# Annual Report

# 1 APRIL 2017 - 31 MARCH 2018



**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

# **Geoscience Society of New Zealand Inc.**

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# **President's Report**

"The long and valued service of both David Skinner and Janet George has been appreciated and we thank them for their willingness to see smooth transitions take place"

This report spans across a presidential election held on 1st December 2017 and hence covers a range of activities of importance to the New Zealand Geoscience Society throughout 2017-18 that occurred under the presidencies of both Adrian Pittari and Jennifer Eccles.

First, we remember our members who have passed away this year, including prominent contributors to the Society: **Michael (Mike) Isaac** (past-treasurer, 1982-1985), **David Smale** (GSNZ editor, 1998-2005; past-secretary, 1977-1980), and **Henry Pantin** (treasurer and co-editor, 1959-60). We also remembered the passing of **Helen Augusta Hope Sanderson (nee MacDonald)** the first NZ woman to graduate MSc with Honours in Geology at a NZ University.

The presentation of society activities in a consolidated Annual Report is now in its second year. Progress on succession within the national committee has been made, with Alan Orpin elected as treasurer at the 2017 AGM and long-serving treasurer David Skinner co-opted onto the national committee to see the financial year to completion before Alan takes over the 2018-19 reins with new financial setups. Succession of the GSNZ administrator will be next, as long-serving Janet George retires. The long and valued service of both David and Janet has been appreciated and we thank them for their willingness to see smooth transitions take place. The national committee is itself now quite 'new' and we thank those who have served and those who have now stepped up to do so. There are however, still plenty of opportunities for those interested to bring fresh ideas and enthusiasm to the national committee, subcommittees, branches and special interest groups.

At this point I would like to recognise an important contributor of the Society: **David Skinner**. David was elected treasurer in 1999 and served 18 years in this position – the longest serving treasurer. If we add the extra year David served on the committee (1978-9), then he is officially the Society's longest-serving committee member – 19 years! Over his time as treasurer, David was involved with the establishment of the Awards Trust (2004) and trustee ever since, registering the Society onto the Charities Register (2008), amalgamation of the Geological and Geophysical societies (2010) and conversion to computerised accounting ... although on this last point David prefers to say Mind Your Own

Business! David has kept the Society afloat much to the relief of ten presidents! He has been an Honorary member since 2014.

Another stalwart of our own time on the committee has been GSNZ administrator **Janet George**. Janet became administrator in 2007 and has been crucial to the smooth running of both the national committee and many Geoscience conferences in her separate but not unrelated day job as an event organiser. Janet has been a constant name and face for the society to many of our members and the public.

Dave Craw presented his Hochstetter Lecture on *Tectonics and genetics in topographic evolution* to 610 people across 11 centres; his supplementary lectures were attended by 250 people. Both talks were engaging and interesting.

The 2017 annual conference in Auckland, organised by the Auckland Branch attracted 262 delegates (~50% of whom were students) and 206 oral and poster presentations. The conference was convened by Michael Rowe and supported by the local organising committee and Auckland Event Services. The Geoscience conference continues to provide an active forum for the New Zealand geoscience research community and interested parties to come together to disseminate new findings, share ideas and network. The conference annual dinner, last year held at the Villa Maria winery, also gives us the opportunity to celebrate the excellence within our community with the presentation of our annual awards. These are fully documented in the Awards and Grants section of this report.

We also take the opportunity to acknowledge those members of our community who achieved recognition for their excellence in other national and international forums, with New Zealand geoscience punching well beyond our population size. To support the next generation of geoscientists, the Society also supports student research outside those awarded at the conference dinner through funding of Young Researcher Travel Grants to attend international conferences; travel grants to this conference, and the S.J. Hastie Scholarships for Masters or Honours research. Conference income also funds student oral and poster prizes.

Anna Kaiser, succeeded in December 2017 by Sam McColl, managed our publication sales this year. The Wandering River field guide and Field Wallet have continued to be our most popular publications. The second edition of our flagship book 'A Continent on the Move' has also continued to sell well through GNS Science and Potton and Burton. On the upstream end of publications – managed by our Publications Convenor, Matt Sagar – the Society has facilitated several signification Miscellaneous Publications:

MP150: The passing of a member of the Geoscience community can trigger the need to preserve and share memories and the 56 page tribute "The working life of Michael

John Selby (1936-2018): A highly influential late 20th century New Zealand geomorphologist and university leader" by Cam Nelson and contributions from over 20 members of our community demonstrates the respect and affection in which he was held. Available free to download.

MP149: The late George Eiby and John Latter's book on volcanoes was near publication at the time of George's death in 1992 and has now, edited by Tony Hurst, been published as a free to download e-book "Volcanoes: A historical account and tribute to George Eiby and John Latter."

MP148: the late Peter Ballance's "New Zealand geology: an illustrated guide" – an e-book that is free to download from the GSNZ website;

MP146: Bruce Hayward's "Out of the Ocean into the fire: History in the rocks, fossils and landforms of Auckland, Northland and Coromandel" – all attendees at the 2017 Geoscience conference in Auckland received a free copy;

MP144: Jane C. Park's biography of her husband, edited by Simon Nathan "The Life and Times of James Park: Geologist, Explorer, University Dean" – also free to download.

Three editions of the GSNZ Newsletter (June 2017, November 2017 and March 2018) have been published this financial year, under the excellent editorship of Glenn Vallendar. Seven electronic Newsflashes (Jun., two in Sept., Oct., Nov., Dec, March) and five Newsbriefs were also issued throughout the year. Our website has continued to remain up-to-date through the dedicated work of our website editor, Hugh Grenfell.

The geoheritage subcommittee, led by Bruce Hayward, has continued to advocate on our behalf on various geopreservation matters including working with councils (e.g. Whangarei and Waitomo) to establish protection of Outstanding National Features, reminding council to actually protect established ONFs (Auckland with resource consents impacting Takapuna's Fossil Forest). The Crater Hill appeal in the Environment Court was decided against subdivision but unfortunately is now under appeal in the High Court. Conservation, and Associate Environment, Minister Eugenie Sage was contacted with regards to a variety of issues within her prevue and was interested having a change from the biological perspective on her portfolios.

The committee encouraged branches to recognise our national geosciences day – Hector Day. This year a national initiative, the Hector Day geo-bake, was advertised generating creative and enthusiastic efforts from many of our younger members in particular. Morning teas were held before photos were uploaded to and judged on the GSNZ Facebook site. The national prize of a geological hammer, a copy of A Continent on the

Move and a one-year GSNZ membership was awarded to Marcus Richards and Freya Priestnall from Otago with an impressive Otago Basin layer cake.

Our Society is one of the larger Constituent Organisations of the Royal Society of New Zealand. We also renewed our memoranda of understanding with the geological societies of Australia and America, mainly associated with applying membership rates to each other's conferences.

I thank this year's national committee for their hard work and contributions to the work of the Society; several have been noted above. Andrew Gorman, Anna Kaiser and Huw Horgan stood down from the national committee and we wish them well in their future endeavours.

Jennifer Eccles (president) and Adrian Pittari (immediate past president)

# Statement of Financial Performance-GSNZ

By way of a simplified overview of the Society's financials, income streams include membership subscriptions, sales revenue from publications, donations, and interest from our investments. Our outgoings include costs associated with the administration of the Society, support of lecture tours and the annual conference, production of newsletters to the membership, and sponsorship of publications. Consistent with our charitable status, another significant component of our outgoings is the support of 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). A detailed summary of the Society's Consolidated Accounts and those of the Awards Trust are appended to back of this Annual Report. Figures cited below are drawn from these audited accounts.

The 2017-18 financial year saw an improvement in the Society's financial performance, realising a smaller deficit of \$1,497 versus \$16,185 last year. The primary reason for this improvement was a slight increase in revenue from sales (publications) combined with a \$18,532 reduction in expenses (primarily: no payment from the deliberating sinking John Bevan Geodetic Fieldwork fund, reduction in Wellman Research and Miscellaneous Awards). Whilst this year still registers as a loss in the consolidated accounts, the \$14,688 improvement in performance is nonetheless noteworthy, particularly on a back of a \$3,322 reduction in subscriptions. Memberships remain a significant source of discretionary income for the society, but their continued decline is cause for concern, as has been noted by the previous treasurer.

At the end of the financial year, the total cash funds in the operating accounts were \$287,396, a \$5,349 gain over last year. In the Geological Awards Trust, modest interest rates realised \$18,969 of growth in the consolidated term investments to \$564,602, after disbursement of \$8,690 for 11 awards made; a significant reduction from the previous year, but in keeping with figures from the 2016-17 financial year. Similarly, the total accumulated funds in the Trust grew by \$9,079 to \$627,956.

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

Following consultation with our auditors (Dent & Heath), since the start of the new financial year (2018-19) we have been working towards consolidating and streamlining all our operating accounts in the Society's general fund. With a view toward simplification, the Income & Expenditure (I&E) "savings" and cheque accounts now carry all the Society's day-to-day operations. As such, the old conference accounts have been closed, and when suppliers transition across to the I&E account, the publications accounts will also close. New revenue, albeit modest, will be forthcoming from around \$190,000 of cash reserves from the old operating accounts that are now in short-term investments earning interest (~3%+).

We have transitioned fully to Westpac banking online, with nearly all payments now being electronic with appropriate signing co-authorisation also online. This has yielded significant administrative efficiencies and is a more robust system for committee members on the move. The online feature come into its own during the Geoscience 2018 Conference registration process and having the ability to generate up-to-date spreadsheets, rather than waiting for printed statements, for Absolutely Organised has been most helpful.

CLAD Online is our new membership and subscription software and also provides the credit card facility via Stripe for online payments.

With the assistance of Dent & Heath, the Society is now running its operating accounts in the online financial software Xero. To date, it has proven to be efficient and simple to use and has the advantage of being directly auditable come the end of the current financial year. Following the advice of our auditors, the reporting lines have been simplified to aid transparency and operation. The intention is to preserve the capacity to monitor the financial performance of our traditional activities such as the annual conference, Hochstetter Lecture tour, and publications etc.

Lastly, the tireless efforts of David Skinner, the former treasurer (now Financial Advisor), cannot be overstated. David's mentorship through my transition into the role was very much appreciated. I now know just a fraction of his deep knowledge of the accounts. Similarly, the society's outgoing administrator, Janet George, offered critical support and responses to lots of curly questions. Thank you both and enjoy your retirement!

Alan Orpin (Treasurer) and David Skinner (Financial Advisor)

# Minutes of the Last AGM

Minutes of the 8th Annual General Meeting of the Geoscience Society of New Zealand (Inc) held at the New Science Building, University of Auckland on Friday 1 December 2017 at 9:00am

## 1. Welcome and Apologies.

The President (Adrian Pittari) welcomed over 35 members of the Society to the meeting. The following apologies were recorded: Mike Johnston, Glenn Vallender, James Scott, Scott Nodder, Phil Barnes, Sam McColl, Alan Parker, Bob Stewart.

Proposed: A Pittari, seconded J Eccles; carried.

## 2. Minutes of the 7th AGM

It was moved the minutes of the Geoscience Society of New Zealand, held on 30 November 2016, Wanaka, as published in the Annual Report be accepted as a true and accurate record of the meeting.

Proposed: D Skinner, seconded A. Orpin; carried.

## 3. Matters Arising from the Minutes

There were no matters arising from the minutes of the previous AGM.

#### 4. Annual Report

The Annual Report for year ended 30 March 2017, including the President's Report, Financial Accounts, Membership Report and Reports from Branches, Subcommittees and Special Interest Groups was taken as read.

It was moved that the Annual Report be accepted. Proposed A. Pittari, seconded F Davey; carried.

Interim Reports, 1 April – 30 November 2017 (except where stated)

#### a. President

The interim President's verbal report covered the period between the 7th and 8th AGM, thus overlapping part of the President's report within the Annual Report (item 4) and an update since 1 April. The following areas were covered by the President:

- the passing of the following members during the year: D Combs, M Isaac, D Smale, H Pantin, H Sanderson;
- the first stand-alone Annual Report, the membership survey and progress on succession planning;
- recognition of David Skinner's 19 years as committee member, 18 as Treasurer, and of Andrew Gorman's 14 years' service, including on the former Geophysical Society;
- regular activities (Hochstetter Lecture; annual conference; Society awards; publications; newsletter, newsflashes, newsbriefs and the website; geoheritage activities; Hector Day);

- relationships with the Royal Society NZ, and renewal of MoUs with geological societies of Australia and America; and
- appreciation of the work of the committee.

