientist Aotearoa Editor**

## Website

In the 2021-2022 year the website recorded nearly 13,000 visitors. Google analytics estimates the age and gender of website visitors to be as shown below.



The current website was launched in July 2020 and Google analytics was set up in September 2020 so comparative year on year figures are not yet available. These will be reported on next year.

## Newsflashes

Newsflashes continue to be our most commonly used channel to communicate with our members. In the year to 31 March 2022, we sent 15 Newsflashes to our members. The open rate regularly exceeded 50% and was sometimes as high as 60%. This compares extremely favourably with the industry average of 40%. Each Newsflash carries a mix of Society news and a curation of geoscience news, especially where a GSNZ member is featured.

The majority of our readers are based in New Zealand but there are members in the USA, Australia, Japan and throughout Europe who regularly read the Newsflashes.

**Nicki Sayers**  
GSNZ Administrator

### Social Media

GSNZ has been active on social media, with our Administrator Nicki Sayers providing regular 'official' Society news and updates, and a handful of other interested members of the Society sharing content of interest relating to various geoscience news and topics. With permission from the New Zealand Journal of Geology and Geophysics we have also been posting updates promoting the publication of new papers. Unfortunately posts of this kind have been inconsistent due to the limited time available to the team who update and monitor the GSNZ social media on a voluntary basis.



Facebook

<https://www.facebook.com/GeoSocNZ>

Our Facebook presence was set up in 2012 and is our most active social media platform. Upcoming events are posted on the GSNZ page, along with topics of interest as they occur. As of March 2022 the GSNZ Facebook page had ~1,600 followers.

As part of their activities this year the GeOID SIG started a Facebook group linked to the GSNZ main page called "What kind of rock is this?!", to serve as a place for members of the public to share questions and photos about their interesting finds around New Zealand and stimulate relevant discussion. It was hoped that the group would help the GSNZ engage more with the general public and help promote general interest in geoscience topics. In addition, inviting public posts, the GeOID SIG convenor has also posted periodic links and infographics that may help people conduct simple tests to identify their own rock specimens. The group has proven popular with 200+ members but needs to be monitored to prevent it being overrun with posts about random rocks from around the world, and to ensure content is kept appropriate. Monitoring of the group and timely responses to posted questions is difficult as only one person is currently administering the group activities (Jenny Stein, the GeOID SIG convenor). However, the feedback from members who have had their questions has been very positive. Jenny is very grateful to members who have joined the group and have been posting informed comments on people's questions and posts, and to her colleagues at GNS Science who have been helping with rock ID's.



Twitter

<https://twitter.com/GeoscienceNZ>

The GSNZ Twitter account was opened in March 2020 under the handle **@GeoscienceNZ**. The account is mainly used to promote events, publications and job/study opportunities, and occasionally to share topical content posted by other users. The limited number of characters per post compared to other social media platforms

means that we need to make posts on Twitter short and snappy compared to other platforms (however, this is a good general rule for all social media posting).

As of March 2022 the GSNZ Twitter account had ~590 followers.



LinkedIn

<https://nz.linkedin.com/company/geoscience-society-of-new-zealand>

Discussion Group: <https://www.linkedin.com/groups/4638551/>

While apparently not a popular platform within the academic community, LinkedIn is very popular with people in industry and students looking for work. As the most professional, work-oriented social media platform it can be a valuable avenue for making professional connections.

The GSNZ has a group and a company page on LinkedIn. The group page is updated in a similar fashion to the Facebook page, with a combination of Society updates and shared content from other profiles and organisations. The company page is reserved solely for Society news and updates.

As of March 2022, the GSNZ group had ~270 members and the GSNZ company page had ~200 followers.



YouTube

[https://www.youtube.com/channel/UCLIZ45T-9ccRMmjUh\\_Xb9JQ](https://www.youtube.com/channel/UCLIZ45T-9ccRMmjUh_Xb9JQ)

The GSNZ YouTube account is used to host videos of Hochstetter lectures and their supporting lectures. We recognise that we are currently underutilising the platform and hope to investigate options for reinvigorating our presence on this platform in the future.

**Jenny Stein**  
**Social Media Team Leader**

## Branch Reports

### Auckland

The Auckland Branch was established under the former 'Geological Society of NZ' in 1956 and was centred around the former Geology Department at the University of Auckland, now a part of the School of Environment. The Auckland GeoClub (established in 1992 at the Auckland Museum) is an affiliated section of the Auckland Branch comprising amateurs and professionals with a common interest in New Zealand's geology and fossils. The Auckland GeoClub is run autonomously, and many of its members are not members of the national body (Geoscience Society of N.Z.), except those registered for both. However, the GeoClub liaises frequently, and jointly runs activities with, the Auckland Branch and its activities are traditionally included with the Auckland Branch activities when the Auckland Branch reports to the National Committee.

**Branch Committee for 2021-22 Committee Members:** Jennifer Eccles (Auckland Branch Rep)

**Geoclub Committee:** Bruce Hayward, Hugh Grenfell, Garry Carr, Wendy Goad, Christine Major, Peter Scott, Jill Kenny, Maureen Burke, Kath Prickett, Linda Hill, Lee Sawyer, Liz Hoskin

**Branch representative on National Committee:** Michael Rowe

**No. of paid GSNZ members as at 31 March 2022:** 121; Geoclub has 129 members

### Branch Activities and Events

Activity	Description	Date Held	Attendance
Delayed Hochstetter Lecture 2021	"The Southern Alps of New Zealand - an integrated picture of an evolving plate boundary" by Phaedra Upton, GNS Science, Dunedin	19 April, 2021	~30
Delayed Complementary Hochstetter Lecture 2021	"How tectonic and surface processes interact to shape our landscape" by Phaedra Upton, GNS Science, Dunedin	20 April, 2021	~20
Hochstetter Lecture 2022 webinar	The 2022 Hochstetter Lecture presented by Dan Hikuroa, University of Auckland "Encouraging plural methods and values as the foundation for cross-cultural research collaborations" (co-created by Darren King, NIWA) was held as a webinar due to Covid-19 restrictions	19 October, 2021	79

Geoclub meeting	Postponed 2020 Hochstetter Lecture; “How tectonic and surface processes interact to shape our landscape” by Phaedra Upton.	20 April, 2021	42
Geoclub meeting	“Geological Visitors from Outer Space” by Joel Schiff.	18 May, 2021	51
Geoclub meeting	“The ancestral Pirongia Volcano (Waikato) and its geological links to the Auckland Volcanic Field” by Oliver McLeod	15 June, 2021	50
Geoclub meeting	“How geology nurtures the middle class” by Julian Vearncombe, and “How global foraminiferal research has evolved since 1950” by Bruce Hayward.	20 July, 2021	39
Geoclub zoom meeting	“Volcanoes of Auckland: Influence of the Sea” by Bruce Hayward	2 November, 2021	49
Geoclub zoom meeting	“Insights into volcanic risk from Auckland to the Antilles, Andes and Arabia.” By Jan Lindsay	16 November, 2021	60
Geoclub zoom meeting	“Hartley Travers Ferrar (1879–1932) and his geological legacy in Antarctica, Egypt and New Zealand.” by Martin Brook	30 November, 2021	50
Geoclub zoom meeting	Members presentations evening	21 December, 2021	19
Geoclub zoom meeting	“The mollusc collections and research of the late Margaret Morley” by Wilma Blom and Bruce Hayward	15 February, 2022	40
Geoclub zoom meeting	“15 January 2022 eruption of Hunga Volcano, Tonga - first insights into the largest explosion ever recorded.” by Shane Cronin	15 March, 2022	70
Geoclub field trip	Boat trip to Tamaki Strait and back led by Bruce Hayward and Bernhard Sporli,	28 April, 2021	37
Geoclub field trip	King Country and Taranaki geohighlights led by Bruce Hayward	7-11 May, 2021	27



Geoclub field trip	Whatipu led by Bruce Hayward	23 May, 2021	26
Geoclub field trip	Kidds Beach Pliocene led by Bruce Hayward and Wendy Goad	19 June, 2021	12
Geoclub field trip	Musick Pt Waitematas led by Bruce Hayward	21 November, 2021	19
Geoclub field trip	Wattle Downs Pliocene led by Bruce Hayward	28 November, 2021	20
Geoclub field trip	Mt St John and Mt Hobson led by Bruce Hayward	8 December, 2021	17
Geoclub field trip	Mangere Pliocene fossils led by Nathan Collins	12 December, 2021	15
Geoclub field trip	Waiake Bay led by Bruce Hayward	17 February, 2021	14
Geoclub field trip	Kaawa shell bed led by Nathan Collins and Bruce Hayward	27 February, 2021	24
Geoclub field trip	Glenbrook Beach Waitematas led by Hugh Grenfell	12 March, 2022	13

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### Branch Prizes

Prize Name	Winners	Prize
Auckland Science Fair	Thomas Nand & Benji Mackenzie, King's School	\$150 + book
Mid Northland Science Fair	Quinn Borlase, Ngunguru School	\$150 + book

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### Branch Publications

#### 11 Geoclub Newsletters

#### Geocene 25, 26, 27

### Additional Branch Comments

Our activities during the year were severely curtailed because of hard lockdowns due to Covid delta and then omicron varieties. Zoom meetings proved a relatively successful replacement especially for our out of Auckland members.

Summary of Branch Accounts

Accounts 1/4/21-31/3/22				
Date	Particular	Credit	Debit	Balance
<b>Income</b>				
	<b>Opening balance</b>			<b>1787.02</b>
	Branch Grants		0	
<b>Sub-total</b>				
			<b>0</b>	
<b>Expenditure</b>				
	Student Science Fair (Auckland and Whangarei)		0*	
	Hochstetter Lecture Lunch - Phaedra Upton		56.2	
<b>Sub-total</b>				
			<b>56.2</b>	
<b>Totals</b>				
	Opening balance carried forward			1787.02
	Income			0
	Total			1787.02
	Total Expenses			56.2
	<b>Balance</b>			<b>1730.82</b>
Note 2021/22 Science Fair costs reimbursed to Bruce Hayward 20 April 2022 so will be included in next financial year accounts				

## Waikato

The Waikato Branch was established under the former 'Geological Society of NZ' in 1975 as a combined Waikato/Bay of Plenty (=Rotorua) Branch and was centred around the former Earth Sciences Department at the University of Waikato, now a part of the School of Science.

### Branch Committee for 2020-21 Committee Members:

Andrew La Croix, Adrian Pittari, Rochelle Hansen (stepped down Oct. 26), Kirsty Vincent (joined Oct. 26)

**Branch representative on National Committee:** Andrew La Croix

**No. of paid GSNZ members as at 31 March 2021:** 56

### Branch Activities and Events

Activity	Description	Date Held	Attendance
Branch Meeting	Held via Zoom; minutes available	26 October, 2021	11
GSNZ Waikato-Bay of Plenty Zoom Seminar	Talk by Andrew La Croix: "Carbon Capture and Storage in the Surat Basin, Australia"	8 December, 2021	~10

### Branch Prizes

Prize	Winners	Award
Annual University of Waikato School of Science Postgraduate Conference, Geoscience Society of NZ (Waikato) Award) for the best geoscience-related oral presentation	Sebastian Höpker	\$150

### Branch Publications

N/A

### Additional Branch Comments

Updated to online banking and signatories to reflect the current Waikato committee.

