



NEW ZEALAND INSTITUTE OF FORESTRY FOUNDATION

ANNUAL REPORT

Year Ended 31 March 2018

MESSAGE FROM THE CHAIR

The New Zealand Institute of Forestry Foundation (“NZIF Foundation”) was established by the New Zealand Institute of Forestry (“NZIF”) under a Deed of Trust dated 1st December 2011. It is a registered charity and has been approved by Inland Revenue as a donee organisation (which means donations to the Foundation can qualify for tax credits).

The purpose of the NZIF Foundation is to raise funds that can be used to encourage and support forestry related research, education and training through the provision of grants, scholarships and prizes; promote the acquisition, development and dissemination of forestry related knowledge and information and other activities that do not conflict with the Foundation’s charitable purpose. In the Trust Deed, forestry has been given a broad definition to include all those activities involved in the management and use of forests and their products, the objects of which are the production of wood or other forest benefits and the maintenance of the environment in its most beneficial form.

Subject to certain powers retained by NZIF under the Trust Deed (e.g. appointment of Trustees, approval of any name change, approval to any changes the Deed and approval to winding up the Foundation) and to the provisions of the Deed, all activities of the Foundation are under the control of the Trustees.

The Trustees in the year to 31 March 2018 were:

Andrew McEwen (Chair)
David Evison
James Treadwell
Andres Katz (appointed from 30th November 2017)

During the year the Foundation receive three donations to the general fund from NZIF members, totalling \$22,230.

The Trustees were also delighted to receive:

- A donation of \$5,000 from Invercargill City Forests Ltd., with a commitment to supply a further \$5,000 in each of the 2019 and 2020 financial years. In return, the Foundation will establish the Invercargill City Forests Award, through which the Foundation can provide one or more awards, up to a total of \$5,000/year to assist residents of Invercargill City in studies, research or travel in an area which benefits forestry. The award will run until the donated amount is exhausted.
- A donation of \$5,000 from the NZ Redwood Company Ltd., with a commitment for a further \$5,000 in each of the 2019 to 2022 financial years. In return, the Foundation will establish the NZ Redwood Company Scholarship of \$5,000/year, available to a student enrolled in the Bachelor of Forestry Science degree at the University of Canterbury’s School of Forestry. The scholarship will terminate when the donated funds are exhausted.

The Foundation announced its 2017 awards at the NZ Institute of Forestry Conference Awards Dinner held in Rotorua on 3rd September 2017. The recipients were:

A **Future Forest Scholarship** of \$10,000 was awarded to **Fei Guo**, a PhD student at the University of Canterbury looking at the use of spectroscopy of cellulose and wood to predict growth-stress levels in standing trees and logs. This is a new award for the Foundation, made possible by a donation of \$70,000 from the forest investment company New Forests.

The **Otago/Southland Award** of \$1,500, went to **Luke Holmes** a Bachelor of Forest Engineering Honours student at the University of Canterbury whose research topic is the productivity of fully mechanised cable logging operations. He is studying a cable logging operation in Southland using an innovative method of cable logging.

Michael Pay, a second year Master of Forestry Science student at the University of Canterbury received the **Frank Hutchinson Scholarship** of \$1,000 for a postgraduate student. Michael's project is estate modelling of a multi species, multi-objective forest.

A **University undergraduate scholarship** of \$1,000 was received by **Morgan Scragg** a first year Bachelor of Forestry Science student at the University of Canterbury.

The **Mary Sutherland scholarship** of \$1,000 went **Pauline Edge**, a second year Diploma of Forest Management student at Toi Ohomai Institute of Technology in Rotorua.

Winners of the student poster competition held at the NZIF Conference were:

William Hollis a Diploma in Forest Management student at Toi-Ohomai Institute of Technology, Rotorua, for a poster on the classification of native forest using remote sensing imagery (first prize of \$800)

Okey Francis Obi a PhD student at the University of Canterbury for a poster on the efficiency of logging crews (second prize of \$500)

Michael Pay a Master of Forestry Science student at the University of Canterbury, for a poster on outcomes from marginal hill country forest property (third prize of \$200)

Reports from recent award and scholarship winners are attached to this report.