<u>It was moved</u> that the President's verbal report be accepted. *Proposed D. Skinner, seconded G Zellmer; carried.* 

b. Treasurer (for the financial year ended 30 March 2017)

It was moved that the accounts for the Trust Account be accepted. *Proposed D Skinner, seconded C Reid; carried.* 

<u>It was moved</u> that the Consolidated accounts be accepted. *Proposed D. Skinner;* seconded B Hayward; carried

## c. Administrator

The Administrator reported on the following membership statistics as at 30 November 2017:

992 names registered on the database (cf. 1078, March 31, 2016) with 621 as financial members (cf 692, March 31, 2016).

<u>It was moved</u> that the administrator's report be accepted. *Proposed A Pittari;* seconded J Palmer; carried.

5. Election of Officers and Committee for 2017/2018

The President thanked the following committee members who were stepping down: Anna Kaiser, Huw Horgan, Andrew Gorman.

Then, the following election took place as follows:

Office	Nominee (s)	Proposer	Seconder
President	Jennifer Eccles (Auckland)	A Pittari	B Hayward
Vice President	James Scott (Dunedin)	M Sagar	N Mortimer
Secretary	Catherine Reid (Canterbury)	Eligible	S Woelz
Treasurer	Alan Orpin (Wellington)	R Wysoczanki	D Skinner
Committee (5)	Richard Wysocanski (Wellington)	Eligible	
	Matt Sagar (Wellington)	Eligible	
	Sam McColl (Palmerston North)	J Eccles	
	Andrew Rees (Wellington)	A Pittari	J Palmer
	lan Hamling (Wellington)	C Reid	

As there were no further nominations received, <u>it was moved</u> that these nominations be accepted. The officers and committee members *were elected* with acclamation. The following appointments were noted:

## Co-opted Members and Appointments

Immediate Past President (ex officio)Adrian PittariCo-opted memberDavid SkinnerCo-opted member - Newsletter EditorGlenn Vallender

**Administrator** Janet George

The following formal roles of Committee and Subcommittee members were also

acknowledged:

Awards Convenor (Vice-President):

Publications Convenor:

Publications Sales:

Website:

Geoheritage Subcommittee:

FRED Subcommittee:

Geophysical Affairs Subcommittee:

James Scott

Matt Sagar

Sam McColl

Hugh Grenfell

Bruce Hayward

Hamish Campbell

Ian Hamling

## 6. Anticipated Changes to Financial Processes

Alan Orpin spoke about his new role as upcoming Treasurer. He outlined his wish to modernise operational procedures with the society's accounts, which he believed would improve efficiency and the demands on the Treasurer's time (and that of the committee). These included online banking and using Xero to manage the accounts etc. His goal is to simplify the accounting processes and improve the transparency of the accounts for members. He would investigate the banks who will offer online services. He would also look at the structure of the accounts with the view to improve interest-earning opportunities. A member asked if the Society has a sponsor and the answer was that sponsors were used just for specific projects.

## 7. Notice of Motions for Treasurer's Honorarium and Auditor

#### a. Honorarium for Treasurer

Motion: For the Financial Year commencing 1 April 2018 the National Committee shall budget for an honorarium of \$3,500 for the Treasurer

Background: This honorarium for the Treasurer has been approved for each financial year since 1 April 2009 (in the former Geological Society of NZ), and was last raised from \$3,000 to \$3,500 for the financial year commencing 1 April 2015. The National Committee has discussed the honorarium and its appropriate value and agree on the current motion listed here.

Alan Orpin said he felt uncomfortable accepting any honorarium until such time as had full operational responsibility as the Society's Treasurer. In addition, he noted that some of his commitments might reasonably be considered professional development if they occurred during normal work days.

#### b. Honorarium for Treasurer

Motion: For the financial year commencing 1 April 2018 the National Committee shall budget for a honorarium of a maximum, \$3,500 for the Treasurer, if required.

Vote to change the wording /A Pittari, N Wilson

The amended motion was then put by A. Pittari/ seconded J Palmer; Carried.

## c. Appointment of Auditor

It was moved that Dent & Heath be re-appointed as the Society's Auditor. Proposed D Skinner, seconded C Reid; Carried

## 8. Notices of Motions for Rule Changes

a) Motion: That the words "... cheques and withdrawal warrants ...." in Rule 6f be amended to ".... withdrawals, transfers and payments". Proposed Adrian Pittari; seconded D Skinner; Carried

Background: Under Subscriptions and Finance, Rule 6f refers to "...cheques and withdrawal warrants shall be signed by any two of the signatories." The wording change here is to accommodate both existing and new methods of bank transactions that may be recommended by a future Treasurer, such as electronic payments.

b) Motion: That an additional rule be added, namely, Rule 11H that states: "All Special Interest Groups shall, not later than April 30 each year, submit to the Committee a report for the financial year ending 31 March". Proposed Adrian Pittari, seconded J Eccles: Carried

Background: last year the reporting requirements for the Branches were modified; however Special Interest Groups (SIG) currently have no annual reporting obligation, although they are asked for it informally. It is suggested that the same reporting requirement should apply to the SIGs.

<u>c)</u> <u>Motion:</u> That the four occurrences of 'Chairman', namely in rules 7g (twice), 8b and 10a, be replaced with 'Chair'. Proposed A.Pittari, seconded G Zellmer; Carried

Background: This amendment honours and corrects an earlier intention of the Society of the same nature in 2010. Note also that the terminology used in the Rules of the GSNZ Awards Trust is 'chairperson', however, based on the terminology used for the rules of several similar societies, 'chair' is the suggested term to be used here.

#### 9. Award Trustee Elections

Motion: To confirm Alan Orpin (Treasurer) and Adrian Pittari (Immediate past president) and nominate Jennifer Eccles (President), James Scott (Vice-President) and David Skinner as Trustees for the GSNZ Awards Trust. Proposed, A Pittari, seconded M Savage; carried.

## 11) Any other business

- Raising the subscription The actual setting at the AGM would be as a result of a recommendation from the Committee.
- Facebook Currently the administrators were Kat Holt, Andrew Gorman, Janet George and Helen Bostock. Helen raised the question that as she was not a committee member, she may not have the mandate to contribute to Facebook. It was agreed to raise this at its next meeting and to perhaps form a Communications Subcommittee.
- Adrian Pittari was thanked for all his hard work as President for the last two years.
- Meeting closed at 10:30 am

# **National Structure**

# **Committee members**

New and continuing officers and Committee members elected at the 2017 AGM, co-opted members and appointments at or after the AGM and ongoing members of the previous committee:

Elected Officers @ 2017 AGM		First
		Elected
Jennifer Eccles (President)	University of Auckland	2012
Catherine Reid, (Secretary, continuing)	University of Canterbury	2012
James Scott, Vice President	University of Otago	2016
David Skinner (Treasurer, continuing)	GNS Science	1978-79; 99
Alan Orpin (Treasurer)	NIWA	2017
Committee		
Adrian Pittari (Immediate Past President)	University of Waikato	2008
Andrew Rees	University of Wellington	2017
Ian Hamling	GNS Science	2017
Matt Sagar	GNS Science	2016
Sam McColl	Massey University	2016
Richard Wysoczanski	NIWA	2016
Appointments <sup>1</sup> / Co-opted <sup>2</sup>		
<sup>1</sup> Hugh Grenfell, Web master, continuing	University of Auckland	2007
<sup>1</sup> Janet George, Contractor, continuing	Absolutely Organised	2007
<sup>2</sup> Glenn Vallender, Editor, continuing	<i>E</i> dRSR	2011
Outgoing		
Huw Horgan	VUW	2012
Anna Kaiser	GNS Science	2013
Andrew Gorman	University of Otago	2010



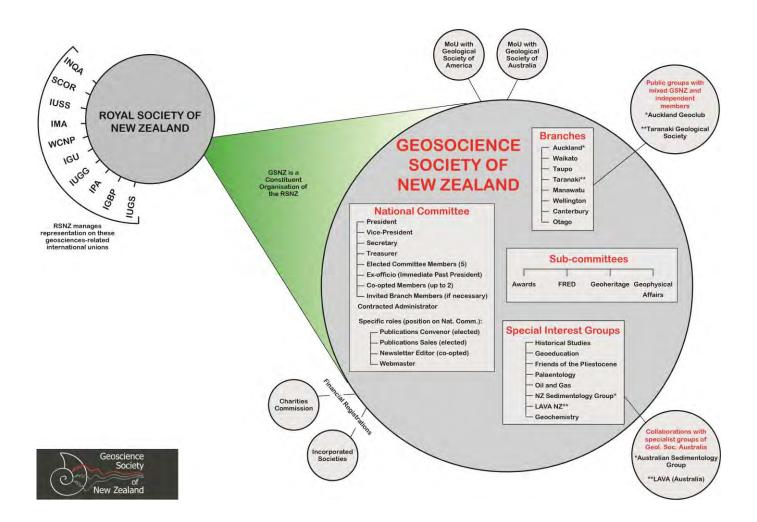
## First meeting of the 2018 National Committee

Back (L to R): Richard Wysoczanski, James Scott, Ian Hamling, David Skinner, Adrian Pittari, Matt Sagar, Glenn Vallender,

Front (L to R): Jennifer Eccles, Janet George, Alan Orpin

Absent: Sam McColl and Catherine Reid

## **Structure**



# **Relationships:**

Current Memoranda of Understanding:

With Geological Society of Australia (effective 1 June 2017 – 31 May 2020)

With Geological Society of America (effective 18 Januar 2018 – 17 January 2021)

With GNS Science regarding FRED (effective 8 August 2018 – 7 August 2021)

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# Membership

# **Total Membership**

From a possible 958names on the database **666** renewed their membership as at 31 March 2018, including the 8 honorary members. The remainder of the names on the database either:

- did not respond
- · officially resigned
- opted out (resigned by opting out electronically)
- gone, no address both by email or hard copy mail.

## **Honorary Life Members**

In 2017 Campbell Nelson was awarded Honorary Life Membership and joins a group with seven others as follows:

Year	Life Member
2017	Campbell Nelson
2016	Mike Johnston
2015	Jack Grant-Mackie
2014	David Skinner
2013	Bruce Hayward
2012	Simon Nathan
2011	Bruce Thompson
	George Risk

# Make up

## **International Make up**

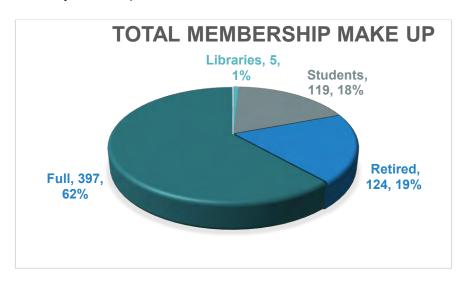
12% of members live overseas (noted as International Members in the Branch break down) 88% from New Zealand.

Of the 12% from Overseas; 43% are from Australia; 25% from USA, 10% from UK and the remainder from a range of mainly European countries.

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## **Total Membership Make -up**

The following figure shows the make-up of the total Society's membership (includes Honorary members)



## **Regional statistics**

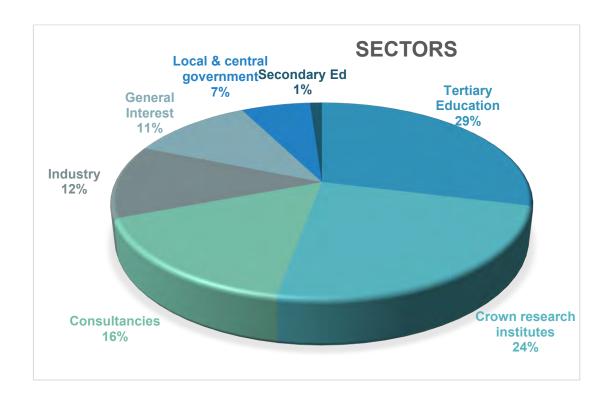
Based on indication of Branch membership

Region	Branch membership
Auckland	118
Waikato	48
Taupo	11
Taranaki	18
Manawatu	26
Wellington	205
Canterbury	77
Otago	78

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## **Sector Categories of Full Members**

Excluding students, retired and members not wishing to indicate, full members are engaged in the following sectors:



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# **Publications**

# **Publication Projects**

## **GSNZ PUBLICATIONS**

Publication Sales (elected December 2017): Sam McColl (Massey University)

Publications Convenor (re-elected December 2017): Matt Sagar (GNS Science)

#### **PUBLICATION PROJECTS**

The following GSNZ-approved projects were in progress and/or published in the 2017–18 financial year. Additional proposals that were received and were still under consideration during this time are not included here.