## Summary of Branch Accounts

Date	Particulars	Credit	Debit	Balance
01/04/2021	Opening balance:			\$413.22
	UoW Sci. Postgrad. Conf. - student prize		\$150.00	
31/03/2021	Balance:			\$263.22

*(NB: The 2020-21 Branch Grant of \$266.00 was received 13 Apr. 2022 and will be reported next year).*

### Taranaki

Founded in 1978, the Taranaki Geological Society became the Taranaki Branch under GSNZ in 1986. TGS membership is by paid subscription; local GSNZ members are automatically members. Monthly meetings (February to December) feature speakers drawn from academia and industry, as well as local contributors. Field trips, both local and further afield, remain an integral part of the TGS' calendar.

**Branch Committee for 2020-21 Committee Members:** Diane Toole (President), Don MacFarlan (Treasurer), Sue Hilton (Secretary), Mark Robbins (Newsletter), Colleen Field (Field Trips Convenor), Steve Thorstensen (Publicity), Keith Armstrong, Gary Walls-Renwick.

**Branch representative on National Committee:** (not applicable; less than 20 members)

**No. of paid GSNZ members as at 31 March 2021:** 15

### Taranaki Branch President's Report

2021 was yet another year marked by Covid-19 restrictions. Not only did it affect each one of us personally, but as a Club we found our program items were either cancelled or delayed. When we did meet there wasn't always the surety of what "Level" we would be operating at. The Toi Foundation rooms, whilst perfect for our needs were often made unavailable due to Covid restrictions. Finally, recently, the use for the facility changed and we had to find a new home. We found and examined the Disabled Citizens Hall which perfectly suits our needs. We now have a fully paid-up venue for the next year and a place to store our library.

For me, as a second term President it wasn't too onerous despite the uncertain meetings. We have a collaborative and able committee made up of Donald MacFarlan (Treasurer and program), Suzanne Hilton (Secretary), Colleen Field (Field Trips), Mark Robbins (Newsletter), Steve Thorstensen (Publicity), Gary Walls-Renwick (Committee) and Keith Armstrong (Committee) who worked well together to keep things running. Of note, a special thanks goes to Donald McFarlan for finding our speakers, keeping our finances in order, ensuring our subs and expenses are paid, and the rooms are booked.

Despite Covid restrictions and meeting venue uncertainty your committee was able to provide some interesting speakers. As follows:

- March 2021 - (in lieu of April 5, Easter) Nick Jackson: The Challenges and Opportunities of Decarbonisation
- May - AGM followed by Travellers' Tales by Diane Toole, Steve Thorstensen, Mark Robbins, Pam Murdoch
- May - (in lieu of June 7, Queen's Birthday). Dane Coppel: Geothermal Wells – Above and Below Ground

*"We now have a fully paid-up venue for the next year and a place to store our library."*

- July - Dominic Strogon: Paleogeographic Reconstruction of Zealandia, mid-Cretaceous to present
- August - Tim Saunderson: Microminerals in volcanic deposits
- September - Cancelled due to Level 4 Lockdown (Tony Brewster rescheduled)
- October - Cancelled Hochstetter Lecture - Darren Ngaru King and Daniel Hikuroa. Rescheduled to next year.
- November - Tony Brewster: Himalayan Foothills by Motorcycle
- December - Year-End Wind-Up: Science Fair Winners; Word Search; Geologically-themed photo connections
- February - 2022 (in lieu of Feb.7, Waitangi Day) Traveller's Tales: Diane Toole, Don MacFarlan, Mark Robbins, Gary Walls-Renwick
- March - Jeremy Wood: Patagonia
- April - Steve Morice: Kapuni 3D Seismic Survey

### *Field Trips*

We are grateful to Colleen Field for her enthusiasm and determination in organising field trips for the year despite lockdowns and restrictions making outings and attendance numbers very small.

From April 2021 to March this year, 6 Field Trips were planned. Two took place, (private rock collection and the Todd Energy Kapuni Tour), 3 were cancelled and some of our members joined the Auckland Geoclub when they were in our area. Bruce Hayward of Auckland kindly invited TGS to share with them.

### *Library*

Our full and varied library is well stocked, but little used. This is because it is stored at my house. Now we have a more permanent home where a library can be on site, we hope that it will be better utilised on meeting nights.

### *Equipment*

We have purchased a large screen and digital projector for use at our meetings rather than relying on borrowing gear.

### *Sponsorship*

Each year we provide prizes for earth science related projects at the Schools Science Fair. This year two pairs of students shared a \$150 grant from TGS.

The winners displayed their projects ('What Concrete is the Strongest?' and 'The Race to Melt,') at the TGS December meeting, where, as in the past, the students described their work & all members present were impressed by the standard of research.

### *Facebook*

TGS has a Facebook page to advertise meetings and post input from members. Please feel free to post your pictures and geology-based news items to share with others. If you don't know how, send details to Steve Thorstensen [sthorste321@gmail.com](mailto:sthorste321@gmail.com)

*“We have purchased a large screen and digital projector for use at our meetings rather than rely on borrowing gear.”*

Thank you to all our members, who have attended meetings, who have put time into turning out for the field trips and who have written up reports.

Thanks for your support.

**Diane Toole**  
**Taranaki Branch President**

### TGS Field Trips Report 2021 - 2022

From 24th April 2021 to 26th March 2022, TGS ran 2 Field Trips, and joined in with Auckland GeoClub on a local FT. Numbers attending ranged from 8 to 11.

(1) 24.4.21; A private gem/mineral/crystal/rock collection. 8 attended. Rod, Kylee and 3 dogs welcomed us to their retail outlet followed by a tour of the house to see their own collection of mainly large examples from across the world., including some pretty lace agate, kauri gum and petrified wood, all from New Zealand. The material was well-displayed, the samples were beautiful. Malachite, calcite, quartz, amethysts, tumbled stones, shaped pebbles, cut-and-polished concretions – all lovely to feel and look at. Thank you, Rod and Kylee.

(2) 9-10.05.21; Bruce Hayward invited TGS to accompany his Auckland GeoClub on 2 days in Taranaki. Bad weather limited attendance from TGS members. Over the two days, sites visited included Awakino Heads, Mohakatino coast, debris avalanche deposits, Corbett Park and Airedale reef. Thank you Bruce.

(3) 11.6.21; Todd Energy Kapuni Tour, 11 attended. Following lunch in the Kaponga Hotel, Roland Swift (TE) gave us a presentation on the requirements for gas/oil formation and why it occurs in Taranaki. He had samples of the 5 formations through which the drill must pass to reach about 4000 m down. Also, the detailed print-outs of seismic surveying he shared, visually demonstrated the faults and strata underlying Taranaki and thus illustrating why Big Ben is placed where it is. On the 'j site' itself, Shaun (TE) led us round to see preparations readying the site for drilling. Big Ben, which we saw on the Mangahewa site (12.4.19) is waiting for its 'blow-out' machine to be fitted. Angie Cooper (TE) was on-hand throughout, answering queries, sharing her expertise. Lastly, we looked at the new solar farm nearby, with its 5800 solar panels.

*“TGS is indebted to Todd Energy for the detailed preparation they had obviously undergone.”*

TGS is indebted to Todd Energy for the detailed preparation they had obviously undergone, their attention to Health and Safety and for being so obliging and generous with their time. Thank you, Todd Energy.

(4) 27.8.21; Massey Microscopy and Imaging Centre with Julie Palmer taking us to Pit Park in afternoon, then following day, Callum Rees leading us up a stream to look for fossils. CANCELLED due to Covid.

(5) 7-11.10.21; Wellington multi-day FT POSTPONED due to Covid-19. Featuring Palaeontological & Petrological Collections at GNS, National Core Store, south coast of Wairarapa with Hamish Campbell, Makara with Rodney Grapes, Castlepoint and astronomy at Carterton.

(6) 26.3.22; Airedale Reef CANCELLED due to Covid and lack of interest. Leader Diane Toole.

**Colleen Field**  
**Field Trips Convenor**

### Branch Activities and Events

Activity	Description	Date Held	Attendance
Meeting	April meeting held in late March because of Easter. See 2021 report.		
Lecture and AGM	AGM was followed by Travellers' Tales given by four local members.	10 May, 2021	19 members; 14 non-members (11 from Auckland)
Lecture Dane Coppell	Geothermal Wells – Above and Below Ground.	31 May, 2021	22 members; 6 non-members
Lecture: Dominic Strogon	Paleogeographic reconstruction of Zealandia, Mid-Cretaceous to present.	05 July, 2021	28 members; 6 non-members
Lecture: Tim Saunderson	Volcanic Deposits and their Micro-Minerals.	02 August, 2021	22 members; 2 non-members
Meeting	Meeting CANCELLED due to Covid lockdown.	06 September, 2021	--
Meeting	Meeting CANCELLED due to Covid restrictions.	04 October, 2021	--
Lecture: Tony Brewster	Himalayan Foothills by Motorcycle.	01 November, 2021	23 members; 6 non-members
Year-End Windup	Student winners of the Taranaki Science & Technology Fair presented and explained their winning experiments.	06 December, 2021	10 members; 9 non-members
Travellers' Tales	Four members each spoke about a trip they had made.	14 February, 2022	12 members



Lecture: Jeremy Wood	Patagonia	07 March, 2022	17 members; 4 non-members
Field Trip	Visited a private gem/mineral/crystal/rock collection.	24 April, 2021	
Field Trip	Joined Bruce Hayward's Auckland GeoClub on their trip of 2 days in Taranaki.	9-10 May, 2021	
Field Trip	Tour of Todd Energy's Kapuni well site in south Taranaki.	11 June, 2021	
Field Trip	CANCELLED due to Covid	27 August, 2021	
Field Trip	POSTPONED due to Covid	7-11 October, 2021	
Field Trip	CANCELLED due to Covid	26 March, 2022	

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### Branch Prizes

Prize	Winners	Award
Student Prize	(not awarded)	
Science Fair Prize(s)	Duncan Poole/Brody Matheson: "What concrete is the Strongest"	\$75.00
	Isabella Treadway/Tasha Forest: "The Race to Melt"	\$75.00

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### Branch Publications

Regular Newsletters were produced by Mark Robbins.

### Additional Branch Comments

(See President's report and Field Trip report above).

### Summary of Branch Accounts

(See audited accounts on next page)

**GEOSCIENCE SOCIETY OF NZ - Taranaki Branch**  
**Financial Statement for year ended 31 March 2022**  
**Statement of Income & Expenditure**

<u>2021</u>	<u>Receipts</u>	<u>2022</u>	<u>2021</u>	<u>Payments</u>	<u>2022</u>
\$ 670.00	Subs and donations in lieu	\$ 725.00	\$ 42.48	Administration (postage, bank etc)	\$ -
\$ 235.00	Publications	\$ 70.00	\$ 490.98	Speakers	\$ 307.45
\$ 286.00	GSNZ grant	\$ -	\$ 80.00	Field Trips	\$ 102.00
\$ 517.41	Interest	\$ 464.99	\$ -	Science fair	\$ 150.00
\$ -	TSB Operations Grant	\$ 600.00	\$ 122.58	Social Functions	\$ 104.94
\$ 5.00	Donations	\$ 5.00	\$ -	Gifts	\$ 30.00
\$ -	Field Trips	\$ -	\$ 108.25	Publicity	\$ -
			\$ -	projector and screen	\$ 936.81
			\$ -	books/publications/library	\$ 30.00
			\$ 395.00	venue hire, expenses	\$ 90.00
			\$ 1,239.29		\$ 1,751.20
			<b>total: \$ 474.12</b>	Excess Inc over Exp	\$ 113.79
<b>\$ 1,713.41</b>	<b>Total</b>	<b>\$ 1,864.99</b>	<b>\$ 1,713.41</b>		<b>\$ 1,864.99</b>

<u>Liabilities</u>		<u>Balance Sheet</u>		<u>Assets</u>	
<u>2021</u>	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>	<u>2022</u>
\$ 270.00	Next years subs paid in current year	\$ 120.00	\$ 30.00	Current yrs subs paid prev year	\$ 270.00
\$ 24,497.21	accumulated funds	\$ 25,280.91	\$ 21,500.00	Term deposits	\$ 21,500.00
\$ 69.58	outstanding cheques	\$ -	\$ -	outstanding cheques from prev year	\$ 25.40
\$ 474.12	annual surplus	\$ 113.79	\$ 3,780.91	Cheque Acc	\$ 3,719.30
<b>\$ 25,310.91</b>		<b>\$ 25,514.70</b>	<b>\$ 25,310.91</b>		<b>\$ 25,514.70</b>

**Financial Review**

Treasurer  
DAB  
MacFarlan

I declare that I have no formal qualifications in accountancy or economics but, in my career as a Registered Valuer, I have had significant experience in the analysis of accounts in order to fulfil the requirements of my profession.