The Board agreed to offer the following awards in 2018:

- Two Future Forest Scholarships for post graduate research of up to \$10,000 each
- New Zealand Redwood Company Scholarship of \$5,000 for an undergraduate scholarship at the University of Canterbury School Forestry
- Invercargill City Forests Award of up to \$5,000 to assist a resident of Invercargill with study, research or travel relevant to forests or forestry
- Chavasse Travel Award of up to \$3,500 to assist a mid-career person to travel overseas or to bring an overseas person to NZ
- Jon Dey memorial award of up to \$3,500 to assist research projects in the areas of work study or new technology aimed at improving forest engineering and harvest productivity
- Otago-Southland Award of up to \$3,000 to assist a project of relevance to forestry in the Otago/Southland region
- Mary Sutherland Scholarship of \$1,000 for a polytechnic student
- University Undergraduate Scholarship of \$1,000
- Frank Hutchinson Postgraduate scholarship of \$1,000
- Student Poster prize at NZIF Conference (1st, 2nd and 3rd prizes of \$800, \$500 and \$200)

The majority of the funds for the above awards, totalling \$36,500 arise from donations given in return for a commitment from the Foundation to establish the awards. The balance of \$8,000 are funded from the Foundation's general funds. This exceeds the \$7,300 interest earned from Foundation funds in the year to 31st March 2018, so must in part be taken from donations. To ensure sustainability of the Foundation's work, a substantial increase in donations is needed, so that the main capital fund can generate sufficient income to fund awards.

The Trustees record their appreciation to NZIF for providing administrative services at no cost to the Foundation. This includes assistance to administer the Foundation by the NZIF Administrator, Mrs Jay Matthes and the Trustees thank Mrs Matthes for her assistance.

The financial statements for the year to 31 March 2018 are attached. They have been prepared using the template and associated guidance notes applying to a Tier 3 not-for-profit entity available on the External Reporting Board web site (www.xrb.govt.nz).

A handwritten signature in blue ink that reads "Andrew McEwen". The signature is written in a cursive, flowing style. To the right of the signature is a thin vertical yellow line.

Andrew McEwen ONZM, FNZIF

Chair, NZIF Foundation

REPORTS FROM AWARD WINNERS

The following are reports from some of those who recently received NZIF Foundation scholarships and awards.

Fei Guo, Ph.D. student at the University of Canterbury School of Forestry, received a \$10,000 Future Forest Scholarship in 2018. His thesis topic is the use of spectroscopy of cellulose and wood to predict growth-stress levels in standing trees and logs. He reports:

I am greatly honoured to be the first recipient of the Future Forest Scholarship. Research problems and experimental issues during my Ph.D. study have occasionally been very challenging. The motivation as well as the financial support provided by the scholarship are highly appreciated.

Stress causes changes in the wood structure on the molecular level, which can be studied by near infrared (NIR) and Raman spectroscopy. It is expected that rapid and non-destructive method based on portable spectroscopy can be developed to predict the growth-stress levels in standing trees or logs. This research can potentially provide new insights into the spectroscopy of cellulose and wood and promote the solid wood uses of eucalypts by segregation.

To date, we have demonstrated the effect of growth-stress on veneer production from New Zealand grown *Eucalyptus globoides* through a peeling trial. Near infrared study with dry *E. regnans* samples showed the molecular deformation of cellulosic materials caused by mechanical stress. The effect of moisture content on the NIR spectra of wood was also investigated. Strain in small wet wood samples was able to be measured by transmission NIR, but it is still challenging to predict the growth-strain of green stems using NIR spectroscopy in reflection mode. Deuterium exchange combined with near infrared spectroscopy indicated that the inaccessible cellulose was the main load bearing component in wood. A Raman band shift caused by mechanical strain had been observed recently. Further study needs to be done to achieve a better understanding of the Raman spectra of wood and to investigate the potential of Raman spectroscopy in predicting growth-strain.