# GSNZ Conference 2017 conference, University of Auckland, Abstract Volume (published)

Baker, J. and Rowe, M. (eds) (2017). Abstracts, Geosciences 2017 conference, University of Auckland, New Zealand. Geoscience Society of New Zealand Miscellaneous Publication 147A. 134 p.

# GSNZ Conference 2017 conference, University of Auckland, Field Trip Guide (published)

Brook, M. (compiler) (2017). Fieldtrip Guides, Geosciences 2017 conference, University of Auckland, New Zealand. Geoscience Society of New Zealand Miscellaneous Publication 147B.

FT3: Lowe, D.J., Shane, P.A.R., de Lange, P.J. and Clarkson, B.D. (2017). Rangitoto Island, 56 pp.

FT6: Hayward, B.W. and Geary, I. (2017). Fossil highlights of Auckland, 37 pp.

FT7: Carson L. and Rowland, J. (2017). Broken Hills district epithermal Au–Ag mineralisation, 11 pp.

# The life and times of James Park—geologist, explorer and university dean, by Simon Nathan

(published May 2017)

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# New Zealand geology: an illustrated guide, by Peter F. Ballance and edited by Bruce W. Hayward and Jill Kenny (published November 2017)

A manuscript written by the late Peter F. Ballance before and during his retirement was published as a free eBook (GSNZ Misc. Pub. 148) and launched at the Geosciences 2017 conference, University of Auckland. Bruce Hayward and Jill Kenny compiled, formatted and edited the manuscript, and Louise Cotterall (University of Auckland) updated the figures. The eBook consists of 397 pages, 114 colour photographs and 170 pages of colourised illustrations. The geology of New Zealand is addressed in considerable depth, while remaining accessible to the non-specialist.

# Book on Lloyd Homer, a photographer, by Simon Nathan (approved June 2016; ongoing)

A proposal to publish the above book as a GSNZ Miscellaneous Publication was approved and a seeding fund (\$2,500) was granted to assist publication.

Out of the Ocean, into the Fire: History in the rocks, fossils and landforms of Auckland, Northland and Coromandel, by Bruce Hayward (published September 2017) This book was published in physical format as GSNZ Miscellaneous Publication 146 and is available for \$49.99 through Potton & Burton. As GSNZ President, Adrian Pittari attended the book launch in Auckland (27 September). At the June 2017 meeting of the National Committee, a grant of up to \$5,000 was approved to cover the cost of providing a copy to each delegate attending the Geoscience 2017 conference, with aims of aiding the dissemination of geological knowledge about the Auckland and Northland regions and reducing the per-copy printing costs of the book. Publication was made possible through the fundraising efforts of Bruce Hayward, on behalf of GSNZ.

# Volcanoes: A historical account and tribute to George Eiby and John Latter, edited by Tony W. Hurst

Tony Hurst and Gill Jolly (GNS Science) enquired whether GSNZ would provide \$3,000 (excluding GST) to co-publish a book with GNS Science as part of our Miscellaneous Publication series about volcanoes based on the manuscript written by George Eiby and John Latter. Tony Hurst, with support from Katy Kelly, will edit the manuscript to bring it up to publication standard. This request was approved, provided that the sub-title and an extensive foreword added to the manuscript, and a distribution list for physical copies

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provided. The book will also be available in digital format at no charge from the GSNZ website. Adrian Pittari, as a volcanologist and GSNZ President, was invited to write the foreword. Publication as GSNZ Miscellaneous Publication 149 is imminent.

The Life and Times of James Park: Geologist, Explorer and University Dean, by James C. Park and edited by Simon Nathan (published June 2017)

The memoirs of James Park were published as a free eBook (GSNZ Misc. Pub. 144) that is available via the GSNZ website.

## **Copyright Licensing New Zealand**

In August 2017 \$4,068.13 (including GST) already gathered was paid to GSNZ by Copyright Licensing New Zealand for material for which GSNZ is the copyright holder. This money will be used for sponsoring future publications. Following this, Copyright Licensing New Zealand was notified that GSNZ, as a charitable society, did not want copyright fees to be collected in the future.

## **Building Stones of New Plymouth**

The New Plymouth Building Stones book is still in progress with all new images now available in line with recommended enhancements by national committee in 2017. It is hoped to be available by the end of 2018.

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# **Publication Sales**

		Number	
Publications	Value	sold	Value Sold
Wandering River	\$20.00	11	\$220.00
Cobb Valley	\$15.50	1	\$15.50
Red Rocks	\$20.00	2	\$40.00
Geyserland	\$20.00	2	\$40.00
Queenstown	\$15.00	1	\$15.00
Central Rocks	\$20.00	1	\$20.00
Field Wallet	\$10.00	22	\$220.00
Mountains to Meteorites	\$20.00	2	\$40.00
Geologist Remembers	\$20.00	1	\$20.00
Hochstetter's First Nelson Diary	\$10.00	2	\$20.00
Total		45	\$650.50

In addition, the following publications were sold on the Society's behalf by Potton & Burton and GNS Science

	Number	
Publications	sold	Value Sold
A Continent on the Move	388	\$12,620.81
Out of the Ocean, Into the Fire	1499	\$30,894.05

# **Awards & Grants**

# **Society Awards**

The Young Researcher Travel Grant, for young society members to attend their first international conference, was originally set up to disburse 'profits' from Geoscience Conferences. This fund has proved immensely popular and although structured to allow applications in three rounds annually, was already oversubscribed by worthy applicants in the first round of the 2017-2018 financial year. After assessment by the national committee funds were awarded to six applicants Sonja Bermudez, GNS Science/Victoria University of Wellington; Emanuele Giacalone, University of Otago; Charline Lormand, Massey University; May Sas, University of Auckland; Elham Yousefzadeh, University of Waikato and Rosie Cole, University of Otago. It has been noted that the students applying to this fund are, when looking at overall applications/awards to date, unevenly distributed by supervisor through our community and we encourage more members to bring this opportunity to the attention of their students.

An Awards subcommittee was appointed and convened in September 2017 by then Vice President, Awards, Jennifer Eccles, and awards were made for all the Society prizes available in 2017 with the exception of the Hornibrook Award. Advice for the Giggenbach Award was sought from the Geochemistry Special Interest Group, and the Harold Wellman Prize was awarded at the discretion of the President Adrian Pittari. The S.J. Hastie Scholarships were presented at the Geosciences 2017 conference closing ceremony. All other awards were presented at the Geosciences 2017 conference dinner.

The Society awarded the following in 2017:

Name of Award	Recipient	Details
McKay Hammer Award (Jointly award in 2017)	Nicholas Golledge, Victoria University of Wellington AND	Three papers published internationally on Modelling of the Antarctic Ice Sheet
	Daphne Lee, University of Otago	A body of work focused on establishing the Palaeontology and Palaeobotany of the Southern Zealandia using fossils in Oligocene-Miocene sedimentary deposits.
New Zealand Geophysics Prize	Grant O'Brien, Simon Cox and John Townend	For their paper – "Spatially and temporally systematic hydrologic changes within large geoengineered landslides, Cromwell Gorge, New Zealand, induced by multiple regional earthquakes.
Hochstetter Lecturer	Alan Cooper, University of Otago	Lecture series on: Tectonics of the Haast Schists
S.H. Wilson Prize	Dave Craw, University of Otago	Outstanding contribution to fluid flow associated with gold mineralisation in mountain belts and mine-related environmental issues
Kingma Award	Jenny Black, GNS Science	
Harold Wellman Prize	lan Geary	Discovery of Pliocene fossil beds at Beachlands, Auckland
Wellman Research Award	James Veitch, Massey University	Research to utilise 10Be concentrations in alluvial and sue sediments as a proxy for major catchment disturbance in the Ruamahanga catchment, Wairarapa, during the late-glacial to Holocene.
Jim Ansell Geophysics Scholarship	Clarrie Macklin, Victoria University of Wellington	Research on finite-difference modelling of the Tasman Glacier focussing on glacial speed up during high rainfall events.
Werner Giggenbach Prize for Geochemistry	Simon Barker, University of Auckland	Publication of: Rapid priming, accumulation and recharge of magma driving recent eruptions at a hyperactive caldera volcano.

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S.J. Hastie Scholarship	Alex Davidson, Auckland	Experimental weathering and stabilisation or marginal aggregates.
	Krystal Joan Geraghty, Waikato	Physical controls and processes associated with the 1968-1975 eruptions of Ngauruhoe.
	Hannah Harvey, Massey Clarrie Alexander Macklin, Victoria	Sedimentary geology of a portion of the East Coast Basin, Weber to Akitio, New Zealand
	Thomas Brough	Mass balance of the Tasman Glacier.
	jointly with Janina Gillies, Canterbury	Techonic geomorphology and palaeoseismology of the Humps Fault Zone
	Catherine Sansgter Otago	Hazards footprints from partial exposure of pyroclastic density currents on Mt Ruapheu
		Understanding earthquake hazards: a seismic survey of Dunedin

The NZ SAGE Scholarship, sponsored by EQC, GNS Science and the GSNZ, was awarded in April 2018 to Clarrie Macklin of Victoria University of Wellington to attend the 2018 Summer of Applied Geophysics Experience in New Mexico, USA.

# **Student Travel Grants**

A total of 41 students attending the 2017 Geosciences Conference were awarded travel grants with \$60 going to Waikato students, \$90 going to Victoria Students and to \$110 to Otago students, totalling \$4,200.

# **Annual Conference Prizes**

Seven students were awarded prizes for best oral presentation and best poster presentations at the 2017 Geosciences Conference and were presented at the closing ceremony.

## **Oral Presentation Winners**

Best Honours Presentation Award (\$200)	Stephen Piva	Monash University
Best Oral (RSNZ) (\$500)	Marcus Richards	University of Otago
Runner Up (\$200)	Tom Robertson	University of Waikato
Runner Up (\$200)	Ermanno Brosch	Massey University

## Poster Presentation Winners

Best Poster (\$500)	Stephanie Gates	University of Canterbury
Runner Up (\$200)	Sneha Suresh	University of Auckland
Runner Up (\$200)	Brooke Waterson	University of Auckland

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

# **Communications**

## **Newsletter**

Three issues of the GSNZ Newsletter are produced each year. Along with Newsflashes, the Newsletter remains an important connector and forum for Society members nationally and internationally. A constant challenge is to attract younger society members to contribute ideas, thoughts, news and articles, in workplaces that have increasing demands on time and energy. The Newsletters are eventually electronically available to all members. The editorship of Glenn Vallender is greatly appreciated by the Society.

From statistics received from the online subscription renewal portal:

416 indicated that they would receive the newsletter electronically only.

**247** indicated that they would prefer to receive the newsletter in *hard copy*.

Note that the newsletter is sent out electronically to all members as a matter of course. Newsletters are archived on the GSNZ website and publicly available 6 months after publication.

## **Newsflashes and Email briefs**

Six electronic *News Flashes* (June 2017, September 2017, October 2017, November 2017 December 2017 and March 2018) were sent out during the year, usually after each National Committing Meeting or more frequently if the need arose.

Five *Email Briefs* were sent out on an ad hoc basis as required in 2017/2018 including 2 announcing the deaths of prominent members and 3 regarding Hector Day and a Geo-bake competition.

Both the *News Flash* and *Email Briefs* are emailed to a database of approximately 900 people including current and (recently) past members.

## Website

The website (www.gsnz.org.nz) is kept up to date by web master, Hugh Grenfell, a long-time member of the Society. The current website was designed by GetNet in 2004 and is

hosted and maintained by Freedom Print & Design (both companies located in Palmerston North).

# **Facebook**

A Facebook presence was set up in 2012 (https://www.facebook.com/GeoSocNZ/) and upcoming events are posted here along with topics of interest as they occur. There are currently 675 "friends or likes". The GSNZ Administrator and a number of society members with administrator rights, are able to post current items of interest.