I have examined the financial records of the Taranaki Branch - Geoscience Society of NZ Inc. for the year ended 31 March 2021 and acknowledge that, in common with organisations of a similar nature, it has not been possible to verify that all items of income and expenditure have been authorised or accounted for.

The following recommendations are made for the 2022/23 year.

1. That current financial practises be maintained
2. The society should investigate ways of distributing financial assets as, in my view, reserves are currently excessive for this type and size of organisation.

Subject to these comments, I certify that the above statements correctly summarise the transactions for the year, and show the correct financial position at balance date.

Ian J Burgess Dip VFM RV(ret) – Reviewer 18/04/2022



## Manawatu

The Manawatu Branch was established under the former 'Geological Society of NZ' in 1979 and is centred around Massey University in Palmerston North, with a strong amateur involvement.

**Branch Committee for 2020-21 Committee Members:** Julie Palmer

**Branch representative on National Committee:** Kat Holt

**No. of paid GSNZ members as at 31 March 2022:** 43

### Branch Activities and Events

Activity	Description	Date Held	Attendance
Hochstetter Lecture	"Encouraging plural methods and values as the foundation for cross-cultural research collaborations" by Dan Hikuroa	03 December, 2021	(unknown)

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### Branch Prizes

Nil

### Branch Publications

Nil

### Additional Branch Comments

Very little public/general membership branch activity but the Massey Earth Science community have regular morning tea gatherings and periodic student presentations throughout the year.

Summary of Branch Accounts

**GSNZ MANAWATU BRANCH TREASURER'S REPORT 1 APRIL  
2022**

**Report for Financial Year 1.4.21 to 31.3.22**

**I& E Account**

	<b>Opening Balance 1.4.21</b>	<b>\$ 38.78</b>
Income		
Subscriptions & donations		
Branch Grant		\$ 326.00
Transfer from Bonus Saver		\$ -
Expenses		
AP to Savings Account		-\$ 30.00
Meeting Expenses		
Manawatu Science Fair Prize		
Student Talk Evening Prize		
Postage		
	<b>Closing Balance 31.3.22</b>	<b>\$ 334.78</b>

**Cash and Cheque Account**

	<b>Cash in hand 1 April 2021</b>	<b>\$ 27.50</b>
	Cash received through year	\$ -
	Cash spent through year	\$ -
	<b>Cash in hand 31 March 2022</b>	<b>\$ 27.50</b>
	Westpac cheque account balance	\$ 334.78
	<b>Total Cash and Cheque Account</b>	<b>\$ 362.28</b>

**Bonus Saver Account**

	<b>Opening Balance 1.4.20</b>	<b>\$ 2,039.43</b>
Income		
AP from Cheque Account		\$ 30.00
Interest		\$ -
Expenses		
Bank Fee		-\$ 2.39
	<b>Closing Balance 31.3.21</b>	<b>\$ 2,067.04</b>

*Accounts Prepared by Julie Palmer, 11 November 2022*

## Wellington

The Wellington Branch was established under the former 'Geological Society of NZ' in 1979, but prior to this there was an active Geology Section of the Royal Society of New Zealand. This branch was centred around the former Geology and Geophysics departments at Victoria University of Wellington, now a part of the School of Geography, Environment and Earth Sciences, and the former New Zealand Geological Survey and the New Zealand Oceanographic Institute of the Department of Scientific and Industrial Research, members of which are now mainly from the Crown Research Institutes of GNS Science and NIWA, respectively.

**Branch Committee for 2020-21 Committee Members:** Scott Nodder (secretary), Cliff Atkins, Liz Kennedy (treasurer), Jenni Hopkins, Stephen Piva.

**Branch representative on National Committee:** Jenni Hopkins

**No. of paid GSNZ members as at 31 March 2021:** 219

## Branch Activities and Events

Activity	Description	Date Held	Attendance
Seminar: Jamie Shulmeister	The nature of the last deglaciation in New Zealand glacial records and the role of antecedent topography.	13 May, 2021	~50 members
Seminars: Early Career Research Scientists (ECRs)	<p>Postgraduate Student Seminar - Four short seminars given by Wellington-based ECRs:</p> <p>Marco Rebecchi: Geochemical analysis of the youngest basaltic Plinian eruption on Earth: the 2019 eruptive sequence at Ulawun volcano, Papua New Guinea.</p> <p>Olivia D. Pita-Slim: Analysis of repeating earthquakes near the locking transition of New Zealand's Hikurangi subduction zone.</p> <p>Harrison O'Sullivan-Moffat: Not just cows: urban methane emissions in Auckland, New Zealand.</p> <p>Bryant Chow: Adjoint tomography of</p>	8 July, 2021	~50 members

	the Hikurangi subduction zone and New Zealand's North Island		
Seminar: Jamie Howarth and Alan Orpin	Testing the marine turbidite palaeoseismometer using the 2016 Kaikōura earthquake	12 August, 2021	~50
Judging: NIWA Science Fair	Guest judges (Scott and Jenni) took part in the NIWA Science fair this year	20 August, 2021	N/A
Seminar/Prize night: Beanland-Thornley prize night	Competitive seminars by VUW students for the Beanland-Thornley Prize.	Scheduled for 14 October, 2021	Not held due to Covid
President's Lecture: James Scott	Just how on Earth do we know what Mars is made of?		~50
Hochstetter Lecture: Phaedra Upton	The interplay of mechanical properties and stress in controlling the tectonic and topographic evolution of dynamic landscapes		~50
Hochstetter Support Lecture: Phaedra Upton	An integrated geodynamic view of The Southern Alps/Kā Tiritiri o te Moana		~40

### Branch Prizes

Prize	Winners	Award
Wellington School's NIWA Science Fair	Judged and awarded by Science fair judges	\$350

### Branch Publications

N/A

### Additional Branch Comments

Many thanks to Jenni and Cliff for organising the branch talks this year and for booking the VUW lecture rooms. All talks were also streamed live via Zoom so there were often many people online as well as at the venue.

Summary of Branch Accounts

**Wellington Branch, Geological Society**

**Financial Summary 1/4/21 to 31/3/22**

Liz Kennedy

<b>Financial position at 1/4/21</b>	NZ\$
Bank Balance	2066.74
Liability from previous year	0.00
Petty cash	77.20
<b>Assets total at start of year</b>	<b>2143.94</b>
<b>Financial position at 31/3/22</b>	
Bank Balance	1617.48
Liability carried forward	0.00
Petty cash - brought forward	77.20
Petty cash - earnt	0.00
<b>Assets total at end of year*</b>	<b>1694.68</b>
<b>Net profit</b>	<b>-449.26</b>
Made up of:	
<b>Revenue</b>	
Petty cash collected	0.00
GSNZ Grant	0.00
Interest	0.74
<b>Income total</b>	<b>0.74</b>
<b>Expenses</b>	
Meeting costs - cheque	0.00
Meeting costs - petty cash	0.00
Stamp duty	0.00
Hochstetter speaker dinner	0.00
Student prizes	100.00
Science Fair	350.00
<b>Expenditure total</b>	<b>450.00</b>
<b>Balance</b>	<b>-449.26</b>

## Canterbury

The Canterbury Branch was established under the former 'Geological Society of NZ' in 1961 but had existed independently since 1955 as the Christchurch Colloquium of Geology. The Branch was centred around the Geology Department of Canterbury University, then Department of Geological Sciences, however, since January 2020 the Geology Department has been part of the School of Earth and Environment.

**Branch Committee for 2020-21 Committee Members:** Catherine Reid, Alex Nichols

**Branch representative on National Committee:** Alex Nichols

**No. of paid GSNZ members as at 31 March 2021:** 96

### Branch Activities and Events

Activity	Description	Date Held	Attendance
No branch activities (Hochstetter was held online nationally)			

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### Branch Prizes

Nil

### Branch Publications

Nil

### Additional Branch Comments

Nil

### Summary of Branch Accounts

Opening bank balance: 1323.32

Reserve balance: 625.00

Operational funds: 698.00

Closing bank balance: 1323.32

Reserve balance: 625.00

Operational funds: 698.00



## Otago

Otago and Southland based members of the Geoscience Society of New Zealand. Branch activities are mainly Dunedin-centric, reflecting the majority of the membership who comprise Otago University staff and students, and GNS Science staff.

**Branch Committee for 2020-21 Committee Members:** Nick Mortimer, Sophie Briggs, Andrew Gorman, James Scott, Will Oliver (representing the Otago Students' Geological Society).

**Branch representative on National Committee:** James Scott

**No. of paid GSNZ members as at 31 March 2021:** 78

### Branch Activities and Events

Activity	Description	Date Held	Attendance
Lecture	"From rifting to subduction: imaging volcanic and tectonic processes in New Zealand with magnetotellurics". Wiebke Heise, GNS Lower Hutt	22 April, 2021	20 members; 5 non-members
Lecture	"The Zealandia Switch: Ice Age climate shifts viewed from southern hemisphere moraines", David Barrell, GNS Dunedin	28 July, 2021	20 members; 5 non-members
Fieldtrip	"Dunedin Volcano Trail, Botanic Garden". Adam Martin, GNS Dunedin	20 June, 2021	15 members; 0 non-members
Hochstetter Lecture	"Encouraging plural methods and values as the foundation for cross-cultural research collaborations". Dan Hikuroa and Darren King	02 December, 2021	Zoom only

### Branch Prizes

Prize	Winners	Award
Aurora Otago Science Fair, August 2021	Eve Morton, Fairfield School Yr8. 'Acid Rain Go Away!'	\$50
	Frankie (?surname), Dunedin North Intermediate Yr8. 'S.O.S. Save Our Sand'	\$50
	Riley Mair, Tahuna Yr7. 'Magnetic sand'	\$25
*half the prize value is from GSNZ Otago Branch (see comments below)	Taik Zhou, Tony Tang & Marco Cheu Yr11, Otago Boys' High School 'Basalt or granite'.	\$25

### Branch Publications

N/A

### Additional Branch Comments

COVID lockdowns and traffic light constraints again suppressed branch activities such as in-person talks and fieldtrips.