Luke Holmes, a Batchelor of Forest Engineering Honours student at the University of Canterbury, received a \$1,500 Otago-Southland award for his dissertation research on the productivity of fully mechanised cable logging operations using a harvesting operation in Southland employing an innovative method of cable logging:

During 2017 my dissertation project involved analysing the productivity of fully mechanised cable logging operations in New Zealand. One of the operations that was of significant interest was Andrew Pratt's 'King One' crew, which was harvesting in Castle Downs Forest, Southland. This crew was using an innovative system that involved the use of a HeliHawk grapple in conjunction with a Bellis BE 60 tower yarder. The interesting aspect here was the tailrope being connected to the shovelling machine via an undercarriage mounted block, allowing the grapple to follow the machine about the cutover. The analysis of this operation, and the subsequent comparisons with swing yarder crews around the country, showed that innovative systems such as this were able to remain competitive against much newer machines. During the study I spent 6 days with the crew completing time studies and gathering information. This was during the university holidays and the funding from the NZIF Foundation Otago/Southland Award enabled me to complete this in a time when I would normally have been working. Following the completion of the project the results and learning outcomes were distributed to contractors working in Rayonier|Matariki forests for the benefit of their operations. It was pleasing to be able to use the award in the region itself and provide some valuable results to a local harvesting crew. I would like to thank everyone involved in the awards selection, as receiving this award certainly helped make this project possible.

Photo is of the operation during the study.



Michael Pay, a second year Master of Forestry Science student at the University of Canterbury, received the Frank Hutchinson Scholarship of \$1,000 for a postgraduate student. Michael's dissertation topic was estate modelling of a multi species, multi-objective forest, and he reports:

The Frank Hutchinson Scholarship provided a financial contribution that assisted in supporting me through an M.For.Sci qualification. It was spent on living costs whilst studying. My work involved modelling the future development of a Canterbury based production beech forest using different harvesting strategies, as well as generating predicted cash flow and NPV outcomes for the operation under different management scenarios. The operation also included income from radiata timber and honey (produced from the beech forest).

New Zealand Institute of Forestry Foundation

Performance Report

Year ended 31 March 2018

Contents

	Page
Non-Financial Information:	
Entity Information	8
Statement of Service Performance	10
Financial Information	
Statement of Financial Performance	12
Statement of Financial Position	12
Statement of Cash Flows	13
Statement of Accounting Policies	14
Notes to the Performance Report	15

New Zealand Institute of Forestry Foundation

Entity Information

Year ended 31 March 2018

Legal Name:	New Zealand Institute of Forestry Foundation
Other Name:	NZIF Foundation
Legal Basis:	Registered Charity, Incorporated under the Charitable Trusts Act 1957
Registration Number:	Registered Charity CC47691 Incorporated Society 2556124

Purpose:

The advancement of education in relation to forestry, including, in particular:

1. Acquiring, developing and disseminating knowledge
2. Educating the New Zealand public in relation to forestry

The activities may include:

- (a). Research, education and training assistance through the provision of grants, scholarships, prizes or other forms of assistance
- (b). Educational initiatives and publications, through supporting conferences, seminars, courses and the publication and distribution of forestry-related publications
- (c). Activities incidental to the Foundation's purposes.

Note: Forestry includes all those activities involved in the management and use of forests and their products, the objects of which are the production of wood or other forest benefits and the maintenance of the environment in its most beneficial form.

Entity Structure

The Council of the New Zealand Institute of Forestry (NZIF) is responsible for appointment, reappointment and removal of trustees.

There must be between three and five Trustees.

The NZIF Council is entitled to appoint one of the Trustees to hold office as chairperson and may also remove and replace any person so appointed.

The Trustees in the year to 31 March 2018 were:

Andrew McEwen (Chair)

Appointed as one of the initial trustees and as chairperson in December 2011.

Retired by rotation following the 29th June 2013 AGM.

Re-appointed as a trustee and as Chairperson for a further five-year term expiring on 30th June 2018.

David Evison

Appointed as one of the initial trustees in December 2011.

Retired by rotation following the 2015 AGM.

Reappointed as trustee for a further five year term expiring on 30th June 2020.