# **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 Auckland's geology and fossils. The Auckland GeoClub is run autonomously, and its members are not members 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 2017-18**

Branch representative: Jennifer Eccles

GeoCub committee: Bruce Hayward (convenor), Gary Carr, Wendy Goad, Hugh Grenfell, Jill Kenny (Geocene editor), Christine Major (Treasurer), Peter Scott, Peter Daymond-King, Maureen Burke, Kath Prickett

## No. of paid GSNZ members of this Branch\* on March 31, 2018: 118

\* excludes GeoClub members who are not members of the Geoscience Society of New Zealand

## No. of GeoClub members#: 103 + 15 honorary

# 15% of the GeoClub members are also paid GSNZ members

## **Branch Activities and Events**

The branch and GeoClub held the following activities during the year:

Activity	Brief description	Date	Number attended
Field	South Kaipara Peninsula	Apr 2017	11
trips	Waihi & Karangahake goldfields	Apr 2017	26
	Wellington region 3 days	May 2017	19
	Stillwater Waitematas	Jun 2017	10
	Karaka Bay to Achilles Pt	Jun 2017	19
	New Caledonia 7 days	July 2017	18
	Pollen Island	Aug 2017	19
	Whangaparaoa Head	Aug 2017	17
	Eastern beach	Sep 2017	16

Seminar	Waipu Estuary & One Tree Pt Mt Albert lava flows East Fiordland Cheltenham Beach Xmas BBQ Sunset Beach Baylys Beach, Dargaville - "The geology and volcanoes of the Coromandel Range – a summary" by Bruce Hayward.	Oct 2017 Nov 2017 Nov 2017 Dec 2017 Feb 2018 Mar 2018 Apr 2017	10 + 40 public 15 23 25 28 10 65
	<ul> <li>"Tales of the South Pacific: a story of ocean circulation and change in our region" by Dr Melissa Bowen.</li> </ul>	May 2017	43
	<ul> <li>"A muli-proxy record of Late Holocene environmental change from Lake Colenso, North Island". by Amanda McDonald-Creevey; and "New results from on-going geodetic surveys of the Hauraki Rift" by Robert Pickle.</li> </ul>	Jul 2017	39
	- "UNESCO Global Geoparks: should NZ	Aug 2017	46
	propose some?" by Prof Paul Williams.  - "The secret life of volcanic ash in uncovering the eruptive history of the Auckland Volcanic Field", by Jenni Hopkins.	Sep 2017	63
	"Fossil highlights of northern New Zealand and their stories, by Bruce Hayward.	Oct 2017	52
	- "Assessing the hazard risk of Yasur Volcano, Vanuatu - the world's most continuously active volcano", by Ben Simons, and "19th century geology stories from the vaults of Auckland Museum" by Hugh Grenfell.	Nov 2017	37
	- Members presentations were delivered by lan Simpson (Manganese mining in the Hunuas), Peter Scott (terrace formation), Wendy Goad (carbonate rocks in the Mohaka), Liz Hoskin (Geology of the Isle of Islay, Scotland), Peter Daymond-king (Useful hints for Aucklanders in the event of a volcanic eruption), Grant Moffat (old photos and paintings of Piha), Malcolm MacAvoy (In search of graptolites in the Cobb).	Dec 2017	42
	- Charles Darwin's geological observations in New Zealand by Bruce Hayward; Is there a previously unrecognised volcano at Karaka? by Bruce Hayward.	Feb 2018	45

Fossilised siliceous sinters of the Mar 2018 38 Coromandel Volcanic Zone by Auckland grad student Ayrton Hamilton; & Sediment deposits of the Hikurangi Channel and links to seismic activity by Auckland grad student Aratrika Ganguly Seminar Hochstetter Lecture - Tectonics and genetics 20 June 2017 173 in topographic evolution (Dave Craw) **Complementary Hochstetter Lecture** 21 June 2017 31 Tectonically driven fluid flow and gold mineralisation in actively deforming convergent orogens (Dave Craw)

## **Branch Prizes**

Name of prize Winn			Prize value
Mid Northland (Whangarei) School Science Fair - Best Planet Earth and Beyond Project (joint GeoClub - Branch sponsored)			\$50 + \$50 + books
Central Auckland School Science Fair – Best Planet Earth and Beyond Project (joint Geoclub and GSNZ sponsored)			\$50 + \$50 + books
Branch Publications			
GeoClub Newsletter	11 issues - No.s 266 - 2	76	
Geocene	1 issue - No. 15 (August 2017)	http://www.gs i-46.html#wha	nz.org.nz/information/auckland- it

## **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 2017-2018**

Branch representative: Beth Fox

Branch committee: Hansen

Beth Fox (convenor), Adrian Pittari, Rochelle

(Beth Fox stepped down as convenor at the end of the FY and was replaced by Adrian Pittari)

## No. of paid GSNZ members of this Branch on March 31, 2018: 48

## **Branch Activities and Events**

The branch held 2 seminars and 1 event as follows

Activity	Brief Description	Date	Number attended
Seminar	Hochstetter Lecture - Tectonics and genetics in topographic evolution (Dave Craw)	7 Sept 2017	30
Seminar	Hochstetter Supporting Lecture – Environmental issues associated with mining (Dave Craw)	8 Sept 2017	60
Event	<b>Hector Day Geo-Bake</b> – Branch afternoon tea	16 March 2018	10

## **Branch Prizes**

Name of prize	Winner(s)	Prize value
Waikato Regional Science and Technology Fair (contribution to prizes)	Zac Ranby and Jaxon Hines- Sutton	\$100
Annual University of Waikato School of Science Postgraduate Conference, Geoscience Society of NZ (Waikato) Award for the best geoscience-related oral presentation	Oliver McLeod	\$100
Hector Geo-Bake – Branch book voucher prize	Joint winners 1. Kirsty Vincent 2. Merijn van Logtestijn/Suzanna van de Lagemaat	\$60* (\$30 each)

\*Payment for the Hector Geo-Bake prize occurred in April 2018, so is not reported in this year's accounts

## **Taranaki**

The Taranaki Geological Society (TGS) was founded in 1978 and, at the 1986 national AGM, it was affiliated to the former Geological (now Geoscience) Society of New Zealand (GSNZ) as the Taranaki Branch. The Taranaki Geological Society comprises members who are (1) also financial members of the GSNZ, and whom the national body recognise as the Taranaki Branch of the GSNZ; and (2) members who are solely registered for the local Taranaki Geological Society. Early on the TGS/Taranaki Branch met as a night class at Girl's High where they continue to meet. The TGS/Taranaki Branch supported the 1993 publication of a Taranaki Field Guide and in 2002 became closely involved in the republication of Vince Neall's Volcanic History. Field trips, local and further afield, remain an integral part of the TGS's calendar (see below). Regularly monthly meetings feature speakers drawn from academia and industry, as well as local contributors.

#### **Branch Committee for 2017-18**

Branch representative: Robert Park

Branch committee: Donald MacFarlan (Treasurer); Pamela Murdoch (Secretary); Mark Robbins (Newsletter); Colleen Field (Field Trips); Hugh Alexander, Lauraine Parkinson (Librarian); Susan Burgess

No. of paid GSNZ members of this Branch on March 31, 2018: 18

**Total number of TGS members: 48** 

#### **Branch Activities and Events**

Activity	Brief description	Date	Number attended
AGM	Normal business & elections; Speaker - Jess Hillman, GNS Science, "Gas Hydrates around New Zealand- Geohazards and resource potential'.		18
President's Lecture	<b>Hochstetter Lecture –</b> Tectonics and genetics in topographic evolution (Dave Craw)	4 September 2017	
Seminar	Ashleigh Fromont, University of Auckland MSc/PhD student	1 May 2017	
Seminar	Unusual Earthquakes beneath Taranaki (Tim Stern)	3 July 2017	
Seminar	Active submarine faulting and recent earthquake sequences of the South Island (Phil Barnes).	7 Aug 2017	

Seminar	Joining the Dots – resolving late Pliocene - early Pleistocene correlation from E. Manawatu range into the Whanganui Basin (Julie Palmer)	2 October 2017	
Seminar	Late Cenozoic uplift history of the Taranaki region (Peter Kamp)	6 November 2017	
Seminar	Achievements of Henry Pantin & member's Christmas night (Heather Pantin Lewis)	4 December 2017	
Seminar	Out of the Ocean into the Fire (Bruce Hayward)	5 February 2018	
Seminar	Micropaleontological and sedimentary analysis of lacustrine sediments, Otago (Noel Bates)	5 March 2018	
Seminar	Social Responsibility for geosciences in the unconventional world	19 March 2018	
Field Trip	Pam Murdoch led a walk looking at local art in various sites around the town.	July 2017	
Field Trip	Historian Ron Lambert led a trip around various sites associated with New Plymouth's early oil exploration and exploitation.	Aug 2017	20
Field Trip	Photographer Pat Greenfield led a trip along the Tongaporutu coast to observe erosion and aggradation features as well as evidence of past slumping/faulting/changes in deposition/current bedding in the newly-exposed cliffs.	Dec 2017	22
Field Trip	Diane Toole led a trip to Airedale Reef/Buried Forest to differentiate between trees and ferns destroyed in the Okiawa Formation debris avalanche. The cliff also was studied as it contains the sequence of events from about 100,000 years ago. On a second feild trip home schooled children were taken to the same site by members Colleen Field and Jane Durdle.	March 2018	15

## **Branch Prizes**

Name of prize	Winner(s)	Prize value
George Mason Science Fair Prize	Not Awarded	
Student Award	Noel Bates	\$100

## 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 2017-18**

Branch representative: Julie Palmer

No. of paid GSNZ members of this Branch on March 31, 2018: 26

## **Branch Activities and Events**

The branch held 2 seminars as follows

Activity	Brief description	Date	Number attended
Seminar	Hochstetter Lecture – Tectonics and genetics in topographic evolution (Dave Craw)	19/09/2017	
Seminar	Hochstetter supporting lecture -	20/09/2017	

## **Branch Prizes**

Name of prize	Winner(s)	Prize value
Manawatu Science and Technology Fair Geoscience Prize		Book (c. \$50)

## GSNZ MANAWATU BRANCH TREASURER'S REPORT 1 APRIL 2018 Report for Financial Year 1.4.17 to 31.3.18

#### **I& E Account**

	& E Account		
Income	Opening Balance 1.4.17	\$	179.56
moonic	Subscriptions & donations	\$	_
	Branch Grant	\$	_
	Transfer from Bonus Saver	\$	200.00
Expenses		*	
'	AP to Savings Account	-\$	120.00
	Meeting Expenses	-\$	71.78
	Manawatu Science Fair Prize		_
	Student Talk Evening Prize	\$ \$ \$	_
	Postage	\$	-
	Closing Balance 31.3.18	\$	187.78
Cash a	nd Cheque Account		
	Cash in hand 1 April 2017	\$	27.50
	Cash received through year	\$	-
	Cash spent through year	\$	-
	Cash in hand 31 March 2018	\$	27.50
	Westpac cheque account		
	balance	\$	96.76
	Cheques presented from 2016  Total Cash and Cheque	\$	-
	Account	\$	124.26
Bonı	us Saver Account		
Opening Balance 1.4.17		\$	1,958.75*
Income			•
	AP from Cheque Account	\$	120.00
	Interest	\$	1.55

Closing Balance 31.3.18		\$	1,880.30
Expenses	Transfer to cheque account	-\$	200.00

## Accounts Prepared by Julie Palmer,

\* Note: this balance is correct according to the Westpac bank statement – it is in disagreement by \$8.84 from the balance sheet submitted in 2016-17 financial report – I have hunted for and cannot find the discrepancy – presume interest earned in a preceding year was incorrect as the AP and transfer amounts are correct.

# 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 Department 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.

#### **Branch Committee for 2017**

Branch representative: Huw Horgan/Andrew Rees

Branch committee: Huw Horgan (chair), Scott Nodder (secretary), Liz Kennedy (treasurer), Katie Collins (communications), Joe Prebble, Christian Timm, Cliff Atkins, Nicola Litchfield. Over the course of the year, Katie became unavailable since she took up a new post-doctoral position at the University of Chicago, USA.

The committee maintained branch activities through 2017 despite not holding an annual general meeting for re-election. Thanks to Huw for co-ordinating all the talks over the year.

No. of paid GSNZ members of this Branch on March 31, 2018: 218

## **Branch Activities and Events**

The branch held 8 activities in 2017 as follows, including an inaugural fieldtrip that was opened up to the public and attracted over 100 participants on a fossil-hunting visit to Hurupi Stream, Wairarapa, and two talks by this year's Hochstetter Lecture, Prof Dave Craw. The committee decided to focus the branch talk series in 2017 on the 14<sup>th</sup> November 2016 Mw 7.8 Kaikōura earthquake, and we managed to develop a great schedule of well-received talks. We also held the annual Beanland-Thornley student prize night with five excellent student speakers.

