## Reconcections

# Annual Report 2020

# ecoconnect.me

every species connected



ecoconnect®

Ecoconnections

Annual Report 2019-20

"To explore and affiliate with life is a deep and complicated process in mental development. To an extent still undervalued in philosophy and religion, our existence depends on this propensity, our spirit is woven from it hope rises on its currents."

Edward O. Wilson, Biophilia

©Ecoconnections Release date: 1 September 2020 ecoconnect is a registered trademark ecoconnect<sup>®</sup>

Images courtesy of Onesplash, QuestaGame, Dillyane Nason, Wildcard Sue and Duncan Farquhar

ISBN 9780645065701

ecoconnect.me Facebook LinkedIn LinkedIn group Twitter

Telephone 0438585148

info@ecoconnect.me

12 Albert Street Wagga Wagga NSW2650

ABN 69976359479



2 | Page



### Contents

Founders message 4		
A world in change5		
S	ome headline numbers on the challenges	5
	ome Actors and Events toward better elationships with nature	6
F	or the sake of other species	7
Н	lalf Earth	7
N	Nanaging conservation reserves	8
Tax	onomy Australia workshop	9
Projects10		
Т	axonomy in New Guinea1	LO
S	upport an emerging artist:1	1
Ρ	redators for productivity1	12
Building the ecoconnected community - tell 7 people13		
Some 3 step 'how to' actions		
Н	low to ecoconnect someone 1	15
S	upport someone you ecoconnect 1	15
lf	f you ecoconnect for free1	15
	coconnect Choose – you can now choose a coconnection1	
	arge contributors - Support people ecocon or free1	
В	ulk ecoconnect people 1	15
F	und a specific project1	15
Podcasts16		
From QuestaGame's Andrew Robinson		

Financial statements have been removed from website version of this report. Please make contact if you require these.

### Founders message

We have started! Ecoconnections goal, 'to connect a person to every species', is now possible. The website works and people are connecting. A community of support is building. Conversations with researchers toward high impact projects are beginning and our first research investment is underway. Networks of people are becoming aware of our focus on naming species. People are sharing our positive part of the jigsaw of solutions.

A huge thank you to everyone who has contributed to getting us up and running this year. I have taken feedback and advice from many people. Special mention here to Kevin Thiele from Taxonomy Australia, Andrew Robinson from QuestaGame and the 'Wild Idea' accelerator team who have provided encouragement and insight. People have looked at our website and begun to build awareness of what we do. People have ecoconnected for free, connected themselves and connected friends. The 'bulk ecoconnection' pathway for large contributors is operating. Thank you all!

Around 1.7 Million species have scientific names. Estimates of the number of species on the planet vary but we use a figure of 8.1 Million. It is the same figure used by the Intergovernmental Panel on Biodiversity and Ecosystems Services (IPBES). This gives a working target of 6.4 Million species to discover.

These species may be useful in integrated management of production ecologies (farms and fisheries). They could provide inspiration for medical or other technological advances. They could be sources of whole new industries. Whilst recognising these opportunities, our approach is 'for their own sake'. Life is rare in the cosmos. Living creatures have been successful every year for 5Bn years to get to this point. We aim to counterbalance people centered voices. This year began digesting the IPBES Global Assessment<sup>1</sup> estimate that 1 million species are destined for extinction. The clock is ticking.

We live in a world of change. This year saw Greta Thunberg cross the Atlantic by sea to attend the 25<sup>th</sup> Conference of Parties to the UN Convention on Climate Change. Extinction Rebellion shifted the focus to biodiversity by blocking the streets of London and around the world. These are related challenges; however, climate change is reversible, species extinctions are not. The Conference of Parties to the UN Convention on Biodiversity was scheduled for Kunming China in October 2020, now rescheduled to May 2021. The global pandemic of the COVID19 virus has seen rapid innovation in online meetings giving wider access to these extended pre-conference deliberations. Ecoconnections are watching these changes for the sake of all species including the one you are ecoconnected to.

