EARTHWATCH INSTITUTE

TO CONSERVE THE INTEGRITY AND DIVERSITY OF LIFE ON EARTH

2016 ANNUAL REPORT

JOIN OUR STORY

Cover photo:
Recovery of The Great Barrier Reef
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"YOU CANNOT GET THROUGH A SINGLE DAY WITHOUT HAVING AN IMPACT ON THE WORLD AROUND YOU. WHAT YOU DO MAKES A DIFFERENCE, AND YOU HAVE TO DECIDE WHAT KIND OF DIFFERENCE YOU WANT TO MAKE."

JANE GOODALL

FROM OUR CEO

WITH EVER GROWING PRESSURE BEING PLACED ON OUR NATURAL ENVIRONMENT, THERE HAS NEVER BEEN A GREATER NEED FOR INCREASED UNDERSTANDING AND AWARENESS OF HOW TO LIVE SUSTAINABLY. EARTHWATCH HAS BEEN STRIVING TO ACHIEVE THIS FOR 45 YEARS.

We have continued to undertake critical research uniting citizens and scientists to protect the integrity and diversity of life on Earth and to transform the way business, government and individuals think and act in relation to nature.

This year we have formed a new partnership with Orpheus Island Resort, broadening opportunities for involvement in our vital research on the Great Barrier Reef. We expanded our existing partnership with Qantas, providing ongoing opportunities for indigenous students to engage in experiential STEM. We sent a record number of teachers into the field this year on TeachLive.

We are conscious that our ability to continue after all these years is due to YOU. By coming together we are able to overcome environmental challenges and achieve significant outcomes for species, landscapes, communities and society as a whole. I sincerely thank you for your support over these years.

The New Year brings exciting challenges. Our focus will be on the Sustainable Development Goals, education and capacity building will be core to our work, as will be reconnecting people with nature in urban environments.

Though there are many pressing environmental concerns, they are not unconquerable. Our actions TODAY shape the future of our children's TOMORROW and the direction of our home, Earth.

Cassandra Nichols
Chief Executive Officer
Earthwatch Institute Australia

earthwatch.org.au - Find out more

FROM THE CHAIR

Earthwatch brings individuals from all walks of life together with world-class scientists to work for the good of the planet.

The Earthwatch community continues to grow rapidly, utilising the concept of 'citizen science' which, simply defined, is when members of the public contribute to the collection and/or analysis of information for scientific purposes. Participants can be corporate employees, educators, students or anyone who wants to become involved in a travel experience like no other.

The Earthwatch mission is to connect people with the environment. This is the focus of citizen science. We can only succeed through effective collaboration. Climate change,biodiversity and the health of the world's oceans remain our focus.

Species extinction is occurring at an accelerating rate. The Earth has lost half of its animal species in the last 40 years. As Australians we bear a heavy responsibility – we have the worst mammal extinction rate in the world; we are also custodians of the Earth's greatest natural coral wonder – the Great Barrier Reef. As the driest continent we will be particularly impacted by climate change.

We are indebted to all our partners: the Earthwatch global network, scientists, our corporate sponsors, governments, our volunteers and, the community. It is worth highlighting that with the support of BHP Billiton and the Australian Government our Bush Blitz program has discovered nearly 1,200 new species.

In this year of transition we have laid the foundations for the coming year. This is a tribute to our new CEO, Cassandra Nichols, her leadership team and all staff who are united in building a strong inclusive culture.

I thank all of my Board colleagues for their commitment and, especially acknowledge Heather Campbell, having reached the mandatory 9 year term limit for her outstanding contribution during her time on the Board.

Charles Macek
Chair, Earthwatch Institute Australia

OUR VISION

Our vision is a world in which we live within our means and in balance with nature with individuals coming together as a collective for a sustainable planet.

OUR MISSION

Earthwatch engages all people worldwide in scientific research and education to promote the understanding of and action necessary for a sustainable environment.

OUR ROOTS

Earthwatch is an international environmental charity established in Boston, USA in 1971. Earthwatch Institute in Australia began its journey in 1982. As of this year, Earthwatch Institute has been active for 45 years.

HIGH LEVEL GOALS	MEASURES OF SUCCESS
1 INCREASING SCIENTIFIC KNOWLEDGE	» People and person hours dedicated to collecting scientific data » Peer reviewed publications » Popular publications and outreach events
2 DEVELOPING ENVIRONMENTAL LEADERS	» Education: individuals engaged and developing increased capacity
3 ENABLING ORGANISATIONS TO BECOME MORE SUSTAINABLE	» Partnerships: organisations actively engaged
4 INFORMING ENVIRONMENTAL POLICIES, AGENDAS AND MANAGEMENT PLANS	» Contributions to conventions, agendas, policies and management plans » Pro-environment actions taken
5 ENHANCING NATURAL AND SOCIO-CULTURAL CAPITAL	» Taxa of conservation significance enhanced » Natural habitats enhanced » Ecosystem services enhanced

OUR JOURNEY

Celebrating 45 years of creating knowledge and inspiring action.

45 years

100,000 participants

1,400 projects

1 planet

1971

Earthwatch is born and citizen science begins as 39 participants join our hand-picked scientists from the Smithsonian Institute.

1977

Earthwatch teams undertake a project to understand coral reefs in the Caribbean – completing over 500 dives in a single season. These efforts produce one of the largest and most detailed coral reef maps ever made.

1981

Earthwatch scientists discover a new species of funnel-web spider in Queensland and name it after Earthwatch: *Aname earthwatchorum*.

1982

Earthwatch Australia is born.

Earthwatch teams at Cape Cod gather evidence on impending ecological problems on fragile barrier beaches. US Congress is persuaded to pass the Coastal Barrier Resources Act, protecting barrier islands from development.

1995

Earthwatch teams in Zimbabwe make the first observations of hippopotamus eating meat, suggesting that drought gave rise to omnivory.

1996

Earthwatch scientists in Australia confirm the earliest human occupation here was at least 50,000 years ago, 10,000 years earlier than commonly accepted at that time.

1997

Earthwatch teams working with palaeontologist Dr Keith Rigby discover the largest tyrannosaur ever unearthed. Dr Rigby also finds compelling new evidence on the causes of dinosaur extinction.

2000

Earthwatch teams help clean around 23, 000 oiled penguins in South Africa – 90% of those cleaned survived.

2003

Thanks in part to Earthwatch project Britain's Basking Sharks, basking sharks are listed in Appendix II of the **Convention on International Trade in Endangered Species (CITES).**

2004

Earthwatch wins British Archaeological Award for its support over a period of 12 years of excavations and conservation at the Arbeia Roman fort.

2005

Earthwatch teams enable Lake Elmenteita, Kenya to be designated a Ramsar wetland of international importance, helping protect the habitat of more than 20,000 water birds.

2006

Earthwatch's five-year Investing in Nature HSBC partnership trains 200 environmental scientists from developing countries, leading to the protection or restoration of almost one million hectares of land.

2008

Earthwatch research leads to the designation of the Ikh Nart Nature Reserve as an important bird area of Mongolia, protecting nesting sites of the globally threatened lesser kestrel, cinereous vulture and golden eagle.

2009

Earthwatch Australia's work is recognised with The Prime Minister's Award for Australian Environmentalist of the Year 2009 for outstanding achievement at a national and international level.

Earthwatch TeachLive participants in Western Australia confirm, for the first time, the transcontinental migration of whale sharks from Borneo to Ningaloo Reef. This finding highlights the need for a global approach to whale shark conservation.

ClimateWatch is developed by Earthwatch Australia with the Bureau of Meteorology and the University of Melbourne to understand how changes in temperature and rainfall are affecting the location and behaviour of Australia's plants and animals.

2010

Earthwatch research persuades the Costa Rican government to preserve the conservation status of the Las Baulas marine park – an important nesting ground for the critically endangered leatherback turtle.

Earthwatch Australia develops Bush Blitz in conjunction with the Australian Government and BHP Billiton Sustainable Communities. Bush Blitz is the world's first continent-scale biodiversity survey, providing the knowledge needed to protect Australia's environment.

2011

Oman Earthwatch Program gains support from the Oman Government with its pledge of an endowment fund to enable four Oman Fellowships a year to join an Earthwatch project each year.

Earthwatch Australia in partnership with CSIRO develop TeachWild, a national marine debris research and education program. TeachWild integrates field, modelling, genetic and biochemical marker approaches to understand the impact of marine debris on fauna at the national scale.

2012

Earthwatch participants help to restore important mangrove ecosystems, helping inform the developing national REDD+ plan and the anticipated launch of Africa's first community-based mangrove conservation and development project funded by carbon credits.

Earthwatch researchers uncover a new species of cretaceous crocodile at Arlington Archoasur Site in Texas, USA. Remarkably, they have enough fossils to know what it looked like as it grew from a 1-foot long hatchling to full grown at 22 feet.

2013

Earthwatch scientist Dr Demian Chapman persuades the Convention on International Trade in Endangered Species (CITES) to protect biodiversity by extending restrictions on the shark fin trade. These restrictions now protect the great hammerhead, oceanic white tip and three other species previously not protected by law.

2014

Earthwatch Australia's Bush Blitz program discovers 825 new species, records 14,800 current species, locates 776 pest species and engages over 1,300 students.

Earthwatch receives the prestigious World Tourism Award in recognition of our mission to promote a sustainable way of life through education and field research.

2015

Earthwatch Australia's Bush Blitz program uncovers 7 new species of spider and a new genus of tarantula at Judbarra/ Gregory National Park in the Northern Territory.

Earthwatch Australia's ClimateWatch program reaches 17,000 registered App users and 83,000 recordings of plants and wildlife.

What's Ahead?

2016

A new species of peacock spider that 'dances' is discovered on an Earthwatch Bush Blitz expedition in central Queensland and is named after Queensland Ballet's artistic director, Li Cunxin, famously known as Mao's Last Dancer.