Activity	Brief description	Date	Number attended
Seminar	The 2016 Kaikoura earthquake seen from the ground, with particular focus on the Kekerengu Fault, past and present – <b>Prof Tim Little</b> (VUW)	9.02/17	~70
Seminar	Shattering a plate boundary: Complex multi- fault rupture during the 2016 Mw 7.8 Kaikoura earthquake, New Zealand – <b>Dr Ian Hamling</b> (GNS Science)	22/03/17	~60
Seminar	The marine survey response to the Mw7.8 14 <sup>th</sup> November 2016 Kaikōura Earthquake – <b>Dr Joshu Mountjoy and Dr Philip Barnes</b> (NIWA)	27/07/17	~60
Seminar	GeoNet Rapid: Responding to the Kaikoura Earthquake and Tsunami – <b>Dr Natalie</b> <b>Balfour</b> (GeoNet Data Management Team Leader, GNS Science)	17/08/17	~60
Seminar	Hochstetter Lecture – Tectonics and genetics in topographic evolution ( <b>Prof Dave Craw</b> , Otago University)	12/09/17	31
Seminar	Hochstetter supporting lecture – Tectonically driven fluid flow and gold mineralisation in actively deforming convergent orogens (Prof Dave Craw, Otago University)	11/09/17	~25-30
Fieldtrip	International Fossil Day – Hurupi Stream, Wairarapa (Leaders: Prof James Crampton, VUW/GNS Science; Dr Scott Nodder, NIWA)	14/10/17	>100

**Beanland-Thornley Student Prize Night:** 

Jesse Kearse – Surface fault rupture and slip distribution of the Kekerengu, Jordan Thrust, Needles, Upper Kowhai and Manakau faults during the Mw 7.8 2016

Kaikoura earthquake

Lauren Vargo – Measuring New Zealand

glacier

Seminars & prize night

fluctuations from historic photographs

Alec Yates - Seismic monitoring of White

Island Volcano

**Sam Taylor-Offord** – Two modes of crevasse expansion following rainfall at

Tasman Glacier

**Danielle Lindsay** – A study of 20 years of campaign and continuous GPS across the

central Southern Alps

#### **Branch Prizes**

\$350 Wellington School's Science Fair \$100 Beanland-Thornley student prize night

## **Branch Publications**

None published

## Branch balance sheet - I & E Accounts

The Wellington branch of the NZ Geoscience Society commenced the financial year with a balance of \$1601.09 on 1<sup>st</sup> April 2017. This included a branch bank balance of \$1523.89 and \$77.20 petty cash.

As of 31st March 2018, the total balance was \$1828.66, made up of the branch bank balance of \$1771.46 and \$77.20 in petty cash.

The Wellington branch made a \$350 donation to the Wellington Science Fair in September 2017 and provided \$100 for the student talk prize night in November 2017.

The Wellington branch received a total income in its bank account for the 2017-2018 year of \$697.57. This was comprised of a grant from the NZ Geosciences national committee of \$696.00 (based on a membership of 212), and bank account interest of \$1.57.

2/11/17 ~60

		Expense		
	Expenses	details	Income	Income details
Apr-17	0		0	
May-17	0		0	
Jun-17	0		0	
Jul-17	0		0	
Aug-17	0		1.10	Interest
Sep-17	350	Science Fair	0	
Oct-17	0		0	
Nov-17	0		0	
Dec-17	0	Student talk	0	
Jan-18	100	prize	0	
Feb-18	0		0.47	Interest
Mar-18	0		696	NZ Geo grant
TOTAL	450		697.57	

## Wellington Branch, Geological Society Financial Summary 1/4/17 to 31/3/18

Liz Kennedy (Treasurer)

Financial position at 1/4/17	NZ\$
Bank Balance	1523.89
Liability from previous year	0.00
Petty cash	77.20
Assets total at start of year	1601.09
Financial position at 31/3/18	
Bank Balance	1771.46
Liability carried forward	0.00
Petty cash - brought forward	77.20
Petty cash - earnt	0.00
Assets total at end of year*	1848.66
Net profit	247.57
Made up of:	
Revenue	
Petty cash collected	0.00
GSNZ Grant	696.00
Interest	1.57
Income total	697.57
Expenses	
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
Expenditure total	450.00
	450.00

## **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, now the Department of Geological Sciences.

## **Branch Committee for 2017-18**

Branch representative: Catherine Reid

Branch committee: Darren Gravley

No. of paid GSNZ members of this Branch on March 31, 2018: 77

#### **Branch Activities and Events**

The branch held 1 seminar as follows

Activity	Brief description	Date	Number attended
Seminar	Hochstetter Lecture Tectonics and genetics in topographic evolution (Dave Craw)	4 April 2017	45
Other event	Hector Day Geo-bake	16 Mar 2018	6

#### **Branch Prizes**

No student prizes were awarded this year as the unexpected movement of the Department around campus at crucial times resulted in student talks and awards not being held. This unfortunately follows on from 2016-17 where GSNZ officers were absent and relevant department staff were unaware to request prize funding from the GSNZ. The Canterbury Branch is aware that allocated funds need to be spent as given and will rectify this for 2018 and onward.

## **Otago**

The Otago Branch was established under the former 'Geological Society of NZ' in 1966 and is centred around the Geology Department at University of Otago. Branch membership is mainly drawn from the University of Otago, along with others from GNS Science, local industry and those not affiliated with any professional employer. Activities are sometimes run jointly with the Otago Institute (the local RSNZ branch).

## **Branch Committee for 2017-2018**

Branch representative: Nick Mortimer

Branch committee: Nick Mortimer, Andrew Gorman, Daphne Lee, James Scott

## No. of paid GSNZ members of this Branch on March 31, 2017: 78

Branch Activities and Events
The branch held six seminars as follows

Activity	Brief description	Date	Number attended
Seminar	Hochstetter Lecture – Tectonic and genetics in topographic evolution (Dave Craw)	12 April 2017	80
Seminar	Hochstetter supporting lecture – Gold, nanoparticles and nuggets (Dave Craw)	12 April 2017	30
Seminar	Deformation in New Zealand using geodesy (Paul Denys)	10 May 2017	30
Seminar	Taupo Volcanic Zone special map sheet (Graham Leonard)	20 July 2017	25
Seminar	News from Surtsey, Iceland (James White)	11 Oct 2017	30
Seminar	Life and death by impact: drilling for clues (Sean Gulick)	21 March 2018	40
Geoscience Talks	Geoscience talks in Dunedin mainly take the form of weekly 1pm talks in the Geology Dept with the more occasional 5pm talks (listed above) being badged as Geoscience Society NZ talks.		

## **Branch Prizes**

Name of prize	Winner(s)	Prize value
Aurora Science and Technology Science Fair	1st – Stalag Mayhem (Connor Morahan, Yr 7 Brockville School). 2 <sup>nd</sup> – Sand (Jaydean Washington, Yr 8 Abbotsford School). Highly commended – Seismic Flooding (Aaron Nelson, Yr 8 Balmacewen School)	1st - \$50; 2nd - \$25

## **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.

Activity	Brief description	Date	Number attended
Seminar (Masterton)	Hochstetter Lecture - Tectonic and genetics in topographic evolution (Dave Craw)	13/09/2017	
Seminar (Napier)	<b>Hochstetter Lecture -</b> Tectonic and genetics in topographic evolution (Dave Craw)	14/09/2017	
Seminar (Nelson)	<b>Hochstetter Lecture -</b> Tectonic and genetics in topographic evolution (Dave Craw)	18/09/2017	

## Sub committees

## **Fossil Record File**

The New Zealand Fossil Record File is a register of fossil localities that exists both electronically (as FRED: fossil record electronic database), and as a paper file. Access to FRED is free but detailed use requires registration. FRF is physically administered by curators who are based in universities or GNS Science offices. Day to day management and operation of FRED is carried out by GNS Science at its Lower Hutt office.

A meeting of the FRF Subcommittee was held during the annual 2017 GSNZ in Auckland. Several FRF Curators were present and some useful discussion ensued with respect to use of FRF by professional palaeontologists, students and other members of GSNZ. Progress over the past year with maintenance and upgrading FRED (Fossil Record Electronic Database) is described below by Chris Clowes, who has replaced James Crampton as the GNS Science Project Leader for FRED (Fossil Record Electronic Database):

Over the past year GNS has done quite a lot of work to improve the value of FRED. The work falls under three main headings:

- 1. Correcting errors: One of the most insidious involved the calculation that FRED used to translate between timescale units and absolute ages. While this worked correctly for single period/epoch/age intervals, there was a systemic error when a range (such as "Motuan to Ngaterian") was involved. It has now been corrected.
- 2. New features: One important new search feature has been added the consensus age fields. For every sample recorded in FRED, two age fields, namely "auto consensus-age (narrow)" and "auto consensus-age (broad)" are calculated automatically from all available information including the adopted age (if present), known and inferred age limits, and paleontological age determinations for all analyses. In general, the narrow consensus age finds the overlaps of differing age estimates, whereas the broad consensus age reflects the total range of all estimates. The narrow age is the more discriminating of the two fields i.e., it will yield the fewest results in a search and the broad field casts the widest net. At present, these new fields are only available as search terms; they are not visible on the fossil record forms. We intend to progressively add them to the forms and various other forms of output.
- 3. New data: Nearly 200 new localities and more than 700 new paleontological determinations (including species lists) added in the past 6 months. Not all the paleontological determinations are open-file, but a proportion are.

Our big project for the next three months or so is to significantly improve our bulk data import capability. We have recognised that the existing spreadsheet templates for uploading data are difficult to use at the best of times, and prone to unpredictable and sometime irrecoverable failures, so we are completely re-writing them. The new suite will provide

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separate spreadsheets for uploading outcrop localities, drill-holes, and taxonomic lists. An early test version we have seen appears simple and robust.

The next cab off the rank after that will be a mechanism for handling taxonomic synonyms, but that is still in the very early stages of conceptualisation.

## Geoheritage

## Geoheritage Subcommittee 2017-2018

Bruce 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).

During the year, the Subcommittee kept its usual watching brief for threats to, or management issues involving our country's important earth science sites. Among the issues demanding attention have been:

- 1. Crater Hill. When the Independent Hearings Panel released its recommendation on the proposed Auckland Unitary Plan we discovered that they had recommended subdivision for 550 houses on Auckland's best preserved and last privately-owned tuff cone. At short notice we co-ordinated a publicity campaign to try to have Auckland Council reject this recommendation which included a press release from GSNZ President and an on-line petition. The Council did reject the recommendation by a majority of just one, additionally rejecting a proposal that would have seen parts of nearby Pukaki Lagoon tuff ring zoned as future urban subdivision. The owners then appealed the Council decision to the Environment Court. GSNZ decided that it could not join the proceedings because of the remote risk of having costs awarded against us. However, GSNZ decided to support the Auckland Volcanic Cones Protection Society as they decided to join the proceedings. The Subcommittee convenor attended Environment Court meetings and hearings as an expert witness for AVCS. The Court decision came out against subdivision in April 2018.
- 2. Takapuna Fossil Forest. Following Auckland Council permitted damage to this nationally significant feature, we drafted a letter for the President to the Planning officers of the Council drawing their attention to its protected status as an ONF within the coastal zone whereby no adverse effects were allowed by the NZ Coastal Policy Statement. We received no response.
- 3. Foulden Maar, Otago. We drafted a letter that was sent by the GSNZ President welcoming the new Minister of Conservation Hon Eugenie Sage, that alerted her to two upcoming significant issues for NZ Geoheritage the need to purchase Crater Hill for reserve and the proposal to quarry the diatomite in Foulden Hill maar, which has now become an internationally significant fossil site for the superb late Oligocene plant, insect and fish remains.
- 4. **Whangarei District Plan ONFs**. The convenor presented evidence on behalf of GSNZ at hearings on the proposed new schedule of Outstanding Natural Features in Whangarei District. We were mostly supportive of these new initiatives to get planning protection for more of the district's geoheritage.