In May 2021 a geology-themed art exhibition in the Dunedin Community Gallery "Art+Earth: Caught in Stone" was a great success. Although not a GSNZ-organised event, many branch members participated in creating pieces with artists. The week-long exhibition was a great local profile raiser for the earth sciences.

In June 2021 the branch changed its banking arrangements with BNZ from chequebook-based to online, merged the chequing and savings accounts, and updated the authorised signatories. We now have just one account and the signatories are Sophie Briggs, Nick Mortimer and James Scott.

A relatively small number of Otago Science Fair projects each year have earth science themes. So, for the August 2021 fair (and probably, for future ones), GSNZ Otago Branch and the University of Otago Dept of Geology agreed to combine their prize purses, which were equal in amount. GSNZ Otago Branch thus contributed half the prize amounts listed above.

*“Although not a GSNZ-organised event, many branch members participated in creating pieces with artists.”*

### Summary of Branch Accounts

Date	Notes	Cheque	Savings	Total balance
1 Apr 2021	Opening balance	986.24	1098.96	2085.20
15 Apr 2021	Hector Day BBQ	-67.26		
19 May 2021	Science Fair	-75.00		
2 Jun 2021	Net interest		0.06	
2 Jun 2021	Merge accounts	1099.02	-1099.02	
28 Feb 2022	Net interest	0.47		
31 Mar 2022	Closing balance	1943.47		1943.47

### Other Centres

Official GSNZ events (i.e. President's Lecture, Hochstetter Lecture) are often held in Nelson, Napier and Masterton. These events are usually run by local branches of the RSNZ.

### Activities and Events

Activity	Location	Description	Date Held	Attendance
Hochstetter Lecture	Nelson	"Encouraging plural methods and values as the foundation for cross-cultural research collaborations" by Dan Hikuroa.	27 October, 2021	(unknown)

## Sub-Committees

### Fossil Record File

The New Zealand Fossil Record File (FRF) is a database of fossil localities, taxonomic identifications, adopted ages, and other related geological and paleontological information, primarily from New Zealand. The FRF is jointly governed by the Geoscience Society of New Zealand and GNS Science. A steering group comprises James Scott (University of Otago), James Crampton (Victoria University of Wellington), Chris Clowes (GNS Science, subcommittee convenor), and Joe Prebble (GNS Science).

*“In the year to March 2022, data from more than 1200 additional fossil localities were added to the database.”*

In the year to March 2022, data from more than 1200 additional fossil localities were added to the database, bringing the total to more than 100,000 localities, from which over a million taxa have been recorded (~30,000 unique taxa).

Work to add new functionality to the online application that provides users with access to the database (known as “FRED”) has slowed due to resourcing difficulties, but we have nevertheless managed some progress addressing historic bugs. Users experiencing any difficulties with the application should contact [frf@gns.cri.nz](mailto:frf@gns.cri.nz).

Several new research papers, based at least in part on FRF data, have appeared during the past year, covering a range of topics. Two notable contributions focussing on the East Coast Basin are:

- Bland, K.J.; Morgans, H.E.G.; Strogon, D.P.; Harvey, H. 2022. Litho- and biostratigraphy of a late Oligocene-Early Miocene succession in the Weber area, southern Hawke’s Bay, and implications for early Hikurangi subduction-margin evolution. *New Zealand Journal of Geology and Geophysics*, doi: 10.1080/00288306.2022.2108069
- McArthur, A.D.; Bailleul, J.; Chanier, F.; Clare, A.; McCaffrey, W.D. 2021. Lateral, longitudinal, and temporal variation in trench-slope basin fill: examples from the Neogene Akitio sub-basin, Hikurangi Margin, New Zealand. *New Zealand Journal of Geology and Geophysics*, doi: 10.1080/00288306.2021.1977343

The recent paper describing the FRF published in the *New Zealand Journal of Geology and Geophysics* just 12 months ago (Clowes et al. 2021) has already been well-cited (11 in Scopus, 12 in Web of Science). According to the journal website, it is already the 7th most highly cited paper for the past three years. The number of citations attests to the value of this database to the wider Earth Science community.

All operational costs for running the database have been met by GNS Science with funding provided by the Ministry of Business, Innovation and Employment for Nationally Significant Collections and Databases.

**Chris Clowes**  
**Fossil Record File Sub-Committee Convenor**

### Geoheritage

#### Subcommittee 2021-2022

Bruce W Hayward (Convenor, Auckland), Jill Kenny (Northland), Hugh Grenfell (Auckland), Fred Brook (Nelson), Alan Palmer (Manawatu), Karoly Nemeth (Manawatu), Hamish Campbell (Wellington), Mike Johnston (Nelson), Sam Hampton (Christchurch) and Daphne Lee (Dunedin).

*“The Subcommittee prepared a submission to the Parliamentary Inquiry on the Natural and Built Environments Bill.”*

1. Outstanding Natural Features definition. The Subcommittee prepared a submission to the Parliamentary Inquiry on the Natural and Built Environments Bill (signed by GSNZ President) that will replace the RMA, requesting that a definition of Outstanding Natural Features be included which defines it as geoheritage, as originally intended. BWH presented this submission via Zoom to the Parliamentary Environment Committee.

2. Waiohine Terraces and gravel quarry. The Subcommittee responded to an enquiry about the extent and values of the Waiohine Faulted Terraces Scientific Reserve and ONF in Wairarapa and potential impact of a proposed aggregate quarry. A document describing these was prepared and published in the GSNZ Newsletter concluding the proposed quarry would not adversely effect this geoheritage feature.

3. BWH provided an assessment on behalf of GSNZ that proposed reconstruction of a footpath by Auckland Transport would have nil impact on geoheritage values of Kapa Rd Slip ONF in the Auckland Unitary Plan.

4. A submission was sent in on the draft Auckland Regional Parks Management Plan urging acquisition of Crater Hill and that the offer of a gift of Karaka Volcano by the Landowner should be accepted.

5. A submission was made against a Resource Consent Application to construct a retaining wall at the foot of a slip within Takapuna Cliffs ONF. Hearings are due late in 2022.

6. The following additional sites were added to the NZ Geopreservation Inventory during the year:

- **Northland:** Charlie's Rock columnar basalt; Puhipuhi basalt karst.
- **Auckland:** Kaipara South Head flood tide delta and moa footprint site; Karaka Volcano; Waiuku ignimbrite and fossil forest; Patumahoe Volcano; Cape Hill tuff; Helvetia Volcano tuff ring remnants; Roosevelt Park tuff bluffs; Stanmore Bay recumbent fold; Waitomokia tuff ring and explosion crater.
- **Waikato:** Pirongia fluted basalt boulder; Craters of the Moon; Lake Rotongaio; Lake Surprise, Ruapehu.
- **Hawkes Bay:** Te Iho te Rei (Quarantine Island) uplifted land-locked island.
- **Nelson:** Tangmere shell banks; Wainui Bay Inlet; Horse Terrace Bridge gorge; The Sphinx mesa; Jonson Creek 1929 landslide; Angelus Basin cirques and

tarns; Blue Duck landslide-dammed lake; Lake Casloni and Slip Creek lake; Matiri Hole in the Wall waterfall; Owen Valley hogback ridge; Lake Rotoiti glacially-eroded valley; Upper Motueka River (right branch) glaciated valley; Red Hills ultramafic massif and Patuki Melange; Rototai Road sinkhole lake; Ngarua Marble Cave; Tophouse to Lake Rotoiti fault trace; Lower Matakaitaki 1929 Landslide; Old Man of the Buller; Blackwater burning gas seep; Longford vertical strata; Big River Estuary; Ballroom and Stafford Caves, Aorere Goldfield; Anapai coastal granite features.

- **West Coast:** Thunder Creek Falls; Brewster Glacier and glacial features.
- **Canterbury:** Lake Ohau terminal moraine; Papatea Fault scarp and uplifted reef; Hooker Glacier and meltwater lake; Allandale Rhyolite exposures; Charteris Bay Sandstone, Orton Bradley Park; Hope Fault badlands erosion.
- **Otago:** Taieri scroll plain (Waipiata); Lake Onslow mini scroll plain; Frankton Marina glacial erratic boulder; Hindon Maar 1 Miocene fossils; Von River delta and lacustrine benches; Skippers Canyon and Shotover Gorge; Blue River pools, Makarora Valley; Brewery Hole Cave, Duntroon; Valley of the Whales; Puketapu, Palmerston.
- **Southland:** Waipapa Pt Jurassic conglomerate and fossilised logs; Tiwai ventifacts; Cosy Dell Oligocene rocky shore fossils.

**Bruce Hayward**  
**Geoheritage Sub-Committee Convenor**

## Special Interest Groups

### Early Career Researchers

**Convenor:** Jenni Hopkins

**Interested members:** 92

The Early Career Researcher Special Interest Group is open to all geoscientists who identify as being Early Career Researchers. The aims of the ECR SIG are:

- To provide a supportive community for those who identify as ECRs
- To provide a forum for discussion between members working as ECRs
- To facilitate exchange of ideas and information between ECRs on appropriate topics. For example, post-doctoral scholarships or funding proposals.
- To promote ECRs as collaborators/mentors/academic professionals to reduce career-stage bias in academic opportunities (e.g. panellists, judges, invited presenters)
- To encourage and enhance collegiality within and between geoscience research facilities (e.g. Universities, CRIs) in Australasia.

### SIG Activities and Events

(not reported)

### SIG Expenses

(not reported)

### Friends of the Pleistocene

**Convenor:** Peter Almond

**Interested members:** 107

Friends of the Pleistocene is a multidisciplinary group with a common interest in the Quaternary. It was established during 1989-90; one of the original SIGs of the former Geological Society.

### SIG Activities and Events

Activity	Description	Date
AQUA-FoP Pop up meeting	Online meeting 4 keynotes and 47 offered oral presentations over two days.	8-9 July, 2021
FoP keynote talk	Shaun Eaves – FoP-AQUA keynote, “Climate reconstruction from New Zealand glaciers: a 10-year tenure”	9 July, 2021
FoP-Whitestone Geopark talk, Peter Almond	“...and for the last glacial maximum, cold and windy with some warm spells: Insights into past climate from loess”	21 April, 2022

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### SIG Expenses

Nil



### Geochemistry

**Convenor:** Sebastian Naeher

**Interested members:** 177

The Geochemistry Special Interest Group (GSIG) is for Geoscience Society members interested in geochemical processes in New Zealand. Geochemistry is a highly diverse research field, and we aim to address any related research area such as environmental, isotope and trace element geochemistry, geochronology, thermochronology, organic and biogeochemistry.

### SIG Activities and Events

Activity	Description	Date
Newsletters	Two newsletters (no. 8 and 9) in 2021 with help of GSIG member contributions/ submitted articles, calls for contributions made by email and put together by convenor who also distributed completed newsletters	May and December 2021
Email communications	Occasional email communications to/with members about news, updates, events, job advertisements, etc	Occasionally
GSNZ Conference 2021 planning	Planning of a geochemistry session including two keynote speakers and GSIG lunchtime meeting for the 2021 conference, but did not go ahead due to cancellation of the conference	
S. H. Wilson Prize 2021	S. H. Wilson Prize 2021 was awarded to Dr Kevin Brown (GEOKEM, University of Canterbury) for a lifetime of service to Geochemistry.	
Giggenbach Prize	Werner F Giggenbach Prize for Geochemistry was awarded to Terry Isson (University of Waikato).	