1 EARTHWATCH PROGRAMS

"AN UNDERSTANDING OF THE NATURAL WORLD AND WHAT'S IN IT IS A SOURCE OF NOT ONLY GREAT CURIOSITY BUT GREAT FULFILMENT."

- David Attenborough

Experiential learning experiences are the core of Earthwatch programs. Members of the community including students, teachers, corporate and regular citizens are invited to work alongside renowned scientists gathering data that will help solve real-world issues. The programs not only educate and increase our understanding of pressing environmental and cultural issues, but inspire and motivate people to create positive change.

In the year of 2015-2016, Earthwatch Australia supported a total of 16 national and 48 international research projects engaging thousands of members of society. These projects were delivered through scientific partnerships with 34 national research institutions (10 universities, 18 state or federal government institution and six NGOs). The projects span across our four priority research areas: Climate Change, Wildlife and Ecosystems, Ocean Health and Archaeology and Cultural Heritage.

AUSTRALIAN EXPEDITIONS

PROJECTS

Healthy Humpbacks
Dr Olaf Meynecke,
Griffith University
North Stradbroke Island, QLD

Australia's Changing Islands
Dr Alistair Melzer,
Central Queensland University
St. Bees Island, QLD

Recovery of the Great Barrier Reef
Dr David Bourne,
Australian Institute of Marine Science
Orpheus Island, QLD

Conserving Koala Country
Dr Desley Whisson,
Deakin University
Great Otway National Park, VIC

Wildlife of Australia's Rainforest
Prof Stephen Williams
James Cook University
Wet Tropics Heritage Area, North QLD

Project Manta
Dr Frazer McGregor & Dr Mike van Keulen
Murdoch University
Coral Bay, WA

Snorkelling Australia's Underwater Meadows
Dr. James Udy, Science Under Sail
Healthy Water Ways
Moreton Bay, QLD

Melbourne's Microbats
Dr. Rodney Van der Ree
Australian Research Centre
of Urban Ecology
Melbourne Royal Botanic Gardens, VIC

Turtles on the Move
Dr. Andrew Hamer
Australian Research Centre
of Urban Ecology
Melbourne, VIC

Ranging from 1 day to 2 weeks, Australian expeditions provide opportunities for participants from all walks of life to immerse themselves in nature within Australia's profound landscapes.

PROJECTS	9
PARTICIPANTS	217
PARTICIPANT DAYS	966
PARTICIPANT HOURS	9660

PARTNER PROFILE

RECOVERY OF THE GREAT BARRIER REEF

"THIS EXPERIENCE HAS DEFINITELY CHANGED MY PERSPECTIVE ON THE MARINE ENVIRONMENT. I FEEL MORE CONNECTED TO CORAL AND ITS SCIENCE, WHICH I NEVER FELT BEFORE THIS TRIP. THERE IS NO BETTER WAY TO LEARN OF THE CORAL REEF'S PRESENT CONDITION AND WHAT SCIENTISTS ARE ACTUALLY DOING TO HELP THEIR RECOVERY. TO SUPPORT THE RESEARCHERS TO ESTABLISH THE TECHNOLOGY FOR CORAL REEFS RECOVERY IS VITAL FOR HEALTHY MARINE LIFE AND I FEEL PROUD OF MITSUBISHI'S CONTINUOUS SUPPORT FOR THIS PROGRAM."

– **Tomoka Michimoto,** Mitsubishi Australia Ltd

Dr David Bourne, Australian Institute of Marine Science (AIMS)

LOCATION: ORPHEUS ISLAND, GREAT BARRIER REEF

DURATION 8 DAYS, 2 TRIPS PER YEAR

FIELDING: SINCE 2012

Coral diseases are among the most significant threats to tropical coral reef ecosystems. Approximately 19% of the world's coral reefs have been destroyed, with no immediate prospects of recovery. Summer outbreaks of black band disease, a global coral virus causing total collapse of susceptible types of coral, have been recorded in the Great Barrier Reef. In addition to this, worsening climate change conditions such as ocean acidification and coral bleaching are putting coral communities under further stress.

Research into black band coral disease is crucial to the survival of coral communities, given the increased threats posed by climate change. Knowledge gaps regarding coral diseases represent a major challenge for future management strategies. This expedition aims to address such knowledge gaps to ensure the development of better strategies for protecting corals of the Great Barrier Reef.

Mitsubishi Corporation Partnership

As of December 2014, Mitsubishi Corporation has played an essential role in supporting Recovery of the Great Barrier Reef through funding and the participation of their employees. The funding provided by Mitsubishi Corporation is vital for covering the costs of the research expeditions, facilitating a post doctorate fellow to work on the project and enabling Mitsubishi Corporations employees and affiliates to join the research project contributing to data collection.

All Australian Mitsubishi company employees that participate provide a report that summarises their experience and whether it has impacted on their own perceptions of marine ecosystems, as well as developing their own methods of communicating this knowledge to others.

Australian Institute of Marine Science (AIMS) – 5 year research partnership

Since the successful partnership between the Australian Institute of Marine Science (AIMS) and Earthwatch Australia began in 2011, nine Recovery of the Great Barrier Reef expeditions have fielded and over fifty Earthwatch participants have joined the expedition, helping project leaders Dr. David Bourne and Dr. Yui Sato collect data on over 5000m2 of reef around Orpheus Island.

Mitsubishi Corporation

"CONTRIBUTING TO THIS EXPEDITION NOT ONLY ALLOWS MITSUBISHI TO CONTRIBUTE TO IMPORTANT SCIENTIFIC RESEARCH TO HELP PROTECT ONE OF THE WORLD'S GREATEST NATURAL ASSETS, BUT IT ALSO ALLOWS US TO FULFIL OUR CORPORATE RESPONSIBILITY TO SOCIETY, WHICH IS VERY IMPORTANT TO THE CULTURE OF OUR COMPANY. I BELIEVE THAT THIS EXPEDITION IS UNDERTAKING INTEGRAL RESEARCH TO BETTER UNDERSTAND A SCIENTIFIC ISSUE, WHICH MAY BE ONE OF THE GREATEST SCIENTIFIC CHALLENGES OF THIS GENERATION"

– **Hannah McColl-Wayne,** Mitsubishi Development P/L

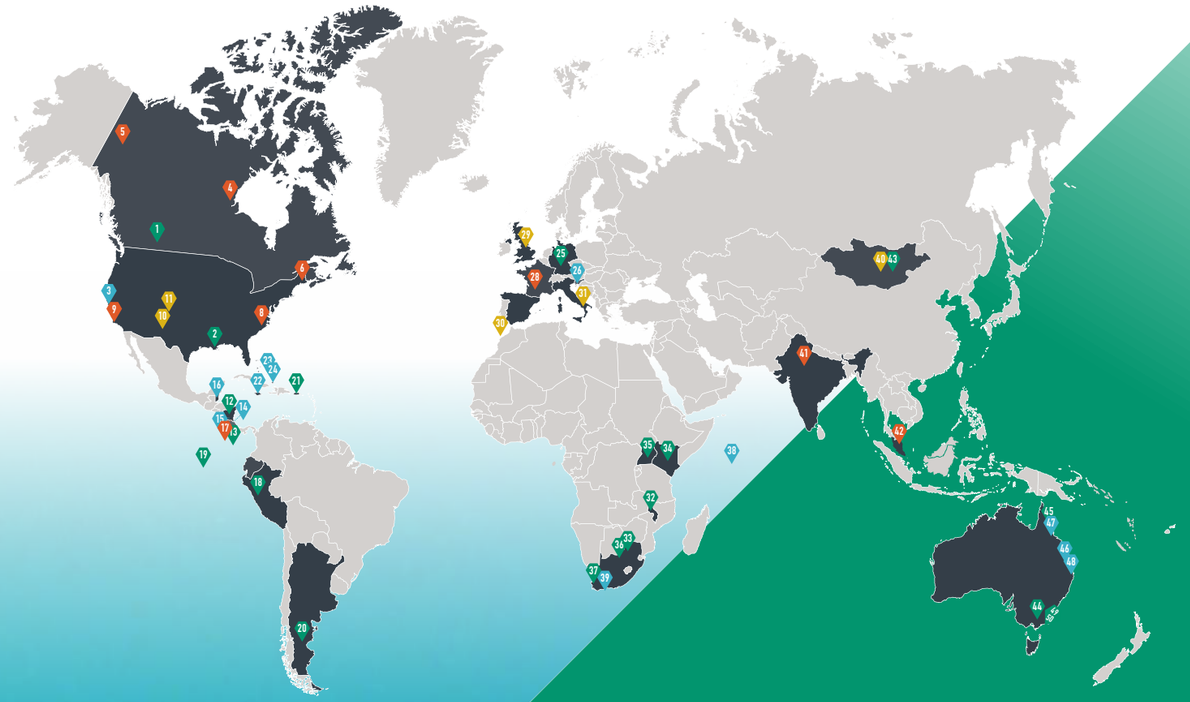
INTERNATIONAL EXPEDITIONS

RESEARCH PROJECTS	84
COUNTRIES	26
AUSTRALIAN PARTICIPANTS	243
TOTAL PARTICIPANTS	4,716
PARTICIPANT DAYS	33,012
PARTICIPANT HOURS	330,120

PROGRAM DESCRIPTIONS

As a global organization, Earthwatch provides opportunities for willing participants to attend scientific research expeditions around the world. Taking a path less travelled, participants become citizen scientists, journeying to places that the typical tourist does not have the chance to visit and experiencing culture and wildlife in a completely unique way. Whilst enjoying the surrounds, they are busy undertaking vital research that responds to global and cultural challenges that we are faced with. This enables participants to personally contribute to improving our scientific knowledge and enhance their own understanding of cultural and environmental topics. They are transformational experiences that help move society towards a sustainable planet through creating environmental advocates.