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## Some other geoheritage activity in New Zealand

- 1. Geoparks in NZ. We heard during the year that UNESCO NZ was to advertise for expressions of interest in establishing one or more Global Geoparks in New Zealand. Two members of our Subcommittee (Bruce and Hamish) are on the expert panel considering these expressions of interest. Two other members (Sam and Karoly) are involved in preparing EOIs. These new UNESCO Global Geopark plans have raised considerable interest around the country and there are many local or regional movements looking to establish geoparks and we know of other GSNZ members who are strongly engaged with such movements.
- A new GNS/DEVORA-funded PhD project is underway studying volcanic geoheritage mostly in the Auckland region and exploring new qualitative methods for evaluation of geoheritage values, perception of geoheritage views from various groups of the society and exploring geo-educational methods that may be useful in geoheritage information dissemination.
- We note that there is movement towards involvement of NZ geoscientsists at Massey University in SW Pacific islands' Geoheritage studies and support for geopark projects. Similar projects are in the draft stages as the basis of international collaborations between Massey University and various universities in Colombia and Chile.
- 4. Karaka Volcano. As a result of a landfill proposal in South Auckland, a previously unrecognised volcano has been identified. This is a new situation, whereby a previously unknown geofeature, that probably qualifies as an Outstanding Natural Feature requiring protection from the adverse effects of developments, has been recognised during the resource consent process. Whether the landfill will get consent or not has not been determined yet by Council.
- 5. Waitomo ONFs. During the year, as part of its district plan review, Waitomo District Council commissioned work to identify, map and propose potential Outstanding Natural Features in its area for scheduling. 76 features have been proposed, most initially identified in the NZ Geopreservation Inventory. A further 41 sites (mostly limestone caves) are recommended to remain in an existing karst overlay which provides some protection for cave entrances and caves eroding soil washing into them. These proposals have not yet been publicly notified for submissions.

## Geopreservation Inventory - www.geomarine.org.nz/NZGI/

No additions have been made to the inventory during the year as our internet host slowly worked on resolving some issues with the database presentation on-line. It is useable but still has some problems with the photo database and full data availability. If you want to find out about sites in the inventory and their mapped extent and data, go to: <a href="http://services.main.net.nz/geopreservation">http://services.main.net.nz/geopreservation</a>

If any member wants to join our subcommittee please email Bruce Hayward.

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# **Geophysical Affairs**

This committee arose after the amalgamation of the two Societies: The New Zealand Geophysical Society and the Geological Society of New Zealand. For the last year this subcommittee has met on an ad hoc basis to provide advice for the SAGE award.

Members who have expressed an interest in this Group: 142

# Special Interest Groups (SIGs)

#### Friends of the Pleistocene

Convenor: P Almond

Friends of the Pleistocene was established during 1989-90, one of the original SIGs of the former Geological Society. There were no activities to report for this year.

Interested members: 100

## Geoscience Education

Convenor: G Vallender

A Geological Education Group, then a subcommittee, was established in the former Geological Society in 1983. The Geological Education Subcommittee became a Special Interest Group in 1989, and then became the Earth Science Education Group in 1991 - jointly sponsored by GSNZ and the NZ Soil Science Society.

Interested members: 100

## SIG Activities for 2017-2018:

Ru Seismometers for schools programme. Support for the establishment and development of this programme which aims to use TC1 vertical seismometers in as many schools and LEOTC's as possible. The programme is managed via Auckland University Physics Dept. The programme is national curriculum aligned with Physics, Geography and Earth and Space Science. There are now 38 stations across the country with eleven in the South Island including two Museums. Main issues include updating and maintaining hardware and software along with sustainability of station managers.

Geotrips virtual field trip web programme. Support by member contribution to GNS led Geotrips programme. New locations added in Canterbury, including Halswell Quarry and Trig H geopreservation sites. Main issue is encouraging and measuring usage that is aligned to curriculum and tourist/local interest groups.

U3A special interest group lectures and fieldtrips. A programme that involves information sharing by lectures and fieldtrips on geological topics for members of U3A's (Univ of the Third Age). Several lectures given to Christchurch U3As, Geraldine U3A and Ashburton U3A special interest groups. Topics included local geology of Mt Somers, history of seismology and aspects of geopreservation. Latest fieldtrip for Ellesmere U3A to Mt Somers area.

#### Historical Studies Convenor: S Nathan

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 Journal, recording the history of Geoscience in New Zealand. The Historical Studies Group maintains contact with the International Commission for the History of the Geological Sciences (INHIGEO), and Mike Johnston is currently Vice President for Australasia and Oceania. An annual subscription of \$15 is charged to cover

the costs of producing a hard copy Journal. A small SIG committee consists of Rodney Grapes (Editor), M Johnston (former Convenor) and Simon Nathan (Convenor).

Financial members: 84

### SIG Publications for 2012017-2018

Journal of the Historical Studies Group no. 55 (April 2017)

Journal of the Historical Studies Group no. 56 (August 2017)

Journal of the Historical Studies Group no. 57 (November 2017)

Journal of the Historical Studies Group no. 58 (March 2018)

2nd Special historical issue of the Journal of the Royal Society of New Zealand 47(2):

Finding New Zealand's scientific heritage - Science in the 20th century

The life and times of James Park: geologist, explorer, university dean. GSNZ miscellaneous publication MP144.

## Oil and Gas (updated)

The Oil and Gas Interest group is currently inactive and seeks a convenor.

Interested members: 126

## Paleontology

Convenor H Campbell

The Paleontology Group was established during 1989-90, one of the original SIGs of the former Geological Society. No committee exists. It is a loose grouping of like-minded GSNZ members: anyone with an interest in palaeontology.

Interested members: 116

#### SIG Activities for 2017-2018:

A lunchtime meeting was held at Geosciences 2017 conference in Auckland where the security of fossil collections, security of fossil localities, the black market in fossils, exciting new discoveries, techniques, developments and job prospects topics were discussed.

## Sedimentology (updated)

#### Convenor M Lawrence

The aim of the Sedimentology Special Interest Group (SSIG) is to promote communication and support among sedimentologists and provide a forum for discussion of aspects of sedimentology, stratigraphy, and sedimentary geology in New Zealand. It is open to both active researchers and those just interested in the field. The NZ Sedimentology Group is linked to its Australian equivalent, the ANZ Sedimentology.

Interested members: 174

## SIG Activities for 2017-2018:

Annual meeting: A lunch-time meeting was held at the Geosciences 2017 conference in Auckland.

*Workshop Development:* Preparations made for Ichnology: Principles, Practice, and Application. A 3-Day Interactive Workshop Designed for Undergraduate to Graduate Students, and Professional Geologists, to be held 26-28 May 2017.

Ichology Workshop 26-28 May 2017: \$30 attendance fee, 19 attendees and run by 3 volunteers.

Day 1: Classroom -based. Ichnology overview and case study.

Day 2: Ichnology core workshop, MBIE core store, Featherston.

Day 3: Ichnology in the field, Tora area, Wairarapa Coast. More details can be found in GSNZ Newsletter March 2018 No. 24.

#### Geochemistry (updated)

#### Convenor James Scott

The New Zealand Geochemical Group was established in 1965 and then incorporated the NZ Mineralogical Society in 2003 to form NZGeMS. NZGeMS joined the GSNZ in 2012 as a Special Interest Group. There were no activities to report for the 2017-2018 financial year, but the group was re-established in late 2017. Two newsletters were produced for the year. The Werner F. Giggenbach Award was awarded to Simon Barker and the Stuart H. Wilson to David Craw.

Interested members: 148

## LAVA NZ (Volcanology) (updated)

## Convenor A Pittari

A Volcanic Studies Group was established during 1989-90, one of the original SIGs of the former Geological Society. However, this group became disestablished during the 1990s. A new Volcanology SIG - LAVA NZ - was re-established in 2014 and is linked to the equivalent Specialist Group of the Geological Society of Australia, the Learned Australasian Volcanologists Association (LAVA).

Interested members: 196

## SIG Activities for 2017-2018:

4<sup>th</sup> Annual meeting: A lunch-time meeting was held at the Geosciences 2017 conference, University of Auckland

The NZ bid for the IAVCEI 2021 Scientific Assembly was successful in August 2017. LAVA NZ has been an instrument of communication to the NZ volcanological community regarding the bid effort. The win and further ideas for developing the conference were discussed at the Annual Meeting in Auckland.

#### SIG Publications for 2017 - 2018

Two issues of LAVA News were produced and emailed to members during the year: LAVA News vol. 30(Jul. 28, 2017)

LAVA News vol. 31 (Jan. 31, 2018)

## **Annual Conference**



The 2017 Annual Conference Geoscience Society of New Zealand was hosted and organised by the members of the School of Environment of the University of Auckland. The conference was held at the University's Science complex on the City Campus in Auckland, over the period from 28<sup>th</sup> November to 1<sup>st</sup> December. The conference programme included three days of scientific sessions (Wednesday – Friday), pre- and post-conference field trips, a public lecture, plus a number of intra-conference meetings and Special Interest Group meetings. The social programme featured an icebreaker on Monday evening at the venue and the conference dinner on Wednesday evening held at Villa Maria and a wrap up party at Old Government House.

Registration fees remained the same as the previous five years with the total attendance reaching 262.

Registrants	Registration Fee	Attended
Full Member – Early	\$350	69
Full Member - Standard	\$400	12
Non-member – Early	\$450	10
Non-member - Standard	\$500	9
Retired member – Early	\$250	14
Retired member - Standard	\$300	1
Student registration* - Early	\$150	124
Student registration* - Standard	\$200	6
Day registration	\$180 - \$250	5
Complimentary		12
TOTAL		262

<sup>\*</sup>Not all were members of the Society

Sponsors this year were

GNS Science (Platinum)

University of Auckland (Gold)

EQC (Gold)

NIWA (Silver and Poster Session)

BECA (Bronze)

OceanaGold Waihi Operation (Bronze)

Royal Society and NZJGG (Icebreaker & Student Award)

Other statistics of interest.

- 206 Abstracts were received, resulting in 119 presented as oral and 87 as posters.
- Of the 7 field trips initially planned only 3 received sufficient numbers to be viable.
- A total of \$4200 was awarded as student travel grants
- Total sponsor revenue \$28, 684
- Total conference surplus \$4615

# Geoscience Consolidated and Geoscience Awards Trust Audited Accounts

# Consolidated Accounts of Geoscience Society of New Zealand Incorporated For the year ended 31 March 2018

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## INDEPENDENT AUDITOR'S REPORT

## To the Members of Geoscience Society of New Zealand Incorporated

## Opinion

We have audited the accompanying consolidated performance report of Geoscience Society of New Zealand Incorporated and its subsidiaries (the Group) on pages 3 to 13, which comprises the entity information, the consolidated statement of service performance, the consolidated statement of financial performance and consolidated statement of cash flows for the year ended 31 March 2018, the consolidated statement of financial position as at 31 March 2018, the statement of accounting policies and other explanatory information.

### In our opinion:

- a) the reported outcomes and outputs, and quantification of the outputs to the extent practicable, in the consolidated statement of service performance are suitable;
- b) the consolidated performance report on pages 3 to 13 presents fairly, in all material respects:
  - the entity information for the year ended 31 March 2018:
  - · the consolidated service performance for the year then ended; and
  - the consolidated financial position of Geoscience Society of New Zealand Incorporated as at 31 March 2018, and its consolidated financial performance, and consolidated cash flows for the year then ended in accordance with Public Benefit Entity Simple Format Reporting – Accrual (Not-For-Profit).

## **Basis for Opinion**

We conducted our audit of the statement of consolidated financial performance, consolidated statement of financial position, consolidated statement of cash flows, statement of accounting policies and notes to the consolidated performance report in accordance with International Standards on Auditing (New Zealand) (ISAs (NZ)), and the audit of the entity information and consolidated statement of service performance in accordance with the International Standard on Assurance Engagements (New Zealand) ISAE (NZ) 3000 (Revised). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Performance Report section of our report. We are independent of the Group in accordance with Professional and Ethical Standard 1 (Revised) Code of Ethics for Assurance Practitioners issued by the New Zealand Auditing and Assurance Standards Board, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other than in our capacity as auditor we have no relationship with, or interests in, the Group.

## Restriction on Responsibility

This report is made solely to the Members, as a body, in accordance with section 42F of the Charities Act 2005. Our audit work has been undertaken so that we might state to the Members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Members as a body, for our audit work, for this report, or for the opinions we have formed.