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### SIG Expenses

Nil

## Geoscience Education, Outreach and International Development (GeOID)

**Convenor:** Michael Petterson, then Jenny Stein (from October 2021)

**Committee Members:** Michael Petterson, Jenny Stein, Janis Russell, Suzanne Bull, Ben Kennedy.

**Interested members:** 187

The GeOID SIG is for any GSNZ members involved or interested in the communication of geoscience to non-geoscientific audiences. Whether you work with school students, members of the public, or other experts (such as economists and policy makers), GeOID is a place to share, initiate and celebrate your ideas, efforts and experiences. We are keen to support and promote a multi-faceted approach to outreach that engages with audiences at all levels and incorporates a range of geographical (local, national and international) and cultural (academic, industry, mātauranga Māori and community) perspectives.

In October 2021, Michael Petterson stepped down as convenor of the GeOID SIG. Michael thoroughly enjoyed being the Convenor of GeOID, following on from the Geo-Education SIG. His main role was to widen the scope, and help position Geoscience NZ in different territory; chiefly, the significant role geoscience has to play in social development at local to international scales and the manifold issues linked to the Sustainable Development Goals. Michael would like to thank the people who have helped shape the concept of GeOID, in particular Glenn Vallender (with his enormous legacy), Jenny Stein, and James Scott. He also thanks the membership for their support, contributions, talks at the last GSNZ annual session, and the emails he has received with many suggestions and comments.

Jenny in turn would like to thank Michael for his passion for geoethics and for promoting greater awareness and participation in geoscience as a pathway toward positive international development. The COVID-19 global pandemic has been a stark reminder of the interconnectedness and interdependence of countries, cultures and societies around the world, and we must not forget the vital role the geosciences have to play in supporting the wellbeing of us all. I would also like to thank Michael for his advice and support as we develop plans for hosting a national symposium to bring teachers and geoscientists together to collaborate on ways to engage pre-tertiary students with the geosciences. While this has shifted our focus back to the “grass roots” level of outreach here in NZ, as the new convenor of the GeOID SIG, Jenny hopes to continue to support and promote a multi-faceted approach to outreach that engages with audiences at all levels and incorporates a range of geographical (local, national and international) and cultural (academic, industry, mātauranga Māori and community) perspectives.

*“...we must not  
forget the vital  
role the  
geosciences  
have to play in  
supporting the  
wellbeing of us  
all.”*

## Special Interest Groups - Geoscience Education, Outreach and International Development (GeOID)

### SIG Activities and Events

Activity	Description	Date
Newsletter	<p>In this edition:</p> <ul style="list-style-type: none"> <li>Ian Ladds who has regular thoughts on capturing 'Geo-Experiences' that summarise and excite the geological essence of an area.</li> <li>Siân Camps shares her experience with people involved in Watercare activities in Auckland, and how she inspired workers in the wonder and awe of fossils.</li> <li>Jess Hillman, Kyle Bland, Malcolm Arnot and Barbara Lyndsell describe the latest examples from GeoCamp on the western side of South Island.</li> <li>Glenn Vallender summarises some of his recent research examining what the latest statistics and data mean for the numbers of NZ Earth Science Students compared with students studying other subjects.</li> </ul>	June, 2021
Newsletter	<p>In this edition:</p> <ul style="list-style-type: none"> <li>Announcement of the new convenor for the GeOID SIG.</li> <li>Sharing an idea for an outreach initiative designed to be collaborative PLD for schoolteachers and geoscientists, under the working title "Engaging Earth".</li> <li>Notice of the upcoming Tauranga STEM Festival on December 5th</li> <li>Notice of the GSNZ Conference Careers Fair on November 29th.</li> <li>Recent Book Published: Geoscience &amp; the Sustainable Development Goals</li> <li>What's Going On In Australia?</li> </ul>	7 October, 2021
Talk/SIG Meeting (virtual)	As the new SIG convenor (and in lieu of a SIG meeting at conference) Jenny gave an online talk introducing herself and then opened the floor to attendees for their contributions and ideas about SIG activities for the coming year.	7 December, 2021
Newsletter	The first of four planned quarterly newsletters for the 2022 calendar year, the February GeOID newsletter included articles submitted by members:	4 February, 2022

## Special Interest Groups - Geoscience Education, Outreach and International Development (GeOID)

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- Virtual volcanology fieldtrips by Ben Kennedy
- Co-Creation of Bicultural Learning Resources by Sriparna Saha
- GeoTrips by Suzanne Bull
- the International GeoScience Education Organisation (IGEO) by Glenn Vallender
- Navigating the Science Communication Landscape by Janis Russell
- Geoscience outreach on Facebook through our “What kind of rock is this?!” Facebook page, by Jenny Stein

GEOTalk (virtual)	GEOTalk: “GeoTrips” by Suzanne Bull of GNS Science. Suze’s talk introduced the findings from a user survey conducted about the GeoTrips website and how GeOID members can get involved and contribute trips. Attendees: 10.	9 February, 2022
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GEOTalk (virtual)	GEOTalk: “Braiding Lessons From Magmatic Landscapes: Developing A Bicultural Fieldtrip to the Taupō Volcanic Zone (TVZ)” by Sriparna Saha of the University of Canterbury. Attendees: 18.	9 March, 2022
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Committee Meeting (virtual)	Held in two sessions to accommodate committee members being overseas, the committee discussed:  what we would like GeOID to do and be over the coming year  what we could do to build a public presence, and  what we can offer to improve the experience and engagement of our members.	18 March, 2022
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### SIG Expenses

Nil

### Historical Studies Group

**Convenor:** Simon Nathan

**Editor:** Rodney Grapes

**Interested members:** 104

The Historical Studies Group aims to document the history of earth science in New Zealand and record the reminiscences of older geologists. The Reminiscences Subcommittee was established in the former Geological Society in 1979, and then became a Special Interest Group in 1989 - the Historical Studies Group. The late Alan Mason established the Newsletter of the Historical Studies Newsletter (subsequently renamed the Journal of the Historical Studies Group). The main activity of the group is to produce this online journal, recording the history of Geoscience in New Zealand and consisting of articles on New Zealand Geoscience contributed by members.

#### SIG Activities and Events

Activity	Description	Date
Publish Journal	Journal of the Historical Studies Group 69 (June 2021)	June, 2021
	Journal of the Historical Studies Group 70 (November 2021)	November, 2021

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#### SIG Expenses

Nil

### Hydrogeology

**Convenor:** Hisham Zarour

**Interested members:** 79

In New Zealand, 80% of freshwater is found under the ground at any given time. High level hydrogeological skills and knowledge are needed to protect this precious resource and to ensure it is used in the most beneficial and sustainable manner for environmental and socio-economic purposes. Clearly, New Zealand geologists have profound interest and an important role to play in understanding and managing the nation's groundwaters. The objectives of the Hydrogeology SIG are:

- to stimulate interest and knowledge of hydrogeology
- to raise the profile of geologists in groundwater projects, research and forums
- to establish ties and instigate mutually beneficial cooperation between the GSNZ and other professional associations interested in groundwater in New Zealand
- to explore the possibilities and benefits of connecting with international organisations with similar interests, such as the National Groundwater Association (USA) and the European Federation of Geologists (EFG).

### SIG Activities and Events

(not reported)

### SIG Expenses

(not reported)

### LAVA NZ (Volcanology)

**Convenor:** Adrian Pittari

**Interested members:** 258

LAVA NZ is a special interest group for volcanologists and volcano enthusiasts. LAVA NZ held its inaugural meeting at the Geosciences 2014 conference in New Plymouth. The group is associated with LAVA, a specialist group of the Geological Society of Australia. The two groups are managed separately under the auspices of their parent societies, but currently share a common once-to twice-yearly newsletter (LAVA News). The aims of both LAVA NZ and LAVA are: To provide a forum for discussion between members interested in and/or working in ancient and modern volcanic environments in the Australasian region.

- To facilitate the exchange of ideas and information between workers in volcanology and related disciplines such as sedimentology, mineralisation and igneous geochemistry.
- To provide a stronger link between volcanological researchers and industry-based geologists working in volcanic terrains.
- To promote research into the volcanology of the Australasian region.
- To provide a forum for promotion of volcanology within geoscience to the wider community.

### SIG Activities and Events

Activity	Description	Date
Meeting	Annual meeting held online (Zoom); 14 attendees	30 November, 2021
Newsletter	LAVA News vol. 37	9 July, 2021
Newsletter	LAVA News vol. 38	20 December, 2021

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### SIG Expenses

Nil

### Palaeontology

**Convenor:** Daniel Thomas

**Interested members:** 110

The purpose of the Palaeontology Special Interest Group within GSNZ is to advocate for and promote palaeontology and matters of common concern/interest to palaeontologists. All GSNZ members with an interest in fossils of any sort, from molecules to vertebrates, are welcome.

#### SIG Activities and Events

Activity	Description	Date Held
Online talk	2022 PALEOTalk series launched with: <i>Applications of 3D Imaging in Paleontology; Research and Beyond</i> , presented by Daniel Thomas ( <a href="https://www.youtube.com/watch?v=PbmxSzJw9fA">https://www.youtube.com/watch?v=PbmxSzJw9fA</a> )	31 March, 2022

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#### SIG Expenses

Nil



### Petroleum

**Convenor:** Mac Beggs (until August 2021); Miko Fohrmann (August – November 2021); convenorship currently vacant.

**Interested members:** 103

Hitherto the Petroleum Special Interest Group (formerly Oil & Gas) serves to bring together members with an interest in the application of geoscience to the discovery and development of petroleum resources, and all related aspects, including more esoteric applications of technology, data and knowledge gained from petroleum exploration.

The convenorship of this SIG is currently vacant. There is a proposition to reconstitute this SIG to more broadly cover geoscience in the energy systems transition, but the future of the group will depend on new leadership.

### SIG Activities and Events

Activity	Description	Date Held
Newsletter	Article	July, 2021
Email bulletins	Introducing new Convenor and promoting conference activities	9 August, 2021
Conference	Planned workshop and session for 2021 GSNZ Conference	November 2021 (cancelled)

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### SIG Expenses

Nil

### Sedimentology

**Convenor:** Mark Lawrence

**Interested members:** 186

The Sedimentology Special Interest Group (SSIG) is for GSNZ members interested in all aspects of sedimentology ranging from ancient deposits to modern sedimentological processes. The SSIG is open to both active researchers and those just interested in the field. The aim of the SSIG is to promote communication and support among sedimentologists and provide a forum for sedimentology, stratigraphy and sedimentary geology topics in New Zealand. Activities to achieve this aim include but are not restricted to:

- Organising sedimentology field trips and workshops
- Actively promoting and organising sedimentology-focused sessions at the GSNZ conference
- Holding group lunchtime meetings at the GSNZ conference
- Promoting connections with overseas sedimentology groups
- Providing up to date listings of important publications in sedimentology relating to New Zealand.