WILDLIFE & ECOSYSTEMS · OCEAN HEALTH · CLIMATE CHANGE · ARCHAEOLOGY & CULTURE



"THIS IS MY FIRST EXPERIENCE WITH EARTHWATCH AND I AM VERY IMPRESSED! EVERYTHING FROM THE INITIAL BOOKING ONLINE, TO GETTING TO THE DIG, THE ACCOMMODATION AND THE EXPEDITION ITSELF HAS BEEN SO EASY AND EFFORTLESS AND VERY PROFESSIONAL. I WILL DEFINITELY BE TAKING PART IN ANOTHER EARTHWATCH EXPEDITION – THANK YOU FOR HELPING TO MAKE MY EXPERIENCE SO AMAZING.

– Sharon Mathieson, JBWere, *Excavating the Roman Empire in Britain*

ClimateWatch

ABOUT THE PROGRAM

Developed by Earthwatch in partnership with the Bureau of Meteorology and the University of Melbourne, ClimateWatch is a citizen science initiative based on phenology, the study of periodic plant and animal life cycle events and how these are influenced by seasonal and inter-annual variations in climate. A powerful educational tool, ClimateWatch empowers Australians to learn and contribute to answering questions about the effects of climate change.

The first continental phenology project of its kind in the Southern Hemisphere, ClimateWatch provides participants with free educational resources to embark on their learning journey as well as the capacity to record sightings of 185 indicator species.

Observations are validated and aggregated in a coherent database, providing insight on changes in range distribution and seasonal behaviour over time. Our partnerships with stakeholders in a range of sectors such as education, land management and government are key to the success of ClimateWatch.

WINNER*
Victorian Premier's Sustainability Awards 2016 – Government Category

WINNER*
United Nations Association of Australia World Environment Day Awards 2016

**A collaboration between Climatewatch and the Eastern Alliance for Greenhouse Action*

Available on the App Store

GET IT ON Google play

20,620 REGISTERED USERS
SINCE 2009 (AS OF AUGUST 2016)

59 GRAILS
ESTABLISHED IN BOTANIC GARDENS, NATIONAL PARKS AND UNIVERSITIES ACROSS AUSTRALIA

USERS AGED **18-24**
MAKE 55% OF ALL SIGHTINGS

95,000 SIGHTINGS
SINCE ITS INCEPTION (APPROXIMATELY).

3 UNIVERSITIES
CURRENTLY USE CLIMATEWATCH AS PART OF THEIR BIOLOGY CURRICULUM WHICH HAS REACHED APPROXIMATELY

7,000 STUDENTS

ALL DATA IS PUBLICLY AVAILABLE THROUGH ATLAS OF LIVING AUSTRALIA

INCORPORATED INTO 3 LOCAL COUNCILS BIODIVERSITY AND CLIMATE CHANGE MONITORING PROGRAMS.

EDUCATION PROGRAMS

STUDENT CHALLENGE

Since 2011, Student Challenge has been immersing high school students from years 10 to 12 in field science, motivating and inspiring them to become environmental leaders and providing a clearer understanding of the ecological issues the planet faces. For a week over their school holidays, students embark on a field expedition and work alongside scientists. The students gain practical skills in field research and learn about applied scientific methods and contemporary environmental issues.

Students from a variety of different backgrounds and from across Australia are able to utilise the program as an opportunity to seek direct career advice from professional scientists. Students begin to explore fields of study and careers which might suit their skills and interests. This helps build self-confidence within students and enhances their ability to adapt and work as a team. Student Challenge is generously funded by The George Alexander Foundation.

INDIGENOUS STUDENT CHALLENGE

Indigenous Student Challenge allows indigenous students from rural and remote areas to also have the opportunity to participate in Student Challenge expeditions. Indigenous Student Challenge is funded by the Qantas Foundation.

RESEARCH EXPEDITIONS

Melbourne's Microbats, VIC (2 teams)
Dr Rodney Van der Ree,
Australian Research Centre of Urban Ecology

Turtles on the Move, VIC (2 teams)
Dr Andrew Hamer,
Australian Research Centre of Urban Ecology

Snorkelling Australia's Underwater Meadows (1 team)
Dr James Udy, Healthy Water Ways

FUTURE STUDENT CHALLENGE EXPEDITION

Ecosystems of the Murray River (2 teams)
Dr Peter Cale, Australian Landscape Trust

TEACH LIVE

TeachLive gives teachers from locations across Australia the opportunity to teach live back to their students while on a scientific research expedition through blogs, videos, photos posted on the TeachLive website (www.teachlive.org.au) and other online tools such as Skype. This gives students a unique opportunity to experience the benefits of scientific research and environmental problem solving, and in the long-term builds the capacity of schools and local communities to help conserve Australia's biodiversity.

This financial year six teachers participated on a TeachLive expedition to Moreton Bay, acting as field assistants for Dr James Udy to collect vital data on how Brisbane's urbanisation affects marine flora and fauna. As a result of their participation, several of these teachers have continued to engage their students by developing dedicated environmental programs within their schools. The Snorkelling Australia's *Underwater Meadows TeachLive* expedition is delivered in partnership with the Geography Teachers Association of Victoria, and Earthwatch acknowledges the support of the Department of Education and Training through the Strategic Partnerships Program.

BUSH BLITZ

RESEARCH EXPEDITIONS	7
TEACHERS	11
CORPORATE FELLOWS	16
STUDENTS ENGAGED	2,176
NUMBER OF DAYS	260

BUSH BLITZ PARTNERS

- BHP Billiton Sustainable Communities
- Australian Government Department of the Environment
- Australian Desert Expeditions
- University of Technology, Sydney

Photo Credit: Bush Blitz II Courtesy and approval from BHP Billiton Sustainable Communities.

Bush Blitz is Australia's largest species discovery project – a multimillion dollar partnership to document the plants and animals at sites across Australia.

This information assists higher level conservation planning by increasing our biodiversity knowledge. Data is also provided to managers of national parks and other protected areas, providing them with the tools they need to preserve these vital areas.

In 2015-16 Bush Blitz surveyed remote corners of Western Australia, Tasmania, Queensland, South Australia and the Northern Territory and involved more than 50 scientists from 23 of Australia's leading scientific institutions. This financial year, the program was a great success, making significant scientific discoveries and educating thousands of Australians about science and building capacity in the science of taxonomy.

The program also provides corporate fellows with the opportunity to be a part of the scientific expeditions. Sixteen BHP Billiton employees participated in surveys in 2015-16, acting as field assistants for researchers on Bush Blitz expeditions while building their scientific knowledge and motivation.

BUSH BLITZ TEACHLIVE

In 2013, TeachLive began an exciting new phase of the program with the launch of Bush Blitz TeachLive. This program allows teachers the opportunity to participate on Bush Blitz environmental surveys and teach their students from the field. In 2015-16, eleven teachers participated, engaging over 2,000 students in science and conservation through the Bush Blitz TeachLive website. During this financial year Bush Blitz Teach Live expeditions surveyed areas in Bruny Island, Tasmania, voyaged to the Coral Sea beyond the Great Barrier Reef and trecked with camels through the Simpson Desert with Australian Desert Expeditions.

The progress made during 2015-16 indicates Bush Blitz has continued to be Australia's largest and most significant species discovery project, growing in scale and impact. Bush Blitz's partnership model provides an excellent example of how government, corporate and not-for-profit organisations can work together to protect Australia's biodiversity for future generations.

NUMBER OF PUTATIVE SPECIES FOUND SINCE BUSH BLITZ BEGAN:

NEW FAUNA SPECIES	1139
NEW VASCULAR PLANT SPECIES	27
NEW LICHEN SPECIES	26
NEW FUNGI SPECIES	4

"ON RETURNING TO THE CLASSROOM, I WAS ASTONISHED TO SEE NOT ONLY HOW INSPIRED I WAS BY THE EXPERIENCE, BUT I WAS ALSO PLEASED TO SEE THAT THIS INSPIRATION HAD FILTERED INTO THE CLASSROOM AND MOTIVATED LEARNING ABOUT ECOLOGY IN GENERAL."

– **Michael Hardiker,** Teacher Footscray City College Simpson Desert Bush Blitz Teach Live expedition.

©Gary Cranitch

"I HAVE SPENT MANY A RAINY NIGHT IN A SWAMP LOOKING FOR FROGS, OR IN THE BUSH LOOKING FOR BIRDS, AND I'VE DEVELOPED AN APPRECIATION AND CURIOSITY THAT I NEVER HAD PRIOR TO THE BUSH BLITZ"

– **Matthew Mojas,** BHP Billiton participant, Oxley Wild Rivers NSW expedition.

2 SCIENTIFIC RESEARCH

2015–2016 OVERVIEW

The role of the Scientific Advisory Committee (SAC) is to ensure that the research undertaken by Earthwatch is of value to Australia and conforms to the highest scientific standards. Our work has been strengthened this year by the addition to the SAC of Professor Ian Lilley, a world-renowned archaeologist who currently holds a Personal Chair at the University of Queensland. Ian's research focuses on archaeology and cultural heritage in Australasia, the Indo-Pacific and globally.

There have been many outstanding scientific achievements this year. The Bush Blitz program, with its strong support from BHP Billiton and the Australian Government, continued to make significant scientific discoveries, educating thousands of Australians about science and building capacity in the science of taxonomy. For example, during the expedition to Southwest Tasmania, Tasmanian Tree Frogs (Litoria burrowsae) were breeding in various areas, showing these areas are clear of Chytrid fungus (an infectious disease that has wiped out several species of frog in Australia and elsewhere).

The highly successful Conserving Koala Country had its final fielding in November. Since the project started in 2011, it has successfully monitored the rise, fall and partial recovery of the Cape Otway koala population at Cape Otway, Victoria. The results of this research will have important implications for management of koalas in southern Australia.

Finally, the research conducted as part of Recovery of The Great Barrier Reef continues to produce valuable insights into drivers of black band disease and coral recovery dynamics following a severe storm disturbance.