James Treadwell

Appointed as one of the initial trustees in December 2011.

Retired by rotation following the 23rd June 2014 AGM

Re-appointed as a trustee for a further five-year term expiring on 24th June 2019.

Andres Katz

Appointed as a trustee for a five-year term from 30 November 2017 to 30 November 2023.

Mrs Jay Matthes, NZIF Administrator assists with administration of the Foundation. NZIF provides this service free of charge to the Foundation.

Main Source of Cash and Resources

The main source of revenue is donations from NZIF members and other individuals, companies and associations operating in the NZ forestry sector.

Main Methods to Raise Funds

Appeals to NZIF members and to companies and associations operating in the NZ forestry sector.

Reliance on Volunteers and Donated Goods or Services

The Foundation is administered by the Trustees in a voluntary capacity, assisted by the NZIF Administrator, with NZIF funding the Administrator's costs.

Physical Address: c/- NZ Institute of Forestry
Level 9, 93 The Terrace
Wellington, New Zealand

Postal Address c/- NZ Institute of Forestry
PO Box 10 513 The Terrace
Wellington 6143
New Zealand

Phone +64 4 974 8421

Email: foundation@nzif.org.nz

Website: <http://www.nzif.org.nz>

New Zealand Institute of Forestry Foundation

Statement of Service Performance

Year ended 31 March 2018

Description of Outcomes

The objectives of the Foundation for the year to 31 March 2018 were:

- To solicit donations from NZ Institute of Forestry members and other individuals, companies and organisations operating in the NZ forestry sector;
- To offer the following scholarships and awards during the year:

Two Future Forest Scholarships, each of \$10,000, for post graduate research at a recognised New Zealand tertiary institution into NZ plantation forestry, with a preference given to projects in the areas of environmental markets, wood fibre markets, forest logistics, productivity and genetics.

Chavasse travel award of up to \$3,500 - open to a mid-career person interested or employed in New Zealand forestry to enable:

The applicant to travel overseas in order to increase their and the forestry sector's experience and knowledge; or

The applicant to assist an overseas person to travel to and within New Zealand for the purpose of making presentations on forestry topics to New Zealand audiences.

John Dey memorial award of up to \$3,500 to assist research projects in the areas of work study or new technology aimed at improving forest engineering and harvest productivity.

Otago-Southland Award of up to \$3,000 to assist or enable a project of relevance to forestry in the Otago/Southland region.

Frank Hutchinson scholarship of \$1,000 – available to students enrolled for a forestry or forestry-related postgraduate degree at a NZ University.

Undergraduate scholarship of \$1,000 – available to students enrolled for a forestry or forestry-related degree at a NZ University.

Mary Sutherland scholarship of \$1,000 – available to students enrolled for a forestry or forestry-related course at a NZ Polytechnic.

Prizes for the best student posters submitted to the 2018 NZIF Conference.

Description and Quantification of Outputs

	Actual This Year	Budget This Year	Actual Last Year
Seek donations	\$22,230		\$77,500
Two Future Forest Awards – One award to Fei Guo, PhD student at the University of Canterbury	\$10,000	\$20,000	N.A.
Chavasse Travel Award – No award made	\$0	\$3,500	\$3,500
Jon Dey Memorial Award - No award made	\$0	\$3,500	\$0
Otago Southland Award – Awarded to Luke Holmes, a Batchelor of Forest Engineering Honours student at the University of Canterbury	\$1,500	\$3,000	\$0

Frank Hutchinson Award – awarded to Michael Pay, a M.For.Sc. student at the University of Canterbury	\$1,000	\$1,000	\$1,000
University Undergraduate Scholarship - Awarded to Morgan Scragg a B.For.Sc. student at the University of Canterbury.	\$1,000	\$1,000	\$1,000
Mary Sutherland Award – Awarded to Pauline Edge, a Dip.For.Management student at Toi Ohomai Institute of Technology	\$1,000	\$1,000	\$0
Poster Prizes	\$1,500	\$1,500	\$1,500
William Hollis, a Dip.For.Management student at Toi Ohomai Institute of Technology, received first prize of \$800			
Okey Francis Obi, a PhD student at the University of Canterbury won second prize of \$500			
Michael Pay, a M.For.Sc. student at the University of Canterbury, won third prize of \$200			

