

Welcome

Welcome to the 2019 Cawthron Scitec Expo Awards Event. The Expo has been an annual event in the Nelson-Tasman region for more than 30 years.

Congratulations to all the entrants and their teachers for making this event so successful. This year, we received 315 entries from primary and secondary students from 31 schools in the region. We also received entries from home schooled students.

Thanks to all our sponsors, judges, teachers and parents for their continued support and commitment to the Expo. Without their help, this event could not take place and we appreciate your passion for scientific excellence in our region.

This year we had four categories of projects; Science, Technology, Research, and Art in Science. Each student can win gold, silver, or bronze in each category. All projects also can win a Special Category Award from our sponsors.

To all our guests today, please enjoy the Awards Ceremony and the opportunity to look at a small selection of some of the fantastic entries from the Expo. Here is the programme:

- 4.00pm PRIMARY AWARDS
 Welcome from CEO Cawthron Institute, Charles Eason
- 5.00pm Conclusion of Primary School Awards
- 5.00pm Interval
- 5.30pm SECONDARY AWARDS
 Welcome from CEO Cawthron Institute, Charles Eason
 Presentation from Cawthron Scientist, Sam Murray
- 6.30pm Conclusion of Award Ceremony

If you have any feedback please contact us on: foundation@cawthron.org.nz

PRIMARY AWARDS

Sponsor: Cawthron Institute

Primary, Years 1-4 Art in Science Awards

Bronze:

Alma Atalah Armstrong

Pin Hole Photography

Victory Primary School

Silver:

Brooklyn School Junior Syndicate

Walking with Dinosaurs

Brooklyn School

Gold:

Elise Seaman, Mila Gorton, Freya Goodwin, Darwin Hadfield, Joel Tachang, Olivia Maung, Orrin Lockerbie, Natalia Band, Zain Uppgard-Paora, Jason Peh, Jake Crosbie, Hazel Robertson, Tracey Favel, Lincoln Thang, Aarya Pradhan, Amelia Seaman, Sonny Dysart, Harrison Fitzgerald, Chaos Witika-Wilson, Jordan Anderson-Davis, Alma Atalah Armstrong, Sunny Wilson

Ko Te Wairepo aku awa

Victory Primary School

Primary, Years 5-8 Art in Science Awards

Bronze:

Isabella Johns

Skull Resurrection

Nelson College for Girls Prep

Silver:

Keshia Linyard

Anatomy in Action

Enner Glynn School

Gold:

Oliver Morton

Fibonacci - The Science of Art

Nelson Intermediate School

Primary, Years 1-4 Research Awards

Bronze:

Milosh Kostic

Black Holes

Enner Glynn School

Silver:

Jamie Smith

Planet Earth

Enner Glynn School

Gold:

Anna Doura

Brook Sanctuary Beach Forests

Enner Glynn School

Primary, Years 5-8 Research Awards

Bronze:

Zoe Bonny and Bethany Tate

Why is sleep important?

Mapua School

Silver:

Katie Lohmann

Rubbish Everywhere

Waimea Intermediate School

Gold:

Zara Leifferring, Samantha Alsop

Sunsational Solar

Birchwood School

Primary, Years 1-4 Technology Awards

Bronze: Not awarded

Silver:

Taumarama McGregor, Emma Takimoana, Navaeh Pirere, Shadae Tepu

He Tākaro Hōu: Tītī tōrea

Victory Primary School

Gold:

Whānau Koromiko year 1-3 classroom

Poi

Victory Primary School

Primary, Years 5-8 Technology Awards

Bronze:

Kurt Ward, Hogan Ward

Catch Me If You Can!

Nelson Intermediate School

Silver:

William Dimery-Knight

It's about time!