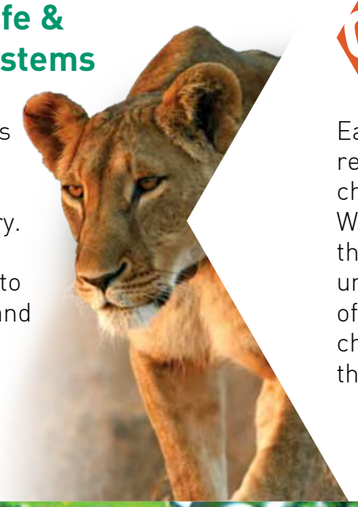
I am very grateful to the dedicated members of the SAC who have provided such well-informed and enthusiastic support over the last year. I look forward to their continuing assistance with developing new initiatives and expanding our partnerships, especially with research institutions and other citizen science organisations.

Professor Ian Woodrow, Chair

PRIORITY RESEARCH AREAS

Wildlife & Ecosystems

Earthwatch supports research in the wildlife and ecosystems category. We help to develop conservation plans to protect our planet and its most threatened inhabitants.

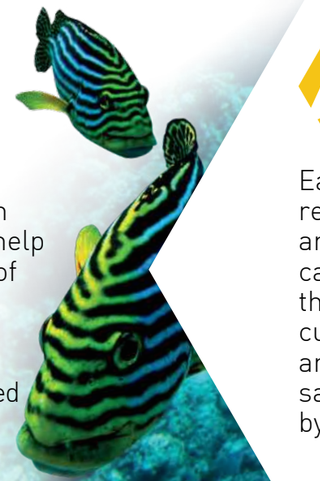


Climate Change

Earthwatch supports research in the climate change category. We support research that improves our understanding of how climate change is affecting the environment.

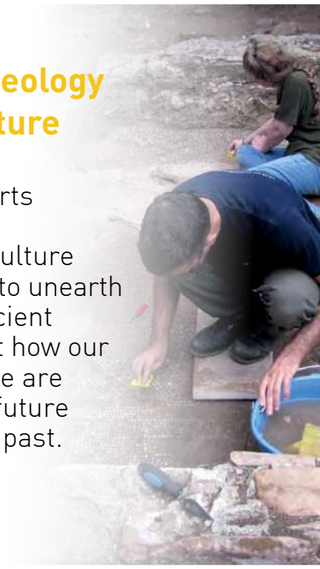
Ocean Health

Earthwatch supports research in the ocean health category. We help to ensure the future of our planet's largest resources. We study ways to protect coral reefs and the threatened species that inhabit our waters.



Archaeology & Culture

Earthwatch supports research in the archaeology and culture category. We help to unearth the remains of ancient cultures to find out how our ancestors lived. We are safeguarding our future by uncovering our past.



DID YOU KNOW?

The current world population of 7.4 Billion is projected to increase by 1 billion over the next 12 years and reach 9.6 Billion in 2050. This will put enormous pressure on natural resources, agriculture and infrastructure.[2]

CO^2 absorbed by the upper later of oceans is increasing by 2 billion tons per year, causing ocean acidification and coral bleaching. 93% of individual reefs in the Great Barrier Reef have already suffered coral bleaching.[1]

There are 5.25 trillion pieces of plastic in the ocean. Australia alone uses 6.9 billion plastic bags a year. If you tied 6.9 billion plastic bags together end on end they would travel around the world 42.5 times.[2]

Greenland loses 281 billion tons of ice each year due to global warming – that's the equivalent of 769, 863 Empire State Buildings![3]

Some 120 – 150 square kilometres of forest are lost each year — equivalent to 5, 409 MCG footy fields! If no action is taken, 230 million hectares of forest will disappear by 2050.[3]

[1] Coral bleaching and ocean stats: NASA and XL Catlin Seaview Survey
[2] Plastic statistics: http://oceancrusaders.org/plastic-crusades/plastic-statistics/
[3] Football field stats forests lost – WWF

EARTHWATCH SCIENTISTS PROFILE

DR ALISTAIR MELZER

PHD IN ECOLOGY,
UNIVERSITY OF QUEENSLAND

Dr Melzer has been working in the dry tropical environment of Queensland since 1989. He has worked with Queensland's industry, government and community to resolve environmental problems associated with project development and subsequent management. He is currently the lead scientist for the Earthwatch expedition Australia's Changing Islands located on the island of St. Bees, Queensland.

DR DAVID BOURNE

PHD IN BIOTECHNOLOGY,
UNIVERSITY OF QUEENSLAND

Dr Bourne is the lead scientist of Earthwatch's Recovery of the Great Barrier Reef expedition, working with participants to study the health of corals at Orpheus Island in the Great Barrier Reef, Queensland. He has previously worked in the UK and Norway for extended periods and carried out fieldwork from the Artic to the Antarctic and many places in between.

WE ASKED OUR SCIENTISTS 5 HIGH PRIORITY QUESTIONS

1	**What first inspired you to pursue a career in your scientific field?**	I took up terrestrial ecology as a consequence of working as a young environmental activist and developing a passion for going deeper into that awareness of nature.	My curiosity of the unknown. A science degree seemed like the right fit for me as it is flexible and you never know what could spark this curiosity. The opportunity to travel and combine that with my career was a great attraction.
2	**What is the most pressing issue facing the environment?**	Environmental degradation as a result of human activity and population growth. Climate change is perhaps the greatest manifestation of these. As an ecologist I see my role as informing and empowering my community and stakeholders so they can trigger change.	Coral reefs are facing threats on two levels directly as a result of human activities: global pressures (ocean warming and acidification) and localised pressures (coastal development). These two threats together are causing the mass-degradation of coral reefs worldwide. A rational and educated discourse is required to raise the issue as a global problem that needs innovative solutions.
3	**What keeps you motivated as an environmental scientist in this day and age?**	There is a growing community revolution in attitudes and actions to many of these issues. The potential for communities to invoke change when they are properly informed, particularly with the access to Facebook, Twitter and other web-based tools, keeps me motivated.	There is still so much we just do not know about the natural world around us. Being involved in a field making so many amazing discoveries is exciting. When you combine it with work associated with coral reefs which themselves are inherently beautiful, it is not hard to stay motivated.
4	**How can individuals make a positive impact?**	People who are concerned with any of these matters need to join the conversations online and within the community to place pressure on decision makers to follow the community lead.	Become better world citizens by reducing our carbon footprint, reducing waste and thinking about the environment around us. Often we feel disconnected from the problem since it is remote from us; however, what we do locally has an impact globally. Engage in debates, educate people, talk to politicians and ensure coral reefs are on the agenda.
5	**What do you most want to achieve with your current Earthwatch program?**	The key outcomes from the St. Bees research program should be (a) better natural resource management and decision making in the face of climate change and (b) Earthwatch participants becoming active advocates for awareness and change in their communities.	Educate the wider public about coral reefs and provide a greater understanding of reefs as a vital ecosystem of the planet. If I offer a wider understanding of the role of microbes and coral reefs and their extreme importance to us, that always makes me happy when engaging in Earthwatch projects.

RESEARCH PARTNERS & NOTABLE ACHIEVEMENTS

Australia's Changing Islands
Central Queensland University

Bush Blitz
Australian Biological Resources Study (ABRS)

ClimateWatch
University of Melbourne

University of Western Australia

Royal Botanic Gardens Victoria

Monash University

University of Sydney

Illawarra Environmental Education Centre

Tinaroo Environmental Education Centre

The Atlas of Living Australia

Conserving Koala Country
Deakin University

Freshwater Watch, Sydney
(HSBC) NSW Office of Environment and Heritage

University of New South Wales

Great Barrier Reef Discovery
(Amcor)
Southern Cross University

Healthy Humpbacks
Griffith University

Melbourne's Microbats
The Australian Research Centre for Urban Ecology (ARCUE)

Project Manta Ningaloo Reef
Murdoch University

Recovery of The Great Barrier Reef
James Cook University

Australian Institute of Marine Science (AIMS)

Sailing for Seagrass
Healthy Waterways and Catchments

Turtles on the Move
The Australian Research Centre for Urban Ecology(ARCUE)

Wildlife of Australia's Rainforest
James Cook University

DURING THE REPORTING PERIOD, SEVERAL HIGHLY SUCCESSFUL EARTHWATCH PROJECTS CONCLUDED, PRODUCING SOME VALUABLE SCIENTIFIC OUTCOMES.

Conserving Koala Country

One of Earthwatch Australia's most popular projects, Conserving Koala Country, had its final fielding in November 2016. The project, led by Dr Desley Whisson from Deakin University, started in 2011. Since its inception it has successfully monitored the rise, fall and partial recovery of the koala population at Cape Otway, Victoria. The results of this study have important implications for the management of koalas in southern Australian locations where population eruptions are likely.

Scientist for a Day

After five years of research, two Melbourne-based projects, conducted in partnership with The Australian Research Centre for Urban Ecology (ARCUE), had final fieldings in January 2016. Melbourne's Microbats, led by Dr Rodney Van Der Ree and Turtles on the Move, led by Dr Andrew Hamer, were Scientist for a Day programs focusing on issues of urban ecology. Each project provided valuable information to support the ongoing management of species within our urban environments.

Freshwater Watch

After three years of research activities in Sydney's peri-urban wetlands, Freshwater Watch had its final fielding day in December 2015. The project was led by Dr Eren Turak from the NSW Office of Environment and Heritage and generously supported by HSBC. The research has provided a valuable understanding of how government agencies can engage participants in collecting accurate information regarding the extent of natural assets. The project also supported the development of a citizen science component of the NSW Wetland Inventory and will also inform the development of data collection programs and protocols to support Global Wetlands Observing System (GWOS).

Bush Blitz

The Bush Blitz program has continued making significant scientific discoveries. As of September 2016, the program has discovered over 1100 new species and collected over 36,000 individual records of plants and animals throughout Australia. This data provides critical information on the habitat and distribution of Australian animals and plants, which will be used by local land managers to conserve these environments.

This year Bush Blitz was a FINALIST in the Banksia Foundation's Sustainability Awards for the Natural Capital category.