### SIG Activities and Events

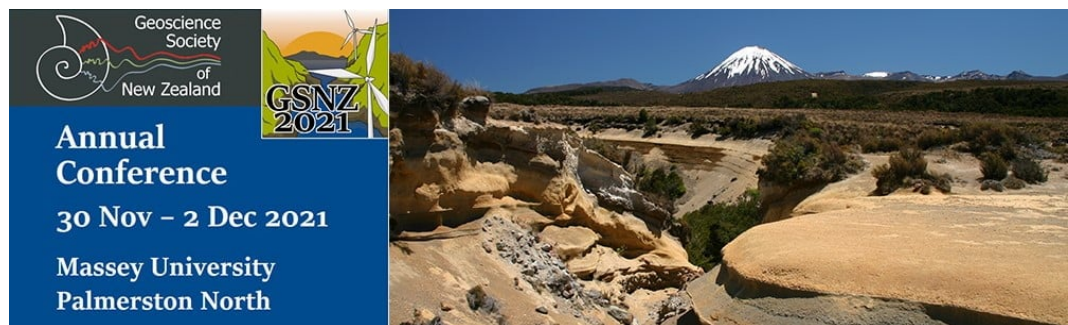
Activity	Description	Date Held
Conference organisation	The International Association of Sedimentologists (IAS) awarded New Zealand the right to host their International Sedimentological Congress (ISC) in 2026. The SSIG has taken this up on behalf of the GSNZ. The organising committee has met a number of times with plans put in place to advertise ISC 2026 at the ISC 2022 to be held in Beijing. Compilation of material for this has commenced. Tourism New Zealand is also supporting the bid and Conferences & Events Ltd have been engaged as the event organisers. Covid meant that the planned SSIG lunchtime meeting at the GSNZ conference at Massey University last November was cancelled.	On-going

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### SIG Expenses

Nil

## GSNZ Annual Conference 2021



The GSNZ Annual Conference 2021 had been scheduled to take place from 30 November – 2 December at Massey University campus in Palmerston North, however it had to be cancelled due to COVID-19. Prior to cancellation the conference had received over 350 registrants, 341 submitted abstracts and had 12 industry sponsors.

It was considered whether deferring the conference until February 2022 would be worthwhile but as there was no guarantee COVID-19 restrictions would be lifted by then, and it would mean holding two conferences in one year, the decision was taken to cancel the 2021 conference and have the same organising committee and venue host the GSNZ Annual Conference 2022 (effectively putting back our rotating venue/host cycle by one year). Feedback from 2021 conference registrants indicated that the majority supported this decision.

Recognising that not all registered speakers would want or be able to present their paper at the next 2022 conference, an abstract volume was published for the 2021 conference. It can be accessed at:

[https://gsnz.org.nz/assets/Uploads/Shop/Products/GSNZ\\_annual\\_conference/MP158\\_2021\\_Palmerston\\_North/MP158\\_2021\\_GSNZ\\_conference\\_Programme\\_Abstract\\_Volume.pdf](https://gsnz.org.nz/assets/Uploads/Shop/Products/GSNZ_annual_conference/MP158_2021_Palmerston_North/MP158_2021_GSNZ_conference_Programme_Abstract_Volume.pdf)

## Appendix A: GSNZ Preliminary Audited Accounts

Here follows preliminary reports on the GSNZ accounts.

# Consolidated Performance Report

Geoscience Society of New Zealand Incorporated  
For the year ended 31 March 2022

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# **Independent Audit Report**

Geoscience Society of New Zealand Incorporated  
For the year ended 31 March 2022





# Entity Information

Consolidated Accounts of Geoscience Society of New Zealand Incorporated  
For the year ended 31 March 2022

'Who are we?', 'Why do we exist?'

## Legal Name of Entity

Geoscience Society of New Zealand Incorporated - Parent  
Geoscience Society of New Zealand Awards Trust - Subsidiary

## Entity Type and Legal Basis

Incorporated Society and Registered Charity

## Registration Number

21991 and CC41125 - Parent

## Entity's Purpose or Mission

- (a) To encourage the advancement of geosciences.
- (b) To serve as a means of facilitating communication and cooperation among members, and other bodies.
- (c) To investigate and report on matters of general interest to New Zealand geoscientists.
- (d) To investigate and report on matters of geoscience that concern members of the general public, and local and territorial statutory bodies.
- (e) To serve as a channel for the expression of the views of New Zealand geoscientists.
- (f) To hold and sponsor conferences and other scientific meetings and meetings of Subcommittees, local Branches and Special Interest Groups.
- (g) To support Tertiary Students and Early Career Geoscientists in their research and to attend geoscience conferences and meetings, by approving Awards and Prizes through the medium of the geological Awards Trust (Inc).
- (h) To encourage and give recognition to high standards of geoscientific research.
- (i) To seek the preservation of important geoscientific sites.
- (j) To encourage the highest standards of professional competence and ethical conduct in the practice of the geosciences in New Zealand.

### **Entity Structure**

Membership of the Society is open to all those interested in the geosciences, whether professional or amateur. Members are elected by a simple vote of the Committee. Membership is in two classes, Ordinary (individuals or corporate bodies), and Honorary.

Our Governance is controlled by an elected committee consisting of elected Officers ( President, Immediate Past President(ex officio), Vice President, Secretary, and Treasurer), five ordinary elected members, and up to two co-opted members on an annualised basis, one of whom maybe the Newsletter Editor. Additional roles, which may or may not be filled by a committee member are: Newsletter Editor, Webmaster and Publications Officer/Convenor.

Four subcommittees look after Awards, the Fossil Record File for New Zealand and its territories, Geoheritage, and Geophysical affairs. A Publication Sub-committee may be convened for large projects.

Eight Branches are located in Auckland, Waikato, Taupo, Taranaki, Manawatu, Wellington, Canterbury and Otago. They are supported by member grants from the Society funds and must follow the Rules of the Society, but otherwise are self-governing in their activities.

Special Interest Groups (SIGs) may be formed, subject to consent from the National Committee, for the purposes of encouraging scientific research and communication in specific geoscience topic areas. The current SIGs are

### **Main Sources of Entity's Cash and Resources**

We receive our main income from sales of publications and subscriptions from members, but also variably from award donations and surpluses from the annual Conference, and occasionally from sponsors of major special publications. These last include the Universities, local and regional bodies, and the Stout Trust for delivery of Special Publications to New Zealand Intermediate and secondary schools.

### **Main Methods Used by Entity to Raise Funds**

Fundraising is by seeking sponsors for major publications and Awards, the running costs of the Annual Conference, and for promoting publication sales; and by actively encouraging membership of the Society. In addition to their membership fee, members have an option to donate to the various specific Award Funds.

### **Entity's Reliance on Volunteers and Donated Goods or Services**

Volunteers including those on the Committee contribute to the day to day running of the Society by being authors and editors of publications, Annual Conference organisers and student staff, fieldtrip guide authors and leaders.

### **Email/Website**

admin@gsnz.org.nz  
www.gsnz.org.nz

### **Postal Address**

PO Box 7003,  
Newtown  
Wellington  
New Zealand, 6242

# Approval of Financial Report

Consolidated Accounts of Geoscience Society of New Zealand Incorporated  
For the year ended 31 March 2022

The Board are pleased to present the approved financial report including the historical financial statements of Geoscience Society of New Zealand Incorporated and Geoscience Society of New Zealand Awards Trust for year ended 31 March 2022.

APPROVED

\_\_\_\_\_  
President

Date .....

\_\_\_\_\_  
Treasurer

Date .....

# Statement of Service Performance

Consolidated Accounts of Geoscience Society of New Zealand  
For the year ended 31 March 2022

'What did we do?', 'When did we do it?'

## Description of Entity's Outcomes

Through the Annual Conference, Branch meetings, field trips and publications, students of all levels and young researchers are exposed to the work and influence of older, more experienced geoscientists, from whom they can learn future career paths. Along with members of the Public, they can learn how the natural world around them can influence their lives by increasing their understanding of geoscience processes leading to and resulting from disasters such as floods, earthquakes and volcanic eruptions, and the origins of geological natural resources such as minerals.

Account	2022	2021
<b>Description and Quantification of the Entity's Outputs</b>		
Conference attendees (Geosciences 2021: A Whole New World – From Local To Global) - conference postponed to	0	411
Conference presentations (papers & posters) -conference postponed	0	318
Conference student attendees - conference postponed	0	126
Workshops & Field Trips (FT-5) participants - conference postponed	0	95
Public Lecture attendees (hosted at annual conference) -conference postponed	0	90
Branch meetings and field trips	54	57
Recipients of the three annual Newsletters	714	698
Recipients of eleven (LY: six) Newsflashes	714	698
Attendees at President's lectures, 2 centres (impacted by COVID)	60	166
Attendees at Hochstetter lecture tour of 3 centres, two branches (impacted by COVID)	159	235
Attendees at Hochstetter support lecture	60	180
Grants and Awards made	20	43
Awards Trust – Awards made	15	17
Awards Trust – Awards value	8,575	9,610

## Additional Information

The Society is ever grateful for donated funds towards student prizes and research awards. For instance, in 1997, funds were donated to the Society by a Mr Sid Hastie, who said "I decided to provide funds for a geology scholarship to foster and encourage an interest in geology in the hope that others will find as much pleasure in the study of geology as I have. The knowledge I have gained and the friends I have made as a result of my interest and curiosity in this fascinating subject have added greatly to my enjoyment of life". This is one of the annual Awards to Masters/Honours level students, one from each University.

# Statement of Financial Performance

Consolidated Accounts of Geoscience Society of New Zealand  
Incorporated  
For the year ended 31 March 2022

'How was it funded?' and 'What did it cost?'

Account	Notes	Group 2022	Parent 2022	Group 2021	Parent 2021
<b>Revenue</b>					
Donations, fundraising and other similar revenue	1	25	25	2,380	2,380
Fees, subscriptions and other revenue from members	1	38,475	38,475	37,264	37,264
Revenue from providing goods or services	1	11,411	11,411	30,292	30,292
Interest, dividends and other investment revenue	1	5,348	1,479	16,034	2,767
<b>Total Revenue</b>		<b>55,259</b>	<b>51,390</b>	<b>85,970</b>	<b>72,702</b>
<b>Expenses</b>					
Costs related to providing goods or service	2	36,315	36,315	64,297	64,297
Grants and donations made	2	23,509	14,934	13,959	4,349
Other expenses	2	4,640	3,043	4,615	3,000
<b>Total Expenses</b>		<b>64,465</b>	<b>54,293</b>	<b>82,871</b>	<b>71,646</b>
<b>Surplus/(Deficit) for the Year</b>		<b>(9,206)</b>	<b>(2,903)</b>	<b>3,099</b>	<b>1,057</b>

This statement should be read in conjunction with the attached Notes to the Accounts and Audit Report

# Statement of Financial Position

Consolidated Accounts of Geoscience Society of New Zealand  
As at 31 March 2022

'What the entity owns?' and 'What the entity owes?'