Riwaka School

Gold:

Arlo Radford, Mitchell Laird, Lochy Morris

The Perfect Poached Egg Experiment

Clifton Terrace School

Primary, Years 1-4 Science Awards

Bronze:

Pipi Johns

Polymer Pollution

Clifton Terrace School

Silver:

Sam Daughtrey, Evie King and Mira Vij

Sunscreen

Clifton Terrace School

Gold:

Nia Linyard

Is Rainwater better than Tapwater

Enner Glynn School

Primary, Years 5-8 Science Awards

Bronze:

Keshia Linyard

Acidic Oceans

Enner Glynn School

Silver:

Micaiah Sampson

Burning Barrier

Waimea Intermediate School

Gold:

Lucy Fillary

Speed on Higgs Road

Mapua School

Special Criteria Awards

Wakatu – Te Reo Māori Award

Sponsor: Wakatu Inc

Prize: \$200

Criteria: Best project in Te Reo Māori

Katie Lohmann

Rubbish Everywhere

Waimea Intermediate School

Science Communicator Award

Sponsor: Nelson Science Society

Prize: \$150 first and \$50 runner-up

Criteria: Best communicator through oral presentation

First:

Zara Leifferring

Sunsational Solar

Birchwood School

Runner-up:

Florrie Wilson, Ceana Renwick

How Well Do We Wash Our Hands?

Clifton Terrace School

Runner-up:

Paige Butler

Making A Difference

St Paul's School

Plant & Food Research Award

Sponsor: Plant & Food Research

Prize: \$100

Criteria: The best investigation in food technology

Willow Brooke and Arwen Brooke

Spinning from the Sea

Home school

Baking Industry Research Trust Primary Award

Sponsor: NZ Baking Industry Research Trust

Prize: \$50 + Book

Criteria: Best understanding of flour usage or bakery products in their food related project

Blair Lind

Cricket Confectionary

St Joseph's School

Royal Aeronautical Society Primary Award

Sponsor: Royal Aeronautical Society, Blenheim Branch

Prize: \$100

Criteria: The best investigation relating to 'flow', including hydro & aero dynamics, vessel building and design

George Maughan

Wind busters

Nelson Central School

Nelson Botanical Society

Sponsor: Nelson Botanical Society Award

Prize: \$50

Criteria: The best investigation relating to botany

Anna Doura

Brook Sanctuary Beach Forests

Enner Glynn School

Marine Conservation Award

Sponsor: Friends of Nelson Haven and Tasman Bays

Prize: \$50 book token

Criteria: Best in Marine Conservation

Keshia Linyard

Acidic Oceans

Enner Glynn School

Port Nelson Ltd Award

Sponsor: Port Nelson Ltd

Prize: \$100

Criteria: The best marine related environmental project

Keshia Linyard

Acidic Oceans

Enner Glynn School

Youth Leadership

Sponsor: Nelson City and Tasman District Councils

Prize: \$300

Criteria: The best investigation focused on sustainability and community

Micaiah Sampson

Burning Barrier

Waimea Intermediate School

Soroptimist International Award

Sponsor: Soroptimist International, Waimea

Prize: \$50

Criteria: Best female in Years 6-8 for each category

Science:

Keshia Linyard

Acidic Oceans

Enner Glynn School

Research:

Zara Leiffering, Samantha Alsop
Sunsational Solar
Birchwood School

Soroptimist International Award**Sponsor: Soroptimist International, Nelson**

Prize: \$50

Criteria: Best female in Years 6-8 for each category

Art:

Keshia Linyard
Anatomy in Action
Enner Glynn School

Technology:

Rangiahua McTanish-Paul, Hamaka Kelly Tata, Sophie Hunt
He Tākaro Hōu: Māra hūpara
Victory Primary School

Tonkin and Taylor Environmental Sustainability Award**Sponsor: Tonkin and Taylor**

Prize: \$150

Criteria: Best project that explores use of the earth's resources while achieving a long-term ecological balance