The Banksia Sustainability Awards are regarded as the most prestigious and longest running sustainability awards in Australia. The 2016 Banksia Sustainability Awards comprise of 11 category Awards and 4 specialist Awards.

The rise of Citizen Science for a

SUSTAINABLE FUTURE

KPMG's Future State 2030 report has identified major global forces taking shape today that will significantly transform the future of businesses, organisations and governments alike. Of these global megatrends, four have been identified that Earthwatch Institute and its associated partners can address through citizen science. These also tie in with the International Union for the Conservation of Nature's (IUCN) Sustainable Development Goals from the 2030 Agenda for Sustainable Development (September 2015).

CLIMATE CHANGE

IUCN Sustainable Development Goals: Climate Action; Affordable and Clean Energy

Rising greenhouse emissions are causing mass extinctions and unpredictable changes to the environment. Achieving the right combination of adaptation and mitigation policies will be challenging for governments in future. Citizens will become more heavily invested in policies regarding climate change and will question whether enough is being done to reduce CO2 emissions. Citizen science programs focussing on climate change are essential to helping the members of the public see the data and environmental changes for themselves, enabling them to become involved and incite change in their daily agendas.

RESOURCE STRESS

IUCN Sustainable Development Goals: Responsible Consumption and Production; Clean Water and Sanitation; Zero Hunger; Life on Land; Life Below Water

Increased stress on natural resources (water, food, land and energy) means that sustainable resource management will be at the core of government agendas. The focus on improved management of Natural Capital within businesses and organisations will be carried on well into the future. Citizen science can assist governments in managing resources through the participation of members of the public in scientific field surveying, helping national park manoeuvres and pushing the agenda for natural resources.

RISE OF THE INDIVIDUAL

IUCN Sustainable Development Goals: Good Health and Well-being; Quality Education

Advances in global education, health and technology will empower individuals like never before. Members of the public will want to become more involved in government decision making and will have more influence thanks to social media and technological advances. Citizen science is a perfect way for individuals to become immersed in environmental research and experience nature first-hand. Earthwatch expeditions and programs are highly supportive of the individual, encouraging each participant to develop, learn and become an environmental advocate to empower change.

URBANISATION

IUCN Sustainable Development Goals: Sustainable Cities and Communities; Industry, Innovation and Infrastructure

Almost two-thirds of the world's population will live in cities by 2030, creating opportunities for social and economic development and sustainable living, but putting enormous pressure on infrastructure and resources. Citizen science will become an essential avenue for maintaining an appreciation and connection to nature in an increasingly urbanised world. Escalating urbanisation may result in populations that are disconnected and unaware of the natural environment, creating a potential risk to the state of the environment and its priority in the community's agenda.

3 FUNDRAISING

Earthwatch continues to focus on community engagement and awareness of past, present and future Earthwatch friends and connections. The aim is to secure funding whilst increasing the brand, identity and growth of Earthwatch Australia activities.

THE ANNUAL APPEAL

The 2016 Annual Appeal was highly successful with a result of over $33,000 being raised by our generous donors. This result is a great credit to the strength of our loyal supporters and their belief in the Earthwatch vision and mission.

This year a short form film clip was produced featuring our Chief Executive Officer, Cassandra Nichols. The clip emphasised the severe weather events caused by climate change and the negative impact of plastic pollution on our marine life. The Great Barrier Reef was forefront of our mission in 2016 due to the recent coral bleaching event being the worst in recorded history. The film clip, used extensively across our social media channels, via electronic direct mail and eNews celebrated Earthwatch's past achievements that have empowered change over 45 years. The response and engagement from the use of this medium was significant resulting in increased online traffic to our social media channels.

EDGE PLEDGE

Edge Pledge is a social enterprise that allows the broader community to raise money for endangered wildlife by pledging to complete the most popular of three challenges as voted by their friends, family and supporters. Participants can choose one of sixteen wildlife projects their funds will support, delivered by Edge Pledge's environmental partners.

This year, Earthwatch was one of eleven environmental partners involved with Edge Pledge, offering two endangered animal projects for which particpipants could raise funds. Both animals relate to two Earthwatch's Australia expeditions: the manta ray (Project Manta) and the white lemuroid ringtail possum (Wildlife of Australia's Rainforests).

TOTAL FUNDS RAISED: **$10,030**

FUNDRAISER CASE STUDY

ISAAC BUSUTTIL – Visionary Wildlife Warrior Award 2015

WINNING CHALLENGE: Pick up rubbish at a local beach once a week for a month.

Seven year old Isaac Busuttil has been dubbed the next Steve Irwin of his generation, inspiring others his age and thousands in the community by raising awareness of endangered wildlife and fundraising for their conservation and protection. Isaac is an Edge Pledge Ambassador and chose to raise money for Earthwatch Australia's second animal project, the white lemuroid ringtail possum, raising $810. Thank you, Isaac!

TOTAL FUNDS RAISED: **$810**

CHEW YUE CHIN – Earthwatch Research and Programs Officer

WINNING CHALLENGE: Morning-ray photography – get up at day break every day to take a photo of the first 'rays' of sunshine for one month.

We were humbled by our very own staff member Yue Chin's great efforts to raise funds for the manta ray, raising over $4,000 – by far the most successful pledge of Edge Pledge*.

TOTAL FUNDS RAISED: **$4,610**

Earth Ball

EARTHBALL

CELEBRATING 45 YEARS OF CREATING KNOWLEDGE AND INSPIRING ACTION.

This year Earthwatch Australia hosted the 2016 Earth Ball at the RACV City Club to share the accomplishments of Earthwatch over 45 years through our dedicated partnerships. It was an evening of entertainment, fun, exciting auctions and also included a thought-provoking discussion from a panel of scientists on caring for the world around us – what does the future hold? Additionally, Australian Icon, Rhonda Burchmore generously performed for a captivated audience and on behalf of Earthwatch Australia – our deepest appreciation for her generous performance.

There was also an award ceremony to recognise excellence in the work of Earthwatch scientists and to celebrate the lifetime contribution of Earthwatch Australia's longest serving volunteer and citizen scientist, Barbara Harrison. The night was a great success, allowing us to raise over **$45,000**.

We couldn't have achieved this success on the night without the support of our partners and sponsors. On behalf of Earthwatch Australia, we'd like to thank the following organisations:

Major Sponsors

QANTAS Future Planet · ambius · RACV · ROBERT OATLEY · MMR CREATIVITY THAT CONNECTS mmr.com.au · cmc talent · bhivegroup · tribal media makers · MOUNTAIN GOAT BEER

Table Sponsors

VICINITY CENTRES · Greenearth Energy Ltd. · EY Building a better working world · Allens › ‹ Linklaters

And for their support through the provision of auction items & prizes on the night

Electric Moto · frank green

earthwatch.org.au - Find out more

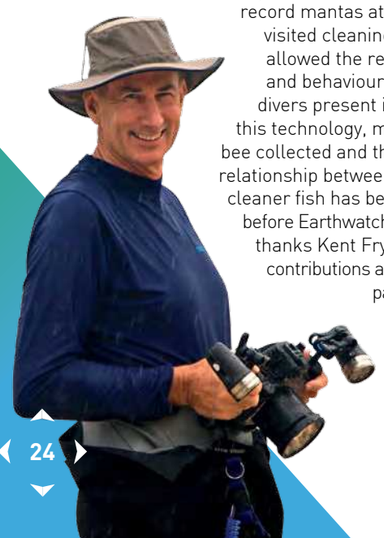
CITIZEN SCIENTIST STORIES

BARBARA HARRISON

Barbara Harrison is Earthwatch Australia's longest serving volunteer and expedition participant of 25 years. She has participated in 21 Earthwatch expeditions ranging from Mongolia to Trinidad, and the Amazon to Hungary since 1991. In addition to this, Barbara has also volunteered on a regular basis in the Earthwatch office, at festivals, fairs and events and tirelessly promoted Earthwatch for 20 years. When asked which one of the twenty-one expeditions is her favourite, Barbara believes every expedition she has enjoyed had something unique and interesting to offer. However, Meerkats of the South African Kalahari was definitely ranked one of her highlights.

KENT FRY

With the help of one of Earthwatch's most committed citizen scientists, Kent Fry, Project Manta has been able to establish camera traps to record mantas. Kent, a keen scuba diver and underwater photographer, has participated on 12 Earthwatch Australia diving expeditions, 4 times on Project Manta and 8 times on Recovery of the Great Barrier Reef. He, very generously, provided funding for Project Manta which allowed an array of GoPro cameras to be set up to record mantas at their regularly visited cleaning stations. This has allowed the recording of photo-IDs and behaviour while there are no divers present in the water. With this technology, more ID photos have bee collected and the complex relationship between manta rays and cleaner fish has been studied like never before Earthwatch Australia sincerely thanks Kent Fry for his generous contributions and regular participation in our diving expeditions.



ENGAGING OUR COMMUNITY

SUSTAINABLE LIVING FESTIVAL

This year, Earthwatch staff and volunteers reached out to the community at the Sustainable Living Festival 2016, setting up a stall promoting Earthwatch's scientific research expeditions and citizen science.

EARTHWATCH TV

Earthwatch TV is a concept consistent with the organisation's mission that allows it to engage to a worldwide audience in a creative and sustainable manner. It increases awareness about some of Australia's biggest environmental issues and ways of understanding and addressing them through science.

EARTHWATCH INSTITUTE TV

VICTORIAN SENIORS FESTIVAL

Marketing and Communications Manager, Erin Leigh went to Melbourne Town Hall to conduct a presentation on Earthwatch's citizen science expeditions at the Victorian Seniors Festival in October. The presentation was a success, resulting in four interested parties wanting to learn more about Earthwatch and one confirmed booking on an expedition.

5 NEW & EMERGING PARTNERSHIPS

MOVING WITH THE FUTURE

keyassets
THE CHILDREN'S SERVICES PROVIDER

Earthwatch Australia is exploring health benefits and innovative educational programs that will engage foster carers and children in their care. This is a world-first project which will look at the positive restorative benefits of natural environments for effective human functioning and well-being.