Account	Notes	Group Parent		Group Parent	
		31-Mar-22	31-Mar-21	31-Mar-22	31-Mar-21
<b>Assets</b>					
<b>Current Assets</b>					
Bank accounts and cash	3	768,475	77,414	77,021	51,142
Debtors and prepayments	3	3,246	2,562	22,878	20,687
Inventory	3	8,506	8,506	10,064	10,064
Term Deposits (current)	3	145,791	145,791	813,229	144,632
<b>Total Current Assets</b>		<b>926,019</b>	<b>234,274</b>	<b>923,192</b>	<b>226,525</b>
<b>Total Assets</b>		<b>926,019</b>	<b>234,274</b>	<b>923,192</b>	<b>226,525</b>
<b>Liabilities</b>					
<b>Current Liabilities</b>					
Creditors and accrued expenses	4	6,239	4,859	1,707	1,707
Unused donations and grants with conditions	4	31,927	31,927	24,427	24,427
<b>Total Current Liabilities</b>		<b>38,166</b>	<b>36,786</b>	<b>26,134</b>	<b>26,134</b>
<b>Total Liabilities</b>		<b>38,166</b>	<b>36,786</b>	<b>26,134</b>	<b>26,134</b>
<b>Total Assets less Total Liabilities (Net Assets)</b>					
		<b>887,853</b>	<b>197,488</b>	<b>897,058</b>	<b>200,391</b>
<b>Accumulated Funds</b>					
Accumulated surpluses or (deficits)	5	380,815	197,488	383,566	200,391
Reserves		507,038		513,492	0
<b>Total Accumulated Funds</b>		<b>887,853</b>	<b>197,488</b>	<b>897,058</b>	<b>200,391</b>

This statement should be read in conjunction with the attached Notes to the Accounts and Audit Report

# Statement of Cash Flows

Consolidated Accounts of Geoscience Society of New Zealand  
For the year ended 31 March 2022

<b>Account</b>	<b>2022</b>	<b>2021</b>
<b>Cash Flows from Operating Activities</b>		
Donations, fundraising and other similar receipts	6,925	2,615
Fees, subscriptions and other receipts from members	43,705	43,182
Receipts from providing goods or services	25,161	14,055
Interest, dividends and other investment receipts	1,205	29
Cash receipts from other operating activities		80
GST	(4,198)	(2,275)
Payments to suppliers and employees	(37,946)	(72,026)
Donations or grants paid	(15,000)	(3,543)
<b>Total Cash Flows from Operating Activities</b>	<b>19,852</b>	<b>(17,883)</b>
<b>Cash Flows from Investing and Financing Activities</b>		
Receipts from sale of investments	0	21,444
Payments to purchase investments	(1,159)	0
Cash flows from other investing and financing activities	7,580	374
<b>Total Cash Flows from Investing and Financing Activities</b>	<b>6,421</b>	<b>21,818</b>
<b>Net Increase/(Decrease) in Cash</b>	<b>26,273</b>	<b>3,935</b>
<b>Bank Accounts and Cash</b>		
Opening cash	51,141	46,708
Net change in cash for period	26,273	3,935
Closing cash	77,414	51,141

This statement should be read in conjunction with the attached Notes to the Accounts and Audit Report

# Statement of Accounting Policies

Consolidated Accounts of Geoscience Society of New Zealand Incorporated

For the year ended 31 March 2022

## 'How did we do our accounting?'

### **Basis of Preparation**

The entity has elected to apply PBE SFR-A (NFP) Public Benefit Entity Simple Format Reporting - Accrual (Not-For-Profit) on the basis that it does not have public accountability and has total annual expenses equal to or less than \$2,000,000. All transactions in the Performance Report are reported using the accrual basis of accounting. The Performance Report is prepared under the assumption that the entity will continue to operate in the foreseeable future.

These are consolidated accounts incorporating Geoscience Society of New Zealand Incorporated (Parent) and Geoscience Society of New Zealand Awards Trust (Suisidary).

### **Goods and Services Tax (GST)**

The entity is registered for GST. All amounts are stated exclusive of goods and services tax (GST) except for accounts payable and accounts receivable which are stated inclusive of GST.

### **Income Tax**

Geoscience Society of New Zealand Incorporated is wholly exempt from New Zealand income tax having fully complied with all statutory conditions for these exemptions.

### **Bank Accounts and Cash**

Bank accounts and cash in the Statement of Cash Flows comprise cash balances and bank balances (including short term deposits) with original maturities of 90 days or less.

### **Changes in Accounting Policies**

There have been no changes in accounting policies. Policies have been applied on a consistent basis with those of the previous reporting period.



# Notes to the Performance Report

Consolidated Accounts of Geoscience Society of New Zealand Incorporated  
For the year ended 31 March 2022

	Group 2022	Parent 2022	Group 2021	Parent 2021
<b>1. Analysis of Revenue</b>				
<b>Donations, fundraising and other similar revenue</b>				
Donations	25	25	2,080	2,080
GeoEducation		0	65	65
Student Travel			235	235
<b>Total Donations, fundraising and other similar revenue</b>	<b>25</b>	<b>25</b>	<b>2,380</b>	<b>2,380</b>
<b>Fees, subscriptions and other revenue from members</b>				
Subscriptions	38,475	38,475	37,264	37,264
<b>Total Fees, subscriptions and other revenue from members</b>	<b>38,475</b>	<b>38,475</b>	<b>37,264</b>	<b>37,264</b>
<b>Revenue from providing goods or services</b>				
Conference Income	0	0	18,280	18,280
Sales	5,331	5,331	11,982	11,982
Sponsorship	6,000	6,000	0	0
Website Advertising	80	80	30	30
<b>Total Revenue from providing goods or services</b>	<b>11,411</b>	<b>11,411</b>	<b>30,292</b>	<b>30,292</b>
<b>Interest, dividends and other investment revenue</b>				
Interest Income	5,348	1,479	16,034	2,767
<b>Total Interest, dividends and other investment revenue</b>	<b>5,348</b>	<b>1,479</b>	<b>16,034</b>	<b>2,767</b>
<b>2. Analysis of Expenses</b>				
<b>Costs related to providing goods or services</b>				
Administration & Office Expenses	26,250	26,250	36,502	36,502
Bank & Merchant Fees	(591)	(591)	255	255
Cost of Goods Sold	1,799	1,799	11,150	11,150
Committee Meetings & Expenses	200	200	780	780
General Expenses	1,059	1,059	0	0
Hochstetter / Lecture Tours	559	559	3,841	3,841
Insurances	1,293	1,293	1,254	1,254
Levy RSNZ	0	0	1,522	1,522
Newsletters	5,746	5,746	8,993	8,993
<b>Total Costs related to providing goods or services</b>	<b>36,315</b>	<b>36,315</b>	<b>64,297</b>	<b>64,297</b>
<b>Grants and donations made</b>				
Branch Grants	4,869	4,869	2,863	2,863
Grants and Awards	6,496	6,496	436	436
Kingma Award	250	250	250	250
Miscellaneous Awards	3,319	3,319	0	0
Student Travel - Conference	0	0	800	800
<b>Awards Trust</b>				
Werner Giffenbach Prize	325	0	500	
Hastie Grants	2,180	0	3,060	
Haywards Communication Award	1,380	0	0	
Jim Ansell Geophysics Scholarship	1,000	0	1,200	
Alan Mason Award	290	0	0	
NZ Geophysics Prize	400	0	0	
Wellman Research Award	3,000	0	4,400	
<b>Total Grants and donations made</b>	<b>23,509</b>	<b>14,934</b>	<b>13,509</b>	<b>4,349</b>
<b>Other expenses</b>				
Audit	4,243	3,043	4,200	3,000
General	397		416	
<b>Total Other expenses</b>	<b>4,640</b>	<b>3,043</b>	<b>4,616</b>	<b>3,000</b>

### 3. Analysis of Assets

#### Bank accounts and cash

Current Accounts	-	0	1,003	1,003
Savings Accounts	-	0	3,432	3,432
Westpac Inc & Exp Acct	56,122	56,122	25,430	25,430
Westpac Inc & Exp Savings	21,292	21,292	21,277	21,277
Awards Trust Current Account	20,073		9,091	
Awards Trust Savings Account	670,988		16,788	
<b>Total Bank accounts and cash</b>	<b>768,475</b>	<b>77,414</b>	<b>77,021</b>	<b>51,142</b>

#### Term Deposit

Term Deposit - General			187,122	
Term Deposit - Hastie			203,258	
Term Deposit - Hayward			50,000	
Term Deposit - NZ Gens			33,103	
Term Deposit - Wellman			195,115	
Operating Funds	145,791	145,791	144,632	144,632
	<b>145,791</b>	<b>145,791</b>	<b>813,230</b>	<b>144,632</b>

#### Debtors and prepayments

Accounts Receivable	1,975	1,975	20,826	20,373
Accrued Interest	587	587	2,052	314
GST	684			
<b>Total Debtors and prepayments</b>	<b>3,246</b>	<b>2,562</b>	<b>22,878</b>	<b>20,687</b>

#### Inventory

Stock on Hand	8,506	8,506	10,064	10,064
<b>Total Inventory</b>	<b>8,506</b>	<b>8,506</b>	<b>10,064</b>	<b>10,064</b>

### 4. Analysis of Liabilities

#### Creditors and accrued expenses

Accounts Payable	4,423	3,043	683	683
GST	1,816	1,816	1,024	1,024
<b>Total Creditors and accrued expenses</b>	<b>6,239</b>	<b>4,859</b>	<b>1,707</b>	<b>1,707</b>

#### Unused donations and grants with conditions

Award Funds	12,698	12,698	5,198	5,198
Continent on the Move #2	4,704	4,704	4,704	4,704
SAGE Geographics Fund	6,565	6,565	6,565	6,565
Stout Trust Grant - Lloyd Homer Book	7,960	7,960	7,960	7,960
<b>Total Unused donations and grants with conditions</b>	<b>31,927</b>	<b>31,927</b>	<b>24,427</b>	<b>24,427</b>

### 5. Accumulated Funds

#### Accumulated Funds

Opening Balance	383,566	200,391	382,927	199,334
Accumulated surpluses or (deficits)	(9,205)	(2,903)	3,099	1,057
Transfers to Reserves	6,454		(2,460)	
<b>Total Accumulated Funds</b>	<b>380,815</b>	<b>197,488</b>	<b>383,566</b>	<b>200,391</b>

#### Reserves

Opening Balance	513,492		512,207	199,334
Net use of funds	(6,454)		1,285	
<b>Total Reserves</b>	<b>507,038</b>		<b>513,492</b>	
<b>Total Accumulated Funds &amp; Reserves</b>	<b>887,853</b>	<b>197,488</b>	<b>897,058</b>	<b>200,391</b>

### 6. Commitments

There are no commitments as at 31 March 2022 (Last year - nil).

### 7. Contingent Liabilities and Guarantees

There are no contingent liabilities or guarantees as at 31 March 2022 (Last year - nil).

### 8. Related Parties

There were no transactions involving related parties during the financial year (Last year - nil).

**9. Events After the Balance Date**

There were no events that have occurred after the balance date that would have a material impact on the Performance Report (Last year - nil).

**10. Ability to Continue Operating**

The entity will continue to operate for the foreseeable future.

# Performance Report

Geoscience Society of New Zealand Awards Trust  
For the year ended 31 March 2022

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# Independent Audit Report

Geoscience Society of New Zealand Awards Trust  
For the year ended 31 March 2022

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# Entity Information

## Geoscience Society of New Zealand Awards Trust For the year ended 31 March 2022

'Who are we?', 'Why do we exist?'

### Legal Name of Entity

Geoscience Society of New Zealand Awards Trust

### Entity Type and Legal Basis

Charitable Trust

### Registration Number

1477708 (CC35670)

### Entity's Purpose or Mission

- a) To make awards recognising significant achievements by persons resident in NZ in Geoscience and related scientific fields, in particular to Tertiary students and Young Researchers within the first ten years of their professional career.
- (b) To administer awards and prizes known as the Alan Mason Historical Studies Fund, Hornibrook Prize, Pullar/Vucetich prize, Hastie Awards, Wellman prize, Wellman Research Award, NZ Geophysics Prize, Werner F. Giggenbach Prize for Geochemistry, Jim Ansell geophysics Scholarship, John Beavan Geodetic Fieldwork Grant, Haywood Geocommunication Award, and such further awards and prizes as may be established by the Trust from time to time.
- (c) To support the advancement of geoscience research and knowledge in NZ generally.
- (d) To make grants to further geoscience research and endeavour.
- (e) To promote awareness and education in the earth sciences in NZ.
- (f) To support libraries and other channels for raising knowledge and awareness of the earth sciences.
- (g) To do all such other acts and things as are incidental to or that will further the attainment of the foregoing objects or any of them provided that nothing herein before contained shall authorise any objects that are not charitable in law.
- (h) To seek, accept and receive donations, subsidies, grants, endowments, gifts, legacies, loans and bequests in money or in kind and to carry out any specified Trust attaching or relating to such benefits to the intent that any benefit made to the Trust be made for the general purposes of the Trust or may be made for some purposes within the general objects of the Trust specified in particular cases by the donor.
- (i) In any way consistent with these objects, to both maximise the income of the Trust on its capital and to increase the capital of the Trust.