Zac Sampson
Drinking in Drought
Ranzau School

Electronics Award

Sponsor: Sensys - Systems for sensing our world

Prize: \$75

Criteria: Best project in electronics

Will Harvey, Harry Mitchener

Solar Roller

Waimea Intermediate School

Statistics NZ Award

Sponsor: Statistics NZ and the NZ Statistics Association

Prize: \$40 book voucher

Criteria: Best use of statistics or statistical analysis in an investigation

Lucy Fillary

Speed on Higgs Road

Mapua School

Electrotest Award

Sponsor: Electrotest

Prize: Temperature and pH Sensor to students' school

Isabella Doblanovic, Alani Inglis

Creek Clarity

Nelson College for Girls Prep

Ministry of Inspiration Award

Sponsor: Ministry of Inspiration

Prize: Day ticket to Inspire Conference 2020

Criteria: Best in innovation and creativity in STEAMS

Arlo Radford, Mitchell Laird, Lochy Morris

The Perfect Poached Egg Experiment

Clifton Terrace School

Rimu and Ngaio

Cellular Art

Mapua School

Ephraima Ngaroi-Akavi, Aaron West, Jose Wells

He Tākaro Hōu: Mata ārai

Victory Primary School

Mr. Science Award

Sponsor: Mr Science

Prize: Mr. Science Classroom kits

Criteria: Most fun and creative project

Kahikatea Class Mapua School

NZ Native Plant; Rongoa Metallic Art

Mapua School

Isabella Johns

Skull Resurrection

Nelson College for Girls Prep

Menzshed Metal Award

Sponsor: Menzshed

Prize: \$100

Criteria: Best metal work project

Harry Bass

Water Wheel

Hope School

Michael Wraight Award

Sponsor: Nelson Beekeepers

Prize: Microscope (value \$450)

Criteria: Best project in biological sciences

Kahikatea Classroom, Mapua School

Plant Cell Art

Mapua School

Conservation Science Award

Sponsor: Department of Conservation

Prize: Serviced hut two night family pass

Criteria: Best project on native plants, wildlife or ecosystems

Connor Edmonds

Sweet Home Otuwhero

Nayland Primary School

SECONDARY AWARDS

Sponsor: Cawthron Institute

Secondary, Years 9-10 Art in Science Awards

Bronze:

Pippa Sussex

Melting glaciers and its effects on rising sea levels.

Nayland College

Silver:

Bailey O'Malley

Laser Our Way to a Brighter Future

Waimea College

Gold:

Bailey O'Malley

New Zealand Native Birds of a Feather Flock Together

Waimea College

Secondary, Years 11-13 Art in Science Awards

Not Awarded

Secondary, Years 9-10 Research Awards

Bronze:

Cassie Cameron

A Burning Problem For Our Oceans

Waimea College

Silver:

Alec Mark

Cosmic Inflation

Home School

Gold:

James O'Malley, Adam Teece

Pakawau's War with Erosion

Waimea College

Secondary, 11-13 Research Awards

Bronze:

Tessa Barnes

It's Not What, It's How

Motueka High School

Silver:

Aimee Bartlett

Megamind

Nayland College

Gold:

Matthew Edmonds

To Dredge or not to Dredge?

Nayland College

Secondary, Years 9-10 Science Awards

Bronze:

Chicchun Needham, Lyn Yokoyama

Tears for Onions

Nayland College

Silver:

Lovina Pluck

Phytoplankton? Vital plankton

Nayland College

Gold:

Jack Noble, Nathan Quinney, Kayden McManaway

Speed of Light through Gelatin

Waimea College

Secondary, Years 11-13 Science Awards

Bronze:

Matthew Edmonds

Unclear

Nayland College

Silver:

Matthew Edmonds

Ready Salted Mussels

Nayland College

Gold:

Aimee Bartlett

Caffeinating Mussels

Nayland College

Secondary, Years 9-10 Technology Awards

Bronze:

Sarah Cools, Freya High, Grace Edmondson

Biomass to Biogas

Nelson College for Girls

Silver:

Sylvie Lloyd, Jasmin Malcolm

Bioplastic

Nelson College for Girls

Gold:

Kelian Landry

E-Trap

Nelson College

Secondary, Years 11-13 Technology Awards

Bronze:

Preston Holder

RC Blimp

Nelson College

Silver:

Jamie Foster

Habhub

Nelson College

Gold:

Eloise Beattie

Total Recall

Nelson College for Girls

Special Criteria Awards

Science Communicator Award

Sponsor: Nelson Science Society

Prize: \$50

Criteria: Best communicator through oral presentation

Runner-up:

James O'Malley, Adam Teece

Pakawau's War with Erosion

Waimea College

Hands-On at Otago Award

Sponsor: University of Otago

Prize: A place at the Hands-On Science week at the University of Otago, Dunedin plus a Canon camera

Criteria: The best application of scientific method for students entering Year 12 or 13 in 2020.