Through a collaboration with Key Assets – The Children's Services provider, a non-government, not-for-profit foster care agency providing high quality out of home care for children and young people across Australia, Earthwatch aims to restore the connection to nature for vulnerable and at risk children and adolescents who have experienced trauma.

Our partnership is committed to immersing foster children into newly designed Earthwatch programs in an effort to benefit their emotional, physical, social, and spiritual states of being.

Key Assets' vision is "to make a positive and lasting difference for children and families" and their mission is "to provide solutions for individuals and organisations that help them achieve their full potential". In the area of foster care Key Assets believes that providing a safe, secure and stable environment for a child or young person within a family-based environment (when they are unable to live with their birth family) is one way to accomplish that mission and vision. Children and young people in Australia need foster care for a variety of reasons. Some will have experienced physical neglect or emotional harm and the subsequent impact of trauma. All of them will almost certainly be struggling with the separation from their birth family.

Inevitably, foster children's past experiences will have an impact on their behaviour and development. Our objective of working in partnership with Key Assets is to offer a continuum of care and opportunity to children and their foster families which aim to make a difference in their academic studies, their personal development, relationship building skills and overall well-being.

QANTAS Future Planet

Future Planet is the Qantas corporate carbon offset program providing a unique perspective on corporate responsibility to Natural capital. It is an environmental leadership program, providing a means to measure Qantas' environmental impact and reduce that impact through leading specific initiatives. Qantas proudly support Earthwatch Australia through the provision of flights for Earthwatch scientists, staff and expedition participants.

Earthwatch and Qantas endeavour to explore new pathways into 2017 for greater impact and providing educational resources for Qantas staff and sharing resources to enable a better understanding of how to reach more travelers with inspiring destinations where research programs into environmental conservation / management are taking place.

CORPORATE PARTNER PROFILE OR CASE STUDY

At Frank Green, our philosophy is simple; design innovative products that are stylish, functional and good for the environment. We believe that in this day and age, everyday products should be both beautiful and technologically advanced.

I wanted to change the way people think about reusable products. It is my mission to encourage others to live more sustainably and to reduce unnecessary waste. We should all be questioning how and where everyday products are being produced and what environmental impact they are having.

I am inspired by Earthwatch's mission of tackling environmental issues at a grass roots level through awareness and education, they are going straight to the cause rather than trying to mask the symptoms. We've partnered with Earthwatch because we support their citizen science model approach to achieving a sustainable environment. For each product you buy online, Frank Green donates a portion of the profits to Earthwatch.

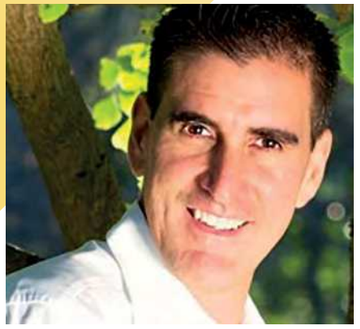
Benjamin Young, Founder and Executive Director

earthwatch.org.au - Find out more

PARTNER PROFILE

WORKING WITH YOU FOR A BETTER ENVIRONMENT

BROTHER INTERNATIONAL – AUSTRALIA'S 8 YEAR PARTNERSHIP WITH EARTHWATCH AUSTRALIA



"IT'S THROUGH THIS 'HANDS-ON' APPROACH THAT PARTICIPANTS CAN APPRECIATE THE POSITIVE DIFFERENCES THAT CAN BE MADE TOWARDS ENVIRONMENTAL CONSERVATION AND PROTECTION. BY PARTICIPATING, WE LEARN, AND IT'S THEN WE REALISE THAT WE NEED TO DO MORE TO PROACTIVELY PROTECT AND CONSERVE OUR ECOSYSTEM IN ORDER TO ENSURE ITS LONG-TERM HEALTH"

– Alex Rodriguez,
Corporate Responsibility and Compliance Manager,
Brother International (Aust) Pty Ltd

To facilitate conservation efforts focused on climate change and sustainable resource management, Brother International Australia is proud to be engaged in a long-term partnership with Earthwatch Australia. Since the partnership commenced in 2009, approximately 100 employees and customers have volunteered up to 600 hours of their time to participate in various Earthwatch research expeditions.

Predominantly, Brother has directly supported Earthwatch's Project Manta ocean research into the movement and ecology of manta rays. Research findings from this project significantly contributed to the protection of manta rays in Australian and International waters and in 2016, we were able to begin researching mantas in a new location, Ningaloo Reef on the west coast of Australia. This has all been possible due to the generous ongoing support from Brother.

Other research expeditions that Brother International Australia have been involved in include monitoring turtle mortality in North Stradbroke Island, investigating bandicoot populations
in Sydney and freshwater management of inner Sydney's wetlands. Further to this support, proceeds of Brother Earth's Click for the Earth campaign generates additional funding for Earthwatch's environmental research programs.

brother
at your side

Brother Earth
Working with you for a better environment

PARTNER PROFILE

KPMG & EARTHWATCH: 23 YEARS STRONG

KPMG has worked in partnership with Earthwatch since 1993 enabling KPMG employees to contribute to critical environmental research and bring the benefits of their experience back to the KPMG community.

This rich partnership of 23 years makes it one of the longest standing and most successful partnerships for Earthwatch Australia and provides valuable organisational support to Earthwatch's continued growth and success in Australia and reflects to one of KPMG's core values of commitment to our communities.

36 KPMG employees have undertaken professional development experiences on 18 research projects over this time period. For the entirety of the Fellowship program, KPMG had provided direct financial support of these environmental research projects to the value of over $110, 000. Additionally, KPMG has provided invaluable support to Earthwatch through pro bono work to the value of over $530,000. This professional services contribution has been pivotal for many Earthwatch activities over the span of the partnership and includes:

1) supporting Earthwatch Australia's mandatory governance requirements by providing pro bono guidance and support for audit and business analysis services annually.

2) the provision of meeting rooms for Earthwatch Australia's end of year board meetings and end of year acknowledgment event.

The partnership between KPMG and Earthwatch is one of significant value. Our two organisations share similar ideals; we both wish to empower communities in environmental responsibility. Thanks to KPMG's significant investment, Earthwatch has been able to focus on its core work of uniting citizens and scientists for a more sustainable future.

"FOR ME, THIS EXPERIENCE HAS BEEN A FANTASTIC INSIGHT INTO HOW CONTRIBUTIONS ARE MADE BY THE SCIENTIFIC COMMUNITY. KPMG NOT ONLY HAS A FOCUS ON HOW WE DELIVER TO CLIENTS BUT ALSO THE IMPACT WE HAVE AS A FIRM. THE ENVIRONMENTAL INITIATIVES SUCH AS THE SUPPORT WE GIVE TO EARTHWATCH ARE FANTASTIC."

Mitchell Sandilands,
volunteer on Recovery of the Great Barrier Reef, 2013

KPMG

"KPMG AUSTRALIA HAS SUPPORTED EARTHWATCH IN ITS MISSION TO PROMOTE SUSTAINABLE CONSERVATION OF THE NATURAL ENVIRONMENT SINCE 1993. A MAJOR INITIATIVE WE SUPPORTED THROUGH THIS PARTNERSHIP WAS THE KPMG EARTHWATCH FELLOWSHIP PROGRAM WHICH ALLOWED OUR PEOPLE TO TAKE PART AS VOLUNTEERS IN SCIENTIFIC RESEARCH EXPEDITIONS. SOME OF THE MANY BENEFITS OF THE PROGRAM INCLUDE; INCREASING STAFF UNDERSTANDING OF SUSTAINABILITY ISSUES AND HOW THEY RELATE TO THE TRIPLE BOTTOM LINE, COMPLEMENTING THE FIRM'S COMMITMENT TO ENGAGING EMPLOYEES IN THE WIDER COMMUNITY AND PROVIDING EMPLOYEES WITH THE OPPORTUNITY TO BROADEN TEAM AND LEADERSHIP SKILLS."

Kaushik Sridhar,
Manager, Corporate Citizenship,
KPMG Australia

earthwatch.org.au - Find out more

PARTNER PROFILE

GEORGE ALEXANDER FOUNDATION

George Alexander came to Australia as a child migrant, and went on to become a mechanic, entrepreneur, successful businessman and later, a generous philanthropist. In 1972 he set up an independent philanthropic foundation as a way of sharing his wealth and giving back to the community. Today, the main focus of The George Alexander Foundation (GAF) is access to education for promising young people, particularly students with financial need and those from rural and remote areas.

Thanks to the generous funding from the GAF, the Earthwatch Student Challenge program has been able to run since 2011, covering the costs not only of student participation on fieldwork expeditions but also all of their travel costs. This allows for students from regional and rural areas and from socio-economically disadvantaged areas to participate on expeditions far from home that they might not otherwise be able to attend.

The aim of the partnership is:

- **Motivate future young leaders of Australia to enrol in science related tertiary education**
- **Inspire students to become active conservation supporters**
- **To address sustainability issues in their own communities.**

Students benefit by gaining new perspectives on science learning, meeting like-minded peers from around Australia and being exposed to excellent career role models by working with some of Australia's leading research scientists. Students improve their confidence by contributing meaningfully to genuine scientific research while learning tangible research skills, leadership techniques and learning about the practical application of science in a real-world scenario.

"MY PARTICIPATION IN STUDENT CHALLENGE HAS BENEFITED MY LIFE SIGNIFICANTLY. AFTER THE EXPERIENCE I HAD A WHOLE NEW PERSPECTIVE ABOUT THE ENVIRONMENT AND MY FUTURE CAREER OPTIONS INTO SCIENCE. THE SKILLS I GAINED - EVEN ONLY FOR THAT WEEK - HAVE AND CONTINUE TO ASSIST ME WITH MY PERSONAL, ACADEMIC AND PROFESSIONAL LIFE. IF I WAS OFFERED THE OPPORTUNITY TO PARTICIPATE AGAIN I WOULD ACCEPT IT INSTANTLY DUE TO HOW POSITIVE IT HAS BEEN FOR ME."