New Zealand Institute of Forestry Foundation

Statement of Financial Performance

Year ended 31 March 2018

	Notes	2018	2017
Revenue			
Donations	1	22,230	77,550
Interest	1	7,330	5,442
Total Revenue		29,560	82,992
Expenses			
Awards	2	16,000	7,000
Administration	2	91	91
Total Expenses		16,091	7,091
Surplus /(Deficit) for the Year		13,469	75,901

New Zealand Institute of Forestry Foundation

Statement of Financial Position

Year ended 31 March 2018

	Notes	2018	2017
Current Assets			
Bank accounts	3	29,426	12,607
Term Deposit	3	204,450	208,820
Accrued interest	3	4,356	3,336
Total Current Assets		238,232	224,762
Non-current Assets		0	0
Current Liabilities		0	0
Non-current Liabilities		0	0
Net Assets		238,232	224,762
Accumulated Funds			
Capital contributed by owners or members		0	0
Accumulated surpluses/(deficits)	5	238,232	224,762
Reserves		0	0
Total Accumulated Funds	5	238,232	224,762

New Zealand Institute of Forestry Foundation

Statement of Cash Flows

Year ended 31 March 2018

	Notes	2018	2017
Cash Flows from Operating Activities			
Cash was received from:			
Donations, fundraising and similar receipts	1	22,230	77,550
Interest, dividends & other investment receipts		6,311	5,276
Cash was applied to:			
Payments to suppliers	2	91	91
Donations and grants paid	2	16,000	7,000
Net Cash Flows from Operating Activities		12,450	75,735
Cash flows from Investing and Financing Activities			
Cash was received from			
Withdrawal from investments		10,666	
Cash was applied to			
Payments to purchase investments		6,296	75,250
Net Cash flows from Investing & Financing Activities		4,369	(75,250)
Net Increase/(Decrease) in Cash		16,819	485
Opening Cash		12,607	12,122
Closing Cash	3	29,426	12,607
This is represented by:			
Bank Accounts & Cash	3	29,426	12,607

New Zealand Institute of Forestry Foundation

Statement of Accounting Policies

Year ended 31 March 2018

Basis of Preparation

New Zealand Institute of Forestry Foundation 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 of equal to or less than \$2,000,000. All transactions in the Performance Report are reported using the accrual basis of accounting. The Performance Report is prepared under the assumption that the entity will continue to operate in the foreseeable future.

Goods and Services Tax (GST)

New Zealand Institute of Forestry Foundation is not registered for GST. Therefore amounts recorded in the Performance Report are inclusive of GST (if any).

Income Tax

New Zealand Institute of Forestry Foundation is wholly exempt from New Zealand income tax having fully complied with all statutory conditions for these exemptions.

Bank Accounts and Cash

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

Tier 2 PBE Accounting Standards Applied

None applied.

Changes in Accounting Policies

There have been no changes in accounting policies during the financial year (last year – nil).

New Zealand Institute of Forestry Foundation

Notes to the Performance Report

Year ended 31 March 2018

Note 1 : Analysis of Revenue

Revenue Item	2018	2017
Donations and other similar revenue		
General donations	12,230	6,500
Donations to Dey Award	0	1,050
Donations to Future Forests Award	0	70,000
Donations to Invercargill City Forests Award	5,000	
Donations to Redwood Scholarship	5,000	
Subtotal	22,230	77,550
Interest, dividends and other investment revenue		
Interest on bank account	15	26
Interest on term deposit	7,316	5,416
Subtotal	7,330	5,442
Total	29,560	82,992

Note 2 : Analysis of Expenses

Expense Item	2018	2017
Costs related to providing goods or services		
Bank related fees	40	40
Administration and overhead costs	51	51
Subtotal	91	91
Grants and donations made		
Future Forests Scholarship	10,000	
Otago-Southland Award	1,500	
Mary Sutherland Scholarship	1,000	0
University undergraduate scholarship	1,000	1,000
Frank Hutchinson scholarship	1,000	1,000
Chavasse Travel Award	0	3,500
Student Poster Prize	1,500	1,500
Subtotal	16,000	7,000
Total Expenses	16,091	7,091