Jamie Foster

Habhub

Nelson College

Dick Roberts Memorial Trust Award (Female/male)

Sponsor: Dick Roberts Memorial Trust

Prize: \$350 & personal trophy by The Centre for Fine Woodworking

Criteria: The best investigation relating to life sciences, biology or geology

Matthew Edmonds

Ready Salted Mussels

Nayland College

Aimee Bartlett

Caffeinating Mussels

Nayland College

NMIT-Aquaculture Award

Sponsor: Nelson Marlborough Institute of Technology

Prize: \$250

Criteria: The best investigation focused on aquaculture

Matthew Edmonds

Ready Salted Mussels

Nayland College

Plant & Food Research Award

Sponsor: Plant & Food Research

Prize: \$150

Criteria: The best investigation around food technology

Aimee Bartlett
Caffeinating Mussels
Nayland College

Royal Aeronautical Society Award

Sponsor: Royal Aeronautical Society, Blenheim Branch

Prize: \$100

Criteria: The best investigation relating to 'flow', including hydro/ aero dynamics, vessel building and design

Jess Scott, Lois Breukel
Swim Like A Shark
Nayland College

Nelson Botanical Society

Sponsor: Nelson Botanical Society Award

Prize: \$100

Criteria: The best investigation relating to botany
Not awarded 2019

The Royal Forest and Bird Shield

Sponsor: Royal Forest and Bird Protection Society

Prize: The historic shield, one years' membership to the Forest and Bird Society and a \$50 book voucher

Criteria: The best study of a native plant, bird or other animal or their protection.

Bailey O'Malley
New Zealand Native Birds of a Feather Flock Together
Waimea College

Port Nelson Ltd Award

Sponsor: Port Nelson Ltd

Prize: \$200

Criteria: The best marine related environmental project

Sylvie Lloyd, Jasmin Malcolm

Bioplastic

Nelson College for Girls

Youth Leadership

Sponsor: Nelson City and Tasman District Councils

Prize: \$300

Criteria: The best investigation focused on sustainability
and community

Sarah Cools, Freya High, Grace Edmondson

Biomass to Biogas

Nelson College for Girls

Menzshed Woodwork Award

Sponsor: Menzshed

Prize: \$100

Criteria: Best woodwork project

Joseph Amos

Purple Heart Shaker Table

Nayland College

Soroptimist International, Waimea Award

Sponsor: Soroptimist International, Waimea Branch

Prize: \$50

Criteria: Best female in Years 9-10

Science:

Lovinia Pluck

Phytoplankton? Vital plankton

Nayland College

Research:

Cassie Cameron

A Burning Problem For Our Oceans

Waimea College

Soroptimist International, Nelson Award

Sponsor: Soroptimist International, Nelson Branch

Prize: \$50

Criteria: Best female in Years 9-10 Art

Technology:

Sylvie Lloyd, Jasmin Malcolm

Bioplastic

Nelson College for Girls

Art:

Pippa Sussex

Melting glaciers and its effects on rising sea levels

Nayland College

Soroptimist International, Nelson Award

Sponsor: Nelson Soroptimist Education Trust

Prize: \$250

Criteria: Best investigation by a female student Years 11- 13

Science:

Aimee Bartlett

Caffeinating Mussels

Nayland College

Technology:

Eloise Beattie

Total Recall

Nelson College for Girls

Tonkin and Taylor Environmental Sustainability Award

Sponsor: Tonkin and Taylor

Prize: \$200

Criteria: Best project that explores use of the earth's resources while achieving a long-term ecological balance

Sarah Cools, Freya High, Grace Edmondson

Biomass to Biogas

Nelson College for Girls

Electronics Award

Sponsor: Sensys – Systems for sensing our world

Prize: \$175

Criteria: Best project in electronics

Kelian Landry
E-Trap
Nelson College

Marine Conservation Award

Sponsor: Friends of Nelson Haven and Tasman Bays

Prize: \$160 book token

Criteria: Best in Marine Conservation

James O'Malley, Adam Teece
Pakawau's War with Erosion
Waimea College

NZART New Zealand Amateur Radio Transmitters Award

Sponsor: NZART

Prize \$100

Criteria: Best project related to radio waves

Kelian Landry
E-Trap
Nelson College

Nelson Pine Award

Sponsor: Golden Edge, Nelson Pine Industries

Prize: \$300

Criteria: Best use of wood materials

Joseph Amos
Purple Heart Shaker Table
Nayland College

Statistics NZ Award

Sponsor: Statistics NZ and the NZ Statistics Association

Prize: \$40 book voucher

Criteria: Best use of statistics or statistical analysis in an investigation

Jack Noble, Nathan Quinney, Kayden McManaway

Speed of Light through Gelatin

Waimea College

Supreme Awards

The John Cross Best Scientific Investigation Award

Sponsor: Cawthron Institute

Prize: \$500 prize and trophy

Criteria: Overall best in science

John Cross was a passionate science teacher and educator who led the Science Fair for many years. The John Cross Best Scientific Investigation Award is presented to the best science project/student. The investigation is marked on originality, technical and graphical skills, statistics, presentation and literature review.