–**Hayley Johns,** Turtles on the Move

PARTNER PROFILE

AMCOR – 15 YEAR PARTNERSHIP WITH EARTHWATCH AUSTRALIA

"SINCE MY RETURN FROM THE EXPEDITION I HAVE FELT EMPOWERED TO HELP DRIVE ENVIRONMENTAL CHANGES IN OUR BUSINESS. MY JOB TITLE AS HEALTH, SAFETY AND ENVIRONMENT COORDINATOR OFTEN FOCUSES HEAVILY ON THE SAFETY, A LITTLE BIT ON THE HEALTH AND ALMOST NOTHING ON THE ENVIRONMENT. I AM GOING TO TAKE A MORE PRO-ACTIVE STANCE AND WILL BE TALKING ABOUT ENVIRONMENTAL ISSUES MORE. I AM RESPONSIBLE FOR REPORTING OUR MONTHLY/ QUARTERLY ENVIRONMENTAL TARGETS AND THIS TIME AROUND I REALLY MADE AN EFFORT TO EXAMINE THE NUMBERS AND SEE WHAT WE COULD DO ON SITE TO REDUCE THEM."

–**Tamara Devcich, Flexibles Asia Pacific, New Zealand**
Great Barrier Reef Discovery, Whitsunday Islands

Since 2001, the Amcor / Earthwatch partnership has been a successful collaboration of like-minded individuals working together to improve overall environmental performance. As one of the world's leading packaging companies, Amcor's commitment to social responsibility and sustainability is paramount to its success and extends to nearly every part of the globe. The partnership has focused on a broad range of environmental matters, such as climate change and wildlife conservation, with a current new focus on marine debris monitoring and solutions.

Over the past 15 years, 189 Amcor employees around the globe have participated in over 60 Earthwatch scientific research expeditions. These staff members have provided much-needed skills and resources to assist Earthwatch scientists in collecting valuable data whilst increasing their own understanding of environmental issues such as climate change, waste management, habitat and biodiversity loss and sustainable industries. With their newly acquired knowledge, they become advocates for the environment in their home countries. Introducing Natural Capital concepts such as biodiversity, ecosystem services and ecosystem goods to Amcor employees enables them to utilise this knowledge for decision-making, incorporating it into their daily work tasks and educating other employees.

Amcor's most recent marine debris expedition was in October of 2015 to the Whitsunday Islands, QLD, Australia, comprising the World Heritage Listed Great Barrier Reef Marine Park, with seventeen employees attending from each of Amcor's three geographic regions: Australasia, Europe and the Americas.

Future Developments

Amcor understands that to reduce environmental impacts, it must consider total life cycle of products and accordingly work with customers and clients across the entire value chain to achieve this. Amcor's research and development team is pushing boundaries in innovation, creating more sustainable packaging for a more sustainable future. Amcor is therefore committed to studying marine debris in varying locations around the globe. Amcor's next marine debris expedition with Earthwatch will be taking place in Bali, Indonesia in October 2016, again with five employees from each of the three global geographic regions. The project, led again by Professor Steve Smith of Southern Cross University's National Marine Science Centre, will focus on debris loads on Bali's beaches, the impact of tourism, waste management regimes and the role of cultural practices in addressing the problem.

earthwatch.org.au - Find out more

TODAY, BUSINESS – ONE OF THE GREATEST ENGINES OF INNOVATION – IS INCREASINGLY RECOGNISED FOR ITS CENTRAL ROLE IN HELPING DELIVER GLOBAL GOALS FOR SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE"

– Inger Andersen, Director General of IUCN and climate change."

BUSINESS PARTNERSHIPS

WE ACKNOWLEDGE THE CRITICAL ROLE THAT OUR FINANCIAL BUSINESS PARTNERS PLAY IN MAINTAINING OUR ABILITY TO DELIVER OUR EXPEDITIONS AND RESEARCH PROGRAMS.

Business partners chose Earthwatch for a variety of reasons. Earthwatch offers to business partners:

- Scientific integrity
- Peer-reviewed field research methodology
- Linking business practices to positive environmental outcomes
- Examples of Natural Capital concepts that enrich business decision making
- Global organisational reach
- Regular research updates
- Public acknowledgement of contributions
- Opportunities for staff participation
- Public recognition of contribution to environmental science and sustainability
- Links with science and research institutions
- Political neutrality
- Tax deductible benefits for work place giving programs and company / personal donations
- A lasting legacy of scientific findings contributing to the sustainability of our planet.
- Environmental leadership programs

THANK YOU to our business partners.

6 WORKING FOR EARTHWATCH

Earthwatch Australia has a diverse team of workers that contribute to the organisation in different capacities: as employees, consultants, interns, office volunteers or staff on secondments from other Earthwatch offices around the world.

Here at Earthwatch we are mindful of the physical time our staff spend at work, in effect more than half of their waking hours. We promote as colourful an environment as possible, with an emphasis on large availability of natural light, plenty of greenery, regular staff activities and acknowledgement of individual and collective contributions that add to the success of Earthwatch.

All staff are offered flexible working arrangements which includes hours of work, patterns of work and also locations of work that enables working from home to support the responsibility of care for a pet and child or a parent.

This assists to promote a healthier mind and a healthier body that has an ability to sustain itself throughout the day in a safe and supportive environment!

The Earthwatch Australia Team

OUR VALUES

- » INCLUSIVE
- » OBJECTIVE
- » PASSIONATE
- » EMPOWERING
- » RESPONSIBLE

SUSTAINABILITY

WE USE GREEN ENERGY

WE SOURCE RECYCLED MATERIALS WHEREVER AVAILABLE

WE SUPPORT OUR STAFF CYCLING TO WORK

WE RECYCLE OUR WASTE

WE PROVIDE PLANTS FOR THE OFFICE SPACE

WE PROVIDE FRUIT FOR STAFF TO ENJOY

earthwatch.org.au - Find out more

KEY SERVICE PROVIDERS

ACCOUNTING, AUDIT & FINANCIAL SERVICES
- Grant Thornton
- KPMG

BANKING
- Bank Australia
- Westpac
- NAB

INSURANCE
- Steadfast IRS

IT SERVICES
- ITConnexion
- Infoxchange

LEGAL & GOVERNANCE
- Allens
- Deloitte
- K&L Gates
- Sparke Helmore

MEDIA, DESIGN AND PRINTING
- Gorilla Print
- SG Printing
- Tribal Media
- MMR

HUMAN RESOURCES
- Insync Surveys
- AIESEC

SERVICE PROVIDER FOCUS

INFOXCHANGE

Infoxchange is a not-for-profit social enterprise that has delivered technology for social justice for over 25 years. With over 100 staff across Australia and New Zealand we tackle the biggest social challenges through the smart and creative use of technology.

We work with community, government and corporate partners to solve family violence, homelessness, mental health and issues facing people with disabilities, the elderly, Aboriginal, Maori and Pasifika communities.

Our products and services are used by nearly 5000 organisations across the community sector. We provide the right tools to improve efficiency and deliver greater impact – from nation-wide service coordination systems to IT advice for individual organisations.

Our community programs focus on digital inclusion. We use technology to improve the lives of vulnerable people, driving social inclusion and creating stronger communities. We believe no one should be left behind in today's digital world

"At Infoxchange, we take our environmental responsibility very seriously. That's why we're delighted to be working with Earthwatch, an organisation that shares our passion for a sustainable future. By providing dedicated IT support, we ensure their systems and infrastructure are working as efficiently and effectively as possible, so that Earthwatch can focus on continuing their important work".

David Spriggs, CEO, Infoxchange

7 SUMMARY OF FINANCIAL STATEMENTS

INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF EARTHWATCH INSTITUTE AUSTRALIA

REPORT ON THE SUMMARY FINANCIAL STATEMENTS

The accompanying summary financial statements, which comprise the statement of financial position as at 30 September 2016, the statement of profit or loss and other comprehensive income, changes in equity and cash flows for the year then ended are derived from the audited financial report of Earthwatch Institute ("the Entity") for the year ended 30 September 2016. We expressed an unmodified audit opinion on that financial report in our report dated 15 December 2016.

The summary financial statements do not contain all the disclosures required by the *Australian Charities and Not-for-profits Commission Act 2012* and the *Australian Charities and Not-for-profits Commission Regulation 2013 (ACNC)*. Reading the summary financial statements, therefore, is not a substitute for reading the audited financial report of the Entity.

Management's Responsibility for the Summary Financial Statements

Management is responsible for the preparation of a summary of the audited financial report on the basis described in Note 1.

Auditors' Responsibility

Our responsibility is to express an opinion on the summary financial statements based on our procedures, which were conducted in accordance with International Standard on Auditing (ISA) 810, *"Engagements to Report on Summary Financial Statements."*

Opinion

In our opinion, the summary financial statements derived from the audited financial report of Earthwatch Institute for the year ended 30 September 2016 are consistent, in all material respects, with that financial report, on the basis described in Note 1.