## National Committee' Responsibility for the Consolidated Performance Report

The National Committee are responsible on behalf of the group for:

- (a) identifying outcomes and outputs, and quantifying the outputs to the extent practicable, that are relevant, reliable, comparable and understandable, to report in the consolidated statement of service performance;(b) the preparation and fair presentation of the consolidated performance report which comprises:
- the entity information;
- the consolidated statement of service performance; and
- the consolidated statement of financial performance, consolidated statement of financial position, consolidated statement of cash flows, consolidated statement of accounting policies and notes to the consolidated performance report in accordance with Public Benefit Entity Simple Format Reporting Accrual (Not-For-Profit) issued in New Zealand by the New Zealand Accounting Standards Board, and





(c) for such internal control as the National Committee determine is necessary to enable the preparation of a consolidated performance report that is free from material misstatement, whether due to fraud or error.

In preparing the consolidated performance report, the National Committee are responsible on behalf of the group for assessing the group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the National Committee either intend to liquidate the group or to cease operations, or have no realistic alternative but to do so.

## Auditor's Responsibilities for the Audit of the Consolidated Performance Report

Our objectives are to obtain reasonable assurance about whether the consolidated performance report is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (NZ) and ISAE (NZ) 3000 (Revised) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users taken on the basis of this consolidated performance report.

As part of an audit in accordance with ISAs (NZ), we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated performance report, whether due
  to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence
  that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material
  misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion,
  forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the use of the going concern basis of accounting by the National Committee and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated performance report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated performance report, including
  the disclosures, and whether the consolidated performance report represents the underlying transactions
  and events in a manner that achieves fair presentation.
- Perform procedures to obtain evidence about and evaluate whether the reported outcomes and outputs, and quantification of the outputs to the extent practicable, are relevant, reliable, comparable and understandable.

We communicate with the National Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Dent and Heath Lower Hutt

21 September 2018

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# **Entity Information**

## Consolidated Accounts of Geoscience Society of New Zealand Incorporated For the year ended 31 March 2018

'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 Numbers**

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 Studentsand 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 GeoEducation, Historic Studies (which produces its own Journal), Friends of the Pleistocene, Paleontology, Oil and Gas, NZ Sedimentology Group, Geochemistry and LAVA (NZ) (volcanology).

We do not employ staff, but we contract out administrative services such as membership and conference organisation. Volunteers from both inside and outside the committee also help with Internet, Web Site, Publications, archives and Conference organisation.

## 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. The Geoscience Society of NZ Awards Trust also receives interest.

## 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 guides, authors and leaders.

## **Physical Address**

C/o GNS Science; 1 Fairway Drive, Avalon, Lower Hutt 5010

## **Postal Address**

Treasurer, GSNZ C/o GNS Science, PO Box 30368, Lower Hutt 5040



## **Statement of Service Performance**

# Consolidated Accounts of Geoscience Society of New Zealand Incorporated For the year ended 31 March 2018

## **Description of the 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.

	Actual	Actual
Description and Quantification (to the extent practicable) of the Entity's Outputs:	This Year	Last Year
Conference attendees (Dynamic New Zealand, Dynamic Earth)	262	249
Conference presentations (papers & posters)	206	210
Conference student attendees	130	108
Workshops & Field Trips (FT-3) participants	75	95 (FT)
Public Lectures	240	205
Branch meetings	60	78
Recipients of the three annual Newsletters	666	726
Recipients of six Newsflashes	666	726
Attendees at President's lecture tour of ten centres	0	304
Attendees at Hochstetter lecture tour of eleven centres	610	792
Attendees at Hochstetter support lecture	250	189
New publication- " Out of the Ocean, into the Fire" by Bruce Hayward	1,499 \$ 30,894	0
New Publication – A Continent on the Move (2 <sup>nd</sup> Edition) – New Zealand Geoscience Revealed – distributed to NZ secondary schools and Regional Councils	388 \$ 12,621	246 \$7,380
GeoEducation – Seismometers in schools and physics teacher science curriculum support	7	31
Grants and Awards made	77	78
Awards Trust – Awards made	11	69
Awards Trust – Awards value	\$8,690	\$25,195



# **Approval of Financial Report**

## Consolidated Accounts of Geoscience Society of New Zealand Incorporated For the year ended 31 March 2018

The Board are pleased to present the approved financial report including the historical consolidated financial statements of Geoscience Society of New Zealand Incorporated for year ended 31 March 2018.

**APPROVED** 

Adrian Pettavi

President (ACTING ON BEHALF OF)

Treasurer

Date 21 Sept 2018

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# **Statement of Financial Performance**

## Consolidated Accounts of Geoscience Society of New Zealand Incorporated For the year ended 31 March 2018

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

Account	Notes	2018	2017
_			
Revenue			
Donations, fundraising and other similar revenue	1	6,362	10,680
Fees, subscriptions and other revenue from members	1	38,736	40,788
Revenue from providing goods or services	1	22,084	19,631
Interest, dividends and other investment revenue	1	19,204	19,586
Other revenue	1	700	244
Total Revenue		87,086	90,929
Expenses			
Volunteer and employee related costs	2	3,500	3,500
Costs related to providing goods or service	2	57,711	63,450
Grants and donations made	2	23,371	36,714
Other expenses	2	4,000	3,450
Total Expenses		88,582	107,114
Surplus/(Deficit) for the Year	***************************************	(1,497)	(16,185)



# **Statement of Financial Position**

# Consolidated Accounts of Geoscience Society of New Zealand Incorporated For the year ended 31 March 2018

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

Account	Notes	2018	2017
Assets			
Current Assets			
Bank Accounts and Cash	3	287,397	282,047
Term Deposits	3	564,602	558,039
Other Current Assets	3	10,127	10,621
Inventory		20,470	35,496
Total Assets		882,596	886,203
Liabilities			
Current Liabilities			
Accounts Payable		2,682	6,938
Unused Donations and Grants with Conditions	4	16,829	14,683
Total Current Liabilities		19,511	21,621
Total Liabilities		19,511	21,621
Total Assets less Total Liabilities (Net Assets)		863,085	864,582
Accumulated Funds			
Reserves		445,614	448,992
Accumulated surpluses or (deficits)	5	417,471	415,590
Total Accumulated Funds		863,085	864,582



# **Statement of Cash Flows**

# Consolidated Accounts of Geoscience Society of New Zealand Incorporated For the year ended 31 March 2018

'How the entity has received and used cash'

Account	2018	2017
Cash Flows from Operating Activities		
Donations, fundraising and other similar receipts	8,508	6,059
Fees, subscriptions and other receipts from members	38,736	39,948
Receipts from providing goods or services	20,704	19,598
Interest, dividends and other investment receipts	19,382	19,586
Cash receipts from other operating activities	700	-
Total Cash Received from Operating Activities	88,030	85,191
Cash was applied to:		
Awards and Scholarships	23,371	36,714
Payments to suppliers and employees	52,746	48,169
Total Cash Paid from Operating Activities	76,117	84,883
Total Cash Flows from Operating Activities	11,913	308
Bank Accounts and Cash		
Opening cash	840,086	839,778
Closing cash	851,999	840,086
Net change in cash for period	11,913	308
Cash & Cash Equivalents comprise of:		
Cheque and Savings Accounts	287,397	282,047
Term Deposits	564,602	558,039
	851,999	840,086



# **Statement of Accounting Policies**

Consolidated Accounts of Geoscience Society of New Zealand Incorporated For the year ended 31 March 2018

'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

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

## 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 term deposits.

## **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 2018

Account

2018

2017

Account	2018	2017
1. Analysis of Revenue		
Donations, fundraising and other similar revenue		
Donations	571	10,680
Student Travel	5,791	_
Total Donations, fundraising and other similar revenue	6,362	10,680
Fees, subscriptions and other revenue from members		
Subscriptions	36,626	39,948
Historical Studies	2,110	840
Total Fees, subscriptions and other revenue from members	38,736	40,788
Revenue from providing goods or services		
Conference Surplus	4,280	8,016
Sales	17,804	11,615
Total Revenue from providing goods or services	22,084	19,631
Interest, dividends and other investment revenue		
Interest Income	19,204	19,586
Total Interest, dividends and other investment revenue	19,204	19,586
Other revenue		
Sundry Income	700	244
Total Other revenue	124,122	120,306
Account	2018	2017
2. Analysis of Expenses		
Volunteer and employee related costs		
Honorarium	3,500	3,500
· ·	3,500 <b>3,500</b>	
Honorarium  Total Volunteer and employee related costs  Costs related to providing goods or services	3,500	3,500
Honorarium  Total Volunteer and employee related costs  Costs related to providing goods or services  Administration Costs	<b>3,500</b> 17,273	<b>3,500</b>
Honorarium  Total Volunteer and employee related costs  Costs related to providing goods or services  Administration Costs  Balance Book Roadside Geology project	3,500 17,273 2,295	3,500 13,400 8,033
Honorarium  Total Volunteer and employee related costs  Costs related to providing goods or services  Administration Costs	<b>3,500</b> 17,273	3,500 13,400 8,033
Honorarium  Total Volunteer and employee related costs  Costs related to providing goods or services Administration Costs Balance Book Roadside Geology project Bank Fees and Merchant Charges Cost of Goods Sold	3,500 17,273 2,295	3,500 13,400 8,033 1,38
Honorarium  Total Volunteer and employee related costs  Costs related to providing goods or services Administration Costs  Balance Book Roadside Geology project Bank Fees and Merchant Charges	3,500 17,273 2,295 1,208	3,500 13,400 8,033 1,383 17,693
Honorarium  Total Volunteer and employee related costs  Costs related to providing goods or services Administration Costs Balance Book Roadside Geology project Bank Fees and Merchant Charges Cost of Goods Sold	3,500 17,273 2,295 1,208 15,060	3,500 13,400 8,033 1,383 17,693 3,163
Honorarium  Total Volunteer and employee related costs  Costs related to providing goods or services  Administration Costs  Balance Book Roadside Geology project  Bank Fees and Merchant Charges  Cost of Goods Sold  Committee Meetings	3,500 17,273 2,295 1,208 15,060 6,630	3,500 13,400 8,033 1,383 17,693 3,163 1,542
Honorarium  Total Volunteer and employee related costs  Costs related to providing goods or services Administration Costs Balance Book Roadside Geology project Bank Fees and Merchant Charges Cost of Goods Sold Committee Meetings Conference Costs	3,500 17,273 2,295 1,208 15,060 6,630 2,998	3,500 13,400 8,033 1,387 17,693 3,167 1,542 2,147
Total Volunteer and employee related costs  Costs related to providing goods or services Administration Costs Balance Book Roadside Geology project Bank Fees and Merchant Charges Cost of Goods Sold Committee Meetings Conference Costs Hochstetter / Lecture Tours	3,500 17,273 2,295 1,208 15,060 6,630 2,998 2,232	3,500 13,400 8,033 1,38 17,693 3,16 1,542 2,14 602
Total Volunteer and employee related costs  Costs related to providing goods or services Administration Costs Balance Book Roadside Geology project Bank Fees and Merchant Charges Cost of Goods Sold Committee Meetings Conference Costs Hochstetter / Lecture Tours Insurances	3,500 17,273 2,295 1,208 15,060 6,630 2,998 2,232 666	3,500 13,400 8,033 1,383 17,693 3,163 1,542 2,143 602 1,313
Honorarium Total Volunteer and employee related costs  Costs related to providing goods or services Administration Costs Balance Book Roadside Geology project Bank Fees and Merchant Charges Cost of Goods Sold Committee Meetings Conference Costs Hochstetter / Lecture Tours Insurances Levy RSNZ	3,500 17,273 2,295 1,208 15,060 6,630 2,998 2,232 666 1,141	3,500 13,400 8,033 1,383 17,693 3,163 1,542 2,143 602 1,313 7,013
Honorarium  Total Volunteer and employee related costs  Costs related to providing goods or services  Administration Costs  Balance Book Roadside Geology project  Bank Fees and Merchant Charges  Cost of Goods Sold  Committee Meetings  Conference Costs  Hochstetter / Lecture Tours  Insurances  Levy RSNZ  Newsletter Costs	3,500 17,273 2,295 1,208 15,060 6,630 2,998 2,232 666 1,141 4,483	3,500 3,500 13,400 8,033 1,381 17,693 3,167 1,542 2,147 602 1,313 7,013 5,326 1,833