Note 3 : Analysis of Assets and Liabilities

Asset Item	2018	2017
Bank accounts and cash		
Cheque account balance	29,426	12,607
Subtotal	29,426	12,607
Other current assets		
Short term deposits	204,450	208,820
Accrued interest	4,356	3,336
Subtotal	208,806	212,155
Total Assets	238,232	224,762
Liability Item		
Total Liabilities	0	0
Total Assets less Total Liabilities	238,232	224,762

Note 4 : Property, Plant and Equipment

The Foundation does not own any property, plant or equipment.

Note 5 : Accumulated Funds

2018				
Description		Accumulated Surpluses or Deficits	Reserves	Total
Opening Balance		224,762	0	224,762
Capital contributed by owners or members				0
Capital returned to owners or members				0
Surplus/(Deficit)		13,469		13,469
Distributions paid to owners or members				0
Transfer to Reserves				0
Transfer from Reserves				0
Closing Balance		238,232	0	238,232

2017				
Opening Balance	0	148,861	0	148,861
Capital contributed by owners or members				0
Capital returned to owners or members				0
Surplus/(Deficit)		75,901		75,901
Distributions paid to owners or members				0
Transfer to Reserves				0
Transfer from Reserves				0
Closing Balance	0	224,762	0	224,762

Note 6 : Commitments and Contingencies

Commitments

There are no commitments as at balance date (Last Year - nil).

Contingent Liabilities and Guarantees

There are no contingent liabilities or guarantees as at balance date (Last Year - nil).

Note 7: Other

Significant Grants and Donations with Conditions which have not been Recorded as a Liability

The Otago-Southland Award was created in 2013/14 from funds arising from the members of the Otago Southland section of NZIF. Awards can be made to assist or enable a project of relevance to forestry in the Otago Southland Region. The award will continue until the fund is exhausted.

The Jon Dey Memorial Award was established in 2015/16 from funds donated by colleagues and friends of the late Jon Dey to assist research projects in the areas of work study or new technology aimed at improving forest engineering and harvest technology. The award will continue until the fund is exhausted.

The Future Forest Scholarship was established in 2016/17 from funds donated by the Australia and New Zealand Forest Fund 2 for research at any recognised NZ tertiary institution into NZ plantation forestry with a preference given to projects in the areas of environmental markets, wood fibre markets, forest logistics, productivity and genetics. The award will continue until the fund is exhausted.

The Invercargill City Forests award was established in 2017/18 from funds donated by Invercargill City Forests to assist Invercargill Residents in studies, research or travel in an area which benefits forestry. The award will continue until the fund is exhausted.

The NZ Redwood Company scholarship was established in 2017/18 to make a scholarship available to students at the University of Canterbury, enrolled for a Bachelor of Forestry Science. The award will continue until the fund is exhausted.

Description	2018			
	Balance at start of year	Additions	Expensed this year	Balance at Year End
Otago Southland Award	9,700	0	1,500	8,200
Jon Dey Memorial Award	7,000	0	0	7,000
Future Forest Scholarship	70,000	0	10,000	60,000
Invercargill City Forests Award	0	5,000	0	5,000
NZ Redwood Co Scholarship	0	5,000	0	5,000
Totals	86,700	10,000	11,500	85,200

Description	2017			
	Balance at start of year	Additions	Expensed this year	Balance at Year End
Otago Southland Award	9,700	0	0	9,700
Jon Dey Award	5,950	1,050	0	7,000
Future Forest Scholarship	0	70,000	0	70,000
Totals	15,650	71,050	0	86,700

Goods or Services provided to the Foundation in Kind

Nil (Last Year : Nil).

Assets Used as Security for Liabilities

Nil (Last Year : Nil).

Note 8: Assets Held on Behalf of Others

Nil (Last Year : Nil).

Note 9: Related Party Transactions

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

Note 10: Events After the Balance Date

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