### Entity Structure

The Trust Board consist of no more than five nor less than three members of the Geoscience Society of New Zealand incorporated ("the Society"). The Immediate Past President and the Treasurer of the Society for the time being are ex officio Trustees, along with between one and three persons elected at the Annual General Meeting of the Society. The Board shall have the following officers:- a Chairperson who shall be the Society's Immediate Past President, a Secretary and a Treasurer; these offices may be combined. The Trustees may appoint up to five persons at any one time as Advisory Trustees to advise them on one or more aspects of the Trust's affairs; Advisory Trustees may attend Board meetings but have neither voting rights nor rights or obligations of Trustees.

### Main Sources of Entity's Cash and Resources

We receive our main income from short and long term (12 month Term Deposit) interest-bearing bank accounts, variably from Society member's donations to specific awards, and occasionally, from new donors for new Awards.

### Entity's Reliance on Volunteers and Donated Goods or Services



Volunteers including those on the Society's Awards Sub-committee contribute to the activities of the Trust by seeking nominations for Awards, and by assessing the suitability of nominees for an Award or Prize.

**Physical Address**

c/- GNS Science; 1 Fairway Drive, Avalon, Lower Hutt 5010

**Postal Address**

c/- Geoscience Society of New Zealand  
PO Box 7003  
Newtown  
Wellington 6242

**Email/Website**

admin@gsnz.org.nz  
www.gsnz.org.nz

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# Approval of Financial Report

## Geoscience Society of New Zealand Awards Trust For the year ended 31 March 2022

The Trustees are pleased to present the approved financial report including the historical financial statements of Geoscience Society of New Zealand Awards Trust for year ended 31 March 2022.

APPROVED

\_\_\_\_\_  
Chairperson  
Date .....

\_\_\_\_\_  
Treasurer  
Date .....

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# Statement of Service Performance

## Geoscience Society of New Zealand Awards Trust For the year ended 31 March 2022

'What did we do?', 'When did we do it?'

### Description of Entity's Outcomes

Awards and prizes were approved this financial year include the six Hastie Awards, The Wellman Prize, the Wellman Research Award, The Pullar/Vucetich Award and the Jim Ansell Geophysics Scholarship. As per the Trust Deed, the available funds to pay out for Awards and Prizes was commensurate with the modest annual interest earned from term deposits.

	2022	2021
<b>Description and Quantification of the Entity's Outputs</b>		
Awards and Prizes distributed	15	17
Value of Awards and Prizes (\$)	8,575	9,610

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# Statement of Financial Performance

## Geoscience Society of New Zealand Awards Trust For the year ended 31 March 2022

'How was it funded?' and 'What did it cost?'

	NOTES	2022	2021
<b>Revenue</b>			
Interest, dividends and other investment revenue	1	3,869	13,267
<b>Total Revenue</b>		<b>3,869</b>	<b>13,267</b>
<b>Expenses</b>			
Grants and donations made	2	8,575	9,610
Other expenses	2	1,597	1,615
<b>Total Expenses</b>		<b>10,172</b>	<b>11,225</b>
<b>Surplus/(Deficit) for the Year</b>		<b>(6,302)</b>	<b>2,042</b>

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This statement has been prepared without conducting an audit or review engagement, and should be read in conjunction with the attached Compilation Report.

# Statement of Financial Position

## Geoscience Society of New Zealand Awards Trust As at 31 March 2022

'What the entity owns?' and 'What the entity owes?'

	NOTES	31 MAR 2022	31 MAR 2021
<b>Assets</b>			
<b>Current Assets</b>			
Bank accounts and cash	3	691,060	25,879
Term Deposits (current)	3	-	668,597
Interest Accrual		-	1,738
GST		684	453
<b>Total Current Assets</b>		<b>691,745</b>	<b>696,667</b>
<b>Total Assets</b>		<b>691,745</b>	<b>696,667</b>
<b>Liabilities</b>			
<b>Current Liabilities</b>			
Creditors and accrued expenses	4	1,380	-
<b>Total Current Liabilities</b>		<b>1,380</b>	<b>-</b>
<b>Total Liabilities</b>		<b>1,380</b>	<b>-</b>
<b>Total Assets less Total Liabilities (Net Assets)</b>		<b>690,365</b>	<b>696,667</b>
<b>Accumulated Funds</b>			
Accumulated surpluses or (deficits)	5	183,327	183,175
Reserves	5	507,038	513,492
<b>Total Accumulated Funds</b>		<b>690,365</b>	<b>696,667</b>

This statement has been prepared without conducting an audit or review engagement, and should be read in conjunction with the attached Compilation Report.

# Statement of Cash Flows

## Geoscience Society of New Zealand Awards Trust For the year ended 31 March 2022

	2022	2021
<b>Cash Flows from Operating Activities</b>		
Interest, dividends and other investment receipts	5,607	16,983
GST	(52)	(229)
Payments to suppliers and employees	(397)	(1,615)
Donations or grants paid	(8,575)	(9,610)
<b>Total Cash Flows from Operating Activities</b>	<b>(3,416)</b>	<b>5,529</b>
<b>Net Increase/(Decrease) in Cash</b>	<b>(3,416)</b>	<b>5,529</b>
<b>Bank Accounts and Cash</b>		
Opening cash	694,476	688,947
Net change in cash for period	(3,416)	5,529
Closing cash	691,060	694,476

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This statement has been prepared without conducting an audit or review engagement, and should be read in conjunction with the attached Compilation Report.

# Statement of Accounting Policies

## Geoscience Society of New Zealand Awards Trust For the year ended 31 March 2022

'How did we do our accounting?'

### Reporting Entity

Geoscience Society of New Zealand Awards Trust is a Charitable Trust and is a registered charity under the Charities Act 2005.

### Basis of Preparation

The entity has elected to apply PBE SFR-A (NFP) Public Benefit Entity Simple Format Reporting - Accrual (Not-For-Profit) on the basis that it does not have public accountability and has total annual expenses equal to or less than \$2,000,000. All transactions in the Performance Report are reported using the accrual basis of accounting. The Performance Report is prepared under the assumption that the entity will continue to operate in the foreseeable future.

### Goods and Services Tax (GST)

The entity is registered for GST. All amounts are stated exclusive of goods and services tax (GST) except for accounts payable and accounts receivable which are stated inclusive of GST.

### Income Tax

Geoscience Society of New Zealand Awards Trust is wholly exempt from New Zealand income tax having fully complied with all statutory conditions for these exemptions.

### Bank Accounts and Cash

Bank accounts and cash in the Statement of Cash Flows comprise cash balances and bank balances (including short term deposits) with original maturities of 90 days or less.

### Changes in Accounting Policies

There have been no changes in accounting policies. Policies have been applied on a consistent basis with those of the previous reporting period.

### Awards and Prizes

These are recorded on a cash basis when they are paid.

# Notes to the Performance Report

## Geoscience Society of New Zealand Awards Trust For the year ended 31 March 2022

	2022	2021
<b>1. Analysis of Revenue</b>		
<b>Interest, dividends and other investment revenue</b>		
Interest Income	3,869	13,267
<b>Total Interest, dividends and other investment revenue</b>	<b>3,869</b>	<b>13,267</b>

	2022	2021
<b>2. Analysis of Expenses</b>		
<b>Grants and donations made</b>		
Werner Giggenbach Prize	325	500
Hastie Grants	2,180	3,060
Hayward Communication Award	1,380	-
Jim Ansell Geophysics Scholarship	1,000	1,200
Alan Mason Award	290	450
NZ Geophysics Prize	400	-
Wellman Research Award	3,000	4,400
<b>Total Grants and donations made</b>	<b>8,575</b>	<b>9,610</b>
<b>Other expenses</b>		
Administration	397	281
Audit	1,200	1,200
General Expenses	-	135
<b>Total Other expenses</b>	<b>1,597</b>	<b>1,615</b>

	2022	2021
<b>3. Analysis of Assets</b>		
<b>Bank accounts and cash</b>		
Current Account	20,073	9,091
Savings Account	670,988	16,788
<b>Total Bank accounts and cash</b>	<b>691,060</b>	<b>25,879</b>
<b>Term Deposits (Current)</b>		
Term Deposit - General	-	187,122
Term Deposit - Hastie	-	203,258
Term Deposit - Hayward	-	50,000
Term Deposit - NZ Gens	-	33,103
Term Deposit - Wellman	-	195,115
<b>Total Term Deposits (Current)</b>	<b>-</b>	<b>668,597</b>
<b>Debtors and prepayments</b>		
Interest Accrual	-	1,738
<b>Total Debtors and prepayments</b>	<b>-</b>	<b>1,738</b>



2022 2021

**4. Analysis of Liabilities****Creditors and accrued expenses**

Accounts Payable	1,380	-
GST	(684)	(453)
<b>Total Creditors and accrued expenses</b>	<b>696</b>	<b>(453)</b>

2022 2021

**5. Accumulated Funds****Accumulated Funds**

Opening Balance	183,175	182,418
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**Accumulated surpluses or (deficits)**

Current year earnings	(6,302)	2,042
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**Transfer of Income/Expenses relating to Reserves**

Net Movements - General Reserve	700	(1,592)
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Net Movements - Hastie Reserve	1,539	(463)
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Net Movements - Hayward Reserve	1,210	189
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Net Movements - NZGems Reserve	220	(436)
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Net Movements - Wellman Reserve	2,785	1,017
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<b>Total Transfer of Income/Expenses relating to Reserves</b>	<b>6,454</b>	<b>(1,285)</b>
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<b>Total Accumulated surpluses or (deficits)</b>	<b>152</b>	<b>757</b>
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<b>Total Accumulated Funds</b>	<b>183,327</b>	<b>183,175</b>
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<b>Total Accumulated Funds</b>	<b>183,327</b>	<b>183,175</b>
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2022 2021

**6. Breakdown of Reserves****Reserves**

General Awards Reserve	160,027	160,727
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Hastie Awards Reserve	139,740	141,279
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Hayward Geocommunication Award	49,235	50,445
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NZGeMs Awards Reserve	30,889	31,110
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Wellman Reserve	127,147	129,931
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<b>Total Reserves</b>	<b>507,038</b>	<b>513,492</b>
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**7. Commitments**

There are no commitments as at 31 March 2022 (Last year - nil).

**8. Contingent Liabilities and Guarantees**

There are no contingent liabilities or guarantees as at 31 March 2022 Last year - nil).

**9. Related Parties**

There were no transactions involving related parties during the financial year. (LY: Nil)

#### **10. Events After the Balance Date**

There were no events that have occurred after the balance date that would have a material impact on the Performance Report (Last year - nil).

#### **11. Ability to Continue Operating**

The entity will continue to operate for the foreseeable future.

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