Adrian King
Partner, KPMG
Melbourne
15 December 2016

SUMMARY OF FINANCIAL STATEMENTS[1]

STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

for the year ended 30 September 2016

	2016 $	2015 $
Revenue from ordinary activities	2,714,557	3,194,122
Interest income	44,804	61,376
	2,759,361	3,255,498
Field research support	(388,075)	(400,672)
Program expenses	(2,024,463)	(2,221,954)
Fellowship and corporate engagement expenses	(3,077)	(8,326)
Executive and international coordination	(8,122)	(15,306)
Other expenses from ordinary activities	(413,114)	(494,859)
Development fund expenses	(59,804)	(40,196)
Total expenses	**(2,896,655)**	**(3,181,313)**
Profit for the year	(137,294)	74,184
Other comprehensive income	-	-
Total profit and other comprehensive income	**(137,294)**	**74,184**

STATEMENT OF FINANCIAL POSITION

at 30 September 2016

	2016 $	2015 $
Assets		
Cash and Cash Equivalents	802,347	497,826
Investments	825,918	1,387,535
Trade Receivable	1,527,546	1,752,313
Other Current Asset	52,594	83,919
Total current assets	**3,208,405**	**3,721,593**
Plant and Equipment	23,079	34,584
Total non-current asset	**23,079**	**34,584**
Total assets	**3,231,484**	**3,756,177**
Liabilities		
Trade and Other Payables	860,221	971,998
Provisions	50,098	46,606
Deferred Income	1,577,600	1,859,378
Total current liabilities	**2,487,919**	**2,877,982**
Provision	12,300	9,636
Total non-current liability	**12,300**	**9,636**
Total liabilities	**2,500,219**	**2,887,618**
Net assets	**731,265**	**868,559**
Members' funds		
Reserves & Development Funds	731,265	868,559
Total Members' funds	**731,265**	**868,559**

NOTES:

[1] The Summary Financial Statements are directly extracted from the Earthwatch Institute Australia 30 September 2016 Financial Report without modification. The full financial report can be downloaded from Earthwatch Institute Australia's website earthwatch.org.au

STATEMENT OF CHANGES IN EQUITY

for the year ended 30 September 2016

	Development Funds $	Funds in Reserve $	Total $
Balance at 30 September 2013	-	650,745	650,745
Profit for the year	-	143,630	143,630
Total profit and other comprehensive income for the year	**-**	**143,630**	**143,630**
Allocation to Development Fund Reserve	100,000	(100,000)	-
Balance at 30 September 2014	100,000	694,375	794,375
Profit for the year	-	74,184	74,184
Total profit and other comprehensive income for the year	**-**	**74,184**	**74,184**
Allocation to (from) Development Fund Reserve	(40,196)	40,196	-
Balance at 30 September 2015	59,804	808,755	868,559
Loss for the year	-	(137,294)	(137,294)
Total loss and other comprehensive income for the year	**-**	**(137,294)**	**(137,294)**
Allocation to (from) Development Fund Reserve	(59,804)	59,804	-
Balance at 30 September 2016[17]	-	731,265	731,265

STATEMENT OF CASH FLOWS

for the year ended 30 September 2016

	2016 $		2015 $
Cash flows from operating activities			
Cash receipts in the course of operations	2,938,939		2,911,597
Cash payments in the course of operations	(3,244,714)		(3,068,829)
Interest received	44,804		61,376
Net cash used in operating activities[15b]	(260,971)		(95,856)
Cash flows from investing activities			
Receipts from/ (Investment in) term deposits	561,617		(737,357)
Payments for plant & equipment	(1,125)		(7,162)
Proceeds from plant & equipment	5,000		-
Net cash provided by/(used in) investing activities	565,492		(744,519)
Net increase/(decrease) in cash held	**304,521**		**(840,375)**
Cash at beginning of financial year	497,826		1,338,201
Cash at end of the financial year[15a]	**802,347**		**497,826**

A MATTER OF GOVERNANCE & MECHANISMS

The ultimate responsibility for governance of Earthwatch rests with the Board. The past year has been a testing time for the Board. A negative staff engagement survey was received by the Board last December. Interviews with departed and current staff confirmed an unhealthy culture. As a result the Board took the decision in January to appoint the Deputy CEO, Cassandra Nichols, as the organisations CEO. The departure of our Director of Finance & Operations who moved to the U.S in January and the resignation of the Director of Earthwatch Foundation contributed to the transitional challenges in early 2016. However, I am delighted to advise our stakeholders that we finish 2016 in a healthier situation than at the beginning of the year. The senior management group, in particular Justin Foster, Director Research Programs and Ari Panagiotou, Director Partnership Development & Innovation, have galvanised as a team to provide our CEO with strong support. They have been ably supported with several new appointments to strengthen our capacity and capability.

It has been a year where we have strengthened the Board with several key appointments. Firstly, Aaron Organ, Director with Ecology & Heritage environmental consultancy, was appointed on the 1st March 2016.

Secondly, Kerrie Lavey, who brings a wealth of knowledge and experience in marketing and communications was appointed on the 6th March 2016, and thirdly, Mathew Nelson, Partner, Climate Change and Sustainability Services at Ernst & Young joined the Board on the 15th July 2016. Each have already made a contribution in the deliberations undertaken by the Board. Sadly, Dr. Neil Byron who had been a Director since May 2010 resigned due to work pressures. Neil's wisdom and his connections with the science community and Government agencies will be missed. Heather Campbell, reaches her nine year term limit this year and will retire following the AGM. During her tenure Heather has made a substantial contribution both on the Board and in Committees.

The Board of Directors have met quarterly, as has the Finance & Risk Committee, which continues to be ably chaired by Colin Gomm and supported by another Board member, Megan Flynn and an independent external member Rod Jackson, Finance Director at Bunzl Outsourcing Services. I too remain a member of this Committee.

After a hiatus, due to the significant staff changes early in the year, a revitalised Marketing Advisory Committee has been re-established under the leadership of Kerrie Lavey and led internally at Earthwatch by Ari Panagiotou.

Over the coming months we aim to make several more appointments to the Board, as permitted within the Earthwatch Constitution. These will be made on the basis of the skills needed and the passion of the individuals for the important work we undertake. Given the probono nature of the expertise and time commitment of our Directors with the same legal responsibilities as large public companies, we are fortunate to continue to attract skilled professionals with a clear commitment to the Environment and a passion for the Earthwatch mission.

I thank all of my Board colleagues and extend my gratitude for their guidance, time and commitment towards our organisational mission.

I know we all share the understanding and agree that Earthwatch has a continuing important role to play in the world and for our future generations to benefit from Science and Environmental Education.

Charles Macek
Chair – Earthwatch Institute

BOARD AND COMMITTEES

SCIENCE ADVISORY COMMITTEE

Prof Ian Woodrow – SAC Chair — *University of Melbourne*
Head, School of Botany

Prof David Booth — *University of Technology, Sydney*
Program Director, School of the Environment

Ms Diana Jones — *Western Australian Museum*
Executive Director, Collections and Research

Prof Stephen Williams — *James Cook University*
Director, Centre for Tropical Biodiversity and Climate Change

Prof. Ian Lilley — *University of Queensland*
Aboriginal and Torres Strait Islander Studies Unit

Dr Martine Maron — *University of Queensland*
Senior Lecturer in Environmental Management

Prof Nancy Longnecker — *University of Otago, Dunedin, NZ*
Professor, Science Communication

Ex-Officio:

Cassandra Nichols — *Earthwatch Institute (Australia)*
Chief Executive Officer

Justin Foster — *Earthwatch Institute (Australia)*
Director, Research Programs

Chew Yue Chin — *Earthwatch Institute (Australia)*
Research and Programs Officer

FINANCE AND RISK COMMITTEE

Colin Gomm – Chair
Megan Flynn
Rod Jackson
Charles Macek

Ex-Officio:
Cassandra Nichols
Bonnie Lessels

MARKETING ADVISORY COMMITTEE

Kerrie Lavey — *Strategicink Pty Ltd*
David Henderson — *Corporate Strategy Expert*
Michael Wall — *Director BHive Group*

Ex-Officio:
Ari Panagiotou
Erin Leigh

EARTHWATCH STAFF

Cassandra Nichols — *Chief Executive Officer*
Ari Panagiotou — *Director – Partnership and Innovation*
Justin Foster — *Director – Research and Programs*
Andrea Haas — *Field Operations Manager*
Erin Leigh — *Marketing and Communications Manager*
Bonnie Lessels — *Business Operations Coordinator*
Viki Nathan — *Learning and Volunteer Engagement Manager*
Bruce Paton — *Program Manager, Bush Blitz and TeachLive*
Chew Yue Chin — *Research and Programs Officer*
Lauren Hall — *Marketing and Science Communications Officer*
Louise Singleton — *Earth Ball Communications Volunteer*
Kristina Tempany — *ClimateWatch Volunteer*

BOARD OF DIRECTORS

Charles Macek - Chair
Appointed: 1 March 2011

Colin Gomm
Appointed: 17 November 2008

Dr Neil Byron
Completed Board
Appointment: March 2016

Chris Schulz
Appointed: 21 January 2011

Heather Campbell
Appointed: 15 January 2007

Prof. Ian Woodrow
Appointed: 12 Decem

Megan Flynn
Appointed: 13 March 2014

Kerrie Lavey
Appointed: 6 March 2016

Aaron Organ
Appointed: 1 March 2016

Mathew Nelson
Appointed: 15 July 2016

BE AN EARTHWATCHER

CONTACT US

Earthwatch Institute Australia

Phone: 03 9016 7590

Email: earth@earthwatch.org.au

Web: www.earthwatch.org.au

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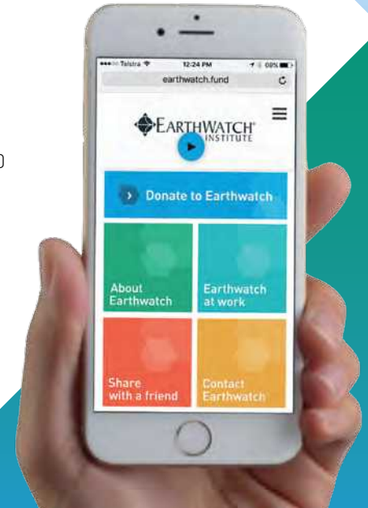

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Editorial	Ari Panagiotou / Erin Leigh / Lauren Hall
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Earthwatch Institute Australia

Phone: 03 9016 7590

Email: earth@earthwatch.org.au

Web: www.earthwatch.org.au

Suite G–07, Ground Floor
60L Green Building
60 Leicester Street
Carlton, Victoria 3053

ABN 25 875 253 851

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