The Des Duthie Technology Award

Sponsor: Cawthron Institute

Prize: \$500 prize and trophy

Criteria: Overall best in technology

Des Duthie led the Science Fair for 10 years before passing the reins to the Cawthron Trust. He strived to make it a landmark annual event that encouraged and rewarded excellence. On request from Des, the Des Duthie Technology Award was designed by engineer and amateur astronomer Peter Knowles, who also designed the sundial in Richmond's Sundial Square.

The Albert Jones Best Research Investigation Award

Sponsor: Nelson Science Society

Prize: \$500 prize and trophy

Criteria: Overall best in research

Albert Jones was a modest Nelson astronomer who achieved international fame and recognition, discovering comets and supernova and making about half a million observations during his 60 years of astronomical observations. In recognition, he received a string of international awards, an OBE and an honorary science doctorate from Victoria University. With this Award for best research project, the Nelson Science Society are honouring his memory and work.

The Cawthron Scitec Expo is a huge feat each year and could not be achieved without the huge support of our community. Thank you to everyone that supported us this year, particularly the members of the organising committee: Gerd Banke, Joy Oakly, Carl Sheehan, Karen Linyard, Simon Patel, Bruce Rudge, Graeme Rogers, Elizabeth Bean, Jenny Pollock and Joanna Wilson.

Our Soroptimist volunteers deserve a very special thank you for their catering services. We are very grateful to the support of our sponsors and these are listed overleaf.

The judges were very ably led by Jenny Pollock and Joanna Wilson during the Expo and subsequently they completed moderation to award all prizes. **2019 Judges were:**

Brydon, Nichola	Jensen, Elizabeth	Palmer, Lucy
Albright, Abbie	Johns, Sarah	Palmer, Penelope
Banke, Gerd	Kasper, Henry	Perrin, Robert
Baxter, Jacqui	Killip, Mo	Pollock, Jenny
Beattie, Eloise	Korcheski, Barry	Pomeroy, Eva
Bloomfield, Gaye	Kwan, Aliatlar	Ragg, Norman Mr
Bradley, Richard	Lambie, Ian	Reardon, Ella
Brydon, Nichola	Langi, Asita	Redshaw, Bernard
Cardwell, Natasha	Laufkotter, Cushla	Reeves, Emma
Chisnall, Callum	Leonard, Kelly	Sampson, Dave
Costley, Nigel	Lloyd, Eva	Sheenan, Carl
Couch, David	Love, Martin	Silcock, Kirsty
Craig, Doug	MacGregor, Ian	Smith, Allan
de Hamel, Richard	Mackie, Andrew	Steel, Duncan
Dean, Lesley	Malla, Sristy	Steiner, Konstanze
Dowd, Georgina	March, Frank	Stephens, Sandy
Duthie, Des	Mathews, Alan	Struik, Gwen
Dyson, Bill	Matthews, Karen	Sturm, Sarah
Dyson, Monique	McFarlane, Emma	Sutherland, Colin
Emery, Analee	McMahon, Rebecca	Taylor, Ella
Emery, Dennis	Miller, Matt	Thomas, Andrea
Fahey, Jemma	Millward, Peter	Thompson, Starley
Fisher, Paul	Moore, John	Unwin, Heni
Gibellini, Nicola	Moran, Damian	van Loon, Christa
Gower, Fiona	Murray, Sam	Ward, Dick
Graham, Heather	Nieuwenhuis, Will	Wilson, Joanna
Hannan, Debbie	O'Connor, Katrina	Wilson, John
Hennessy, Wayne	O'Brien, Skye	Young, Basil
Herbert, Andy	O'Malley Declan	
Ingram, Peter	Palliser, Grant	