Grants and donations made		
Branch Grants	1,246	1,394
Kingma Award	250	250
Miscellaneous Awards	2,000	8,900
Student Travel - Conference	5,580	6,305
Young Researcher Travel Award	5,605	120
Awards Trust		
John Beavan Geodetic Fieldwork	-	3,000
Hornibrook Award	1,300	-
Werner F Giggenbach Prize	500	835
Jim Ansell Geophysics Prize	1,350	1,350
NZ Geophysics Prize	1,060	380
Hastie Awards	2,930	4,290
Wellman Research Award	1,550	9,500
Pullar/Vucetich Award	-	390
Total Grants and donations made	23,371	36,714
Other expenses		
Audit	4,000	3,450
Total Other expenses	4,000	3,450
Account	2018	2017
3. Analysis of Assets		
Bank accounts and cash		
Current Accounts		
Cheque Accounts	24,534	23,413
Savings Accounts	262,862	258,634
Total Bank accounts and cash	287,396	282,047
Term Deposits		
Wellman Fund	178,084	176,097
Hastie Fund	185,516	183,478
General Fund	170,788	168,760
NZGeMs Fund	30,214	29,704
Total Term Deposits	564,602	558,039
Total Bank Accounts and Term Deposits	851,998	840,086
Current Accounts		
GST Refund Due	2,683	3,178
Interest Accrual	6,147	6,324
Receivables	1,297	-
Prepayments	-	1,117
Total Other Current Assets	10,127	10,619
Account	2018	2017
4. Analysis of Liabilities		
Unused Award and Donation Funds		
Award Trust Funds	3,256	1,270
Continent on the Move #2	4,704	4,704
SAGE Geographics Fund	8,869	8,709
Total Unused Award and Donation Funds	16,829	14,683



Account	2018	2017
5. Accumulated Funds & Reserves		
Accumulated Funds		
Opening Balance	415,590	418,226
Current year surplus / (deficit)	(10,529)	(15,706)
Transfer from Reserves	12,410	13,070
Total Accumulated Funds	417,471	415,590
Reserves		
Opening Balance	448,992	462,541
Current year surplus / (deficit)	9,032	(479)
Transfer from Reserves	(12,410)	(13,070)
Total Reserves	445,614	448,992
Total Accumulated Funds & Reserves	863,085	864,582

## 6. Commitments

There are no commitments as at 31 March 2018 (Last year - nil).

## 7. Contingent Liabilities and Guarantees

There are no contingent liabilities or guarantees as at 31 March 2018 (Last year - nil).

Account	2018	2017
8. Related Parties		
Treasurer Honorarium	3,500	3,500

## 9. Events After the Balance Date

There were no events that have occurred after the balance date that would have a material

## 10. Ability to Continue Operating

The entity will continue to operate for the foreseeable future.



# Geoscience Society of New Zealand Awards Trust

# For the year ended 31 March 2018

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## INDEPENDENT AUDITOR'S REPORT

## To the Trustees of Geoscience Society of New Zealand Awards Trust

## Opinion

We have audited the accompanying performance report of Geoscience Society of New Zealand Awards Trust on pages 4 to 12, which comprises the entity information, the statement of service performance, the statement of financial performance and statement of cash flows for the year ended 31 March 2018, the statement of financial position as at 31 March 2018, the statement of accounting policies and other explanatory information.

## In our opinion:

- a) the reported outcomes and outputs, and quantification of the outputs to the extent practicable, in the statement of service performance are suitable;
- b) the performance report on pages 3 to 13 presents fairly, in all material respects:
  - · the entity information for the year ended 31 March 2018;
  - · the service performance for the year then ended; and
  - the financial position of Geoscience Society of New Zealand Awards Trust as at 31 March 2018, and its financial performance, and cash flows for the year then ended in accordance with Public Benefit Entity Simple Format Reporting – Accrual (Not-For-Profit).

## **Basis for Opinion**

We conducted our audit of the statement of financial performance, statement of financial position, statement of cash flows, statement of accounting policies and notes to the performance report in accordance with International Standards on Auditing (New Zealand) (ISAs (NZ)), and the audit of the entity information and statement of service performance in accordance with the International Standard on Assurance Engagements (New Zealand) ISAE (NZ) 3000 (Revised). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Performance Report section of our report. We are independent of the Trust in accordance with Professional and Ethical Standard 1 (Revised) Code of Ethics for Assurance Practitioners issued by the New Zealand Auditing and Assurance Standards Board, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other than in our capacity as auditor we have no relationship with, or interests in, the Trust.

## Restriction on Responsibility

This report is made solely to the Trustees, as a body, in accordance with section 42F of the Charities Act 2005. Our audit work has been undertaken so that we might state to the Trustees those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Trustees as a body, for our audit work, for this report, or for the opinions we have formed.

#### Trustees' Responsibility for the Performance Report

The Trustee are responsible on behalf of the Trust for:

- (a) identifying outcomes and outputs, and quantifying the outputs to the extent practicable, that are relevant, reliable, comparable and understandable, to report in the statement of service performance;
- (b) the preparation and fair presentation of the performance report which comprises:
- the entity information;
- the statement of service performance; and
- the statement of financial performance, statement of financial position, statement of cash flows, statement of accounting policies and notes to the performance report in accordance with Public Benefit Entity Simple Format Reporting Accrual (Not-For-Profit) issued in New Zealand by the New Zealand Accounting Standards Board, and





(c) for such internal control as the Trustees is necessary to enable the preparation of a performance report that is free from material misstatement, whether due to fraud or error.

In preparing the performance report, the Trustees are responsible on behalf of the trust for assessing the trust's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Trustees either intend to liquidate the trust or to cease operations, or have no realistic alternative but to do so.

## Auditor's Responsibilities for the Audit of the Performance Report

Our objectives are to obtain reasonable assurance about whether the performance report is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (NZ) and ISAE (NZ) 3000 (Revised) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users taken on the basis of this performance report.

As part of an audit in accordance with ISAs (NZ), we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the performance report, whether due to fraud or
  error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is
  sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material
  misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion,
  forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the trust's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by trustees.
- Conclude on the appropriateness of the use of the going concern basis of accounting by the Trustees and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the trust's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the performance report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the trust to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the performance report, including the
  disclosures, and whether the performance report represents the underlying transactions and events in a
  manner that achieves fair presentation.
- Perform procedures to obtain evidence about and evaluate whether the reported outcomes and outputs, and quantification of the outputs to the extent practicable, are relevant, reliable, comparable and understandable.

We communicate with the Trustees regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Dent and Heath Lower Hutt

21 September 2018

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# **Entity Information**

# Geoscience Society of New Zealand Awards Trust For the year ended 31 March 2018

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

## **Legal Name of Entity**

Geoscience Society of New Zealand Awards Trust

## Type of Entity and Legal Basis

Incorporated Charitable Trust and Registered Charity

## **Registration Numbers**

CC35670; and Incorporation # 1477708

#### **Entity's Purpose**

- (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 Scolarship, John Beavan Geodetic Fieldwork Grant, 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 endevour.
- (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 betrween 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 the 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/o GNS Science; 1 Fairway Drive, Avalon, Lower Hutt 5010

## **Postal Address**

Treasurer GSNZ C/o GNS Science, PO Box 30 368, Lower Hutt 5040

Email/Website admin@gsnz.org.nz www.gsnz.org.nz



## **Statement of Service Performance**

# Geoscience Society of New Zealand Awards Trust For the year ended 31 March 2018

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

## **Description of Entity's Outcomes**

Awards and prizes were approved this financial year include the Kingma Award, seven Hastie Awards, The Wellman Prize, the Wellman research Award, The Werner F. Giggenbach Prize for Geochemistry, the Jim Ansell Geophysics Scholarship, and the NZ Geophysics Prize (three joint recipients). 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.

	Actual	Actual
Description and Quantification (to the extent practicable) of the Entity's Outputs:	2018	2017
Awards and Prizes distributed	11	69
Value of Awards and Prizes	\$8,690	\$25,195



# **Statement of Financial Performance**

# Geoscience Society of New Zealand Awards Trust For the year ended 31 March 2018

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

Account	Notes	2018	2017
Revenue			
Donations	1	-	6,545
Interest, dividends and other investment revenue	1	18,969	19,267
Total Revenue		18,969	25,812
Expenses			
Grants and Donations made	2	8,690	25,195
Other Expenses	2	1,200	1,226
Total Expenses		9,890	26,421
Surplus / (Deficit) for the Year		9,079	(609)



# **Statement of Financial Position**

# **Geoscience Society of New Zealand Awards Trust** As at 31 March 2018

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

Account	Notes	2018	2017
Current Assets			
Bank accounts and cash	3	58,407	59,264
Term Deposits	3	564,602	558,039
Interest Accrual		6,147	6,324
<b>Total Current Assets</b>		629,156	623,627
Current Liabilities			
Accounts Payable		1,200	4,750
Total Current Liabilities		1,200	4,750
Net Assets		627,956	618,877
Accumulated Funds			
Opening Balance at 1 April		618,877	619,486
Surplus/ (Deficit) for Year		9,079	(609)
Total Accumulated Funds	4	627,956	618,877

Signed on behalf of the Trustees:

Advan Pittari
Trustee

Ala Ch

Trustee

21 Sept 2017

Date



# **Statement of Cash Flows**

# Geoscience Society of New Zealand Awards Trust For the year ended 31 March 2018

'How the entity has received and used cash'

Account	2018	2017
Cash Flows from Operating Activities		
Cash was received from:		
Donations	-	6,545
Interest, dividends and other investment receipts	19,023	19,429
Cash was applied to:		
Payments to suppliers	1,150	1,226
Awards and Scholarships	12,167	20,445
Net Cash Flow from Operating Activities	5,706	4,303
Opening Cash	617,303	613,000
Closing Cash	623,009	617,303
Movements	5,706	4,303
Represented by		
Current Accounts	3,723	4,635
Savings Account	54,684	54,630
Term Deposits	564,602	558,038
	623,009	617,303



# **Statement of Accounting Policies**

# Geoscience Society of New Zealand Awards Trust For the year ended 31 March 2018

'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.

#### **GST**

The trust is not registered for GST and therefore these financial statements have been prepared 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 and term deposits.

## **Changes in Accounting Policy**

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**

# Geoscience Society of New Zealand Awards Trust For the year ended 31 March 2018

Account	2018	2017
1. Analysis of Revenue		
Donations, fundraising and other similar revenue		
Award Fund Donations	-	1,095
Grant from Society for Student Travel awards	-	5,450
Total Donations, fundraising and other similar revenue	0	6,545
Interest and Dividends		
Interest	18,969	19,267
Total Interest and Dividends	18,969	19,267
2. Analysis of Expenses		
Grants and Donations		
John Beavan Geodetic field work		3,000
Hornibrook Award	1,300	-
Werner F Giggenback Prize	500	835
Wellman Research Award (included in last years accounts)	1,550	9,500
Jim Ansell Geophysics Scholarship	1,350	1,350
Wellman Prize/ NZ Geophysics Prize	1,060	380
Hastie Awards	2,930	
Pullar/ Vucetich Award	-	390
Student Travel	-	5,450
Total Grants and Donations	8,690	20,905
Other Expenses		
Audit Fee	1,200	1,150
Bank Charges	•	76
Total Other Expenses	1,200	1,226
Total Expenses	9,890	22,131
3. Bank and Term Deposits		
Bank	2.702	4.004
Current Account	3,723	4,634
Savings Accounts	54,684	54,630
Total Bank	58,407	59,264
_ Term Deposits		
Wellman Fund	178,084	176,097
Hastie Fund	185,516	183,478
General Fund	170,788	168,760
NZGeMs Fund	30,213	29,704
Total Reserves	564,601	558,039
	•	•
Total Bank and Term Deposits	623,008	617,303



## 4. Accumulated Funds

Accumulated Funds		
Opening Balance	169,884	156,944
Accumulated surpluses or (deficits)	47	(130)
Transfer from Reserves	12,410	13,070
Total Accumulated Funds	182,341	169,884
Reserves		
Opening Balance	448,993	462,542
Accumulated surpluses or (deficits)	9,032	(479)
Transfer from Reserves	(12,410)	(13,070)
Total Reserves	445,615	448,993
Total Accumulated Funds and Reserves	627,956	618,877
Wellman Awards Reserve	129,281	128,500
Hastie Awards Reserve	136,047	137,267
NZGeMs Awards Reserve	28,771	28,832
General Awards Reserve	152,734	154,394
	446,833	448,993