The call to action here is to ecoconnect. If you are ecoconnected tell another 7 people a fun fact about your species and encourage them to ecoconnect. We are building resources on our website to help you enjoy your ecoconnection and to generally explore issues in biodiversity and taxonomy. There is a podcast series exploring ecoconnections and how we might best fund taxonomy projects. Our social media channels are a place to interact. Likes and shares are important for us in these platforms. We also welcome approaches about projects we might fund.

Thank you for doing your part.

Duncan Farquhar

<sup>&</sup>lt;sup>1</sup><u>https://ipbes.net/global-assessment</u>

### A world in change

This section aims to encourage you to think about how your species is being affected by what is happening in the world. The dynamics of your species will be unique to its biology and habitat. Ecoconnections compiles a <u>daily paper</u> available through the 'news' tab of the website. Links to back issues are available through <u>our</u> <u>twitter</u> feed. These notes are selected from discussion in the press this year.



Figure 1 Placard from a demonstration inspired by the 'Fridays for Future' movement.

Some headline numbers on the challenges.

Animal populations have declined by 60% in the past 50 years<sup>2</sup>. Populations of migratory fish have plunged by 76% over the last 50 years.<sup>3</sup> There were headlines of "Insectageddon" this year associated with a paper in 'Biological Conservation'<sup>4</sup> noting 40% of insect species threatened with extinction and others showing, for example, 75% decline over 27 years in total flying insect biomass<sup>5</sup>. When countered by Finnish researchers who considered their conclusions alarmist these Australian researchers said they were 'realists'.

It's worth noting the five drivers of change identified in the IPBES assessment<sup>6</sup>;

- 1. changes in land and sea use
- 2. direct exploitation of organisms
- 3. climate change
- 4. pollution
- 5. invasive species

In Australia 7.7 Million Hectares of endangered species habitat has been cleared in the 20 years since the enactment of the Environmental Protection and Biodiversity Control Act 1999<sup>7</sup>. The critical word in the act is 'substantial'. Individually not making a 'substantial' impact on a threatened species meant 99% of referred developments proceeded. It is death by 1000 cuts.

In Brazil, President Bolsonaro unveiled a sweeping plan for the Amazon rainforest that would open indigenous lands to mining, farming and hydroelectric power projects. The rates of forest loss in the Amazon (24.37Mha) are around three times the Australian land clearing in the same period. Land clearing continues across the globe.



Figure 2 Rainforest Canopy

These trends are generally putting pressure on biodiversity. There are a lot of unknowns and complexity. Whilst global awareness is

- <sup>5</sup> <u>https://doi.org/10.1371/journal.pone.0185809</u>
- <sup>6</sup> <u>https://ipbes.net/global-assessment</u>
- <sup>7</sup> https://epbcactreview.environment.gov.au/

<sup>&</sup>lt;sup>4</sup> <u>https://doi.org/10.1016/j.biocon.2019.01.020</u>

<sup>&</sup>lt;sup>2</sup> <u>https://www.wwf.org.uk/sites/default/files/2018-</u> <u>10/wwfintl\_livingplanet\_full.pdf</u>

<sup>&</sup>lt;sup>3</sup> <u>https://worldfishmigrationfoundation.com/wp-content/uploads/2020/07/LPI report 2020.pdf</u>

important, specific awareness can also help. This is where knowing the name of your species, and a fun fact, helps. There are large groups, efforts and ideas joining you in your positive efforts.

Some Actors and Events toward better relationships with nature.

The United Nations (UN) deals with many issues, mostly human and principally war (peripherally biodiversity and/or taxonomy). Countries vote in the UN not people or species. As the world's most powerful intergovernmental organisation UN efforts to harmonize actions of nations have a leading role in our relationships with nature. However, whilst the climate economics and science is clear (16 year old Greta Thunberg focusses us on optimising use of the remaining C budget), the politics can be hard. The same seems true for biodiversity.



Figure 3 Flags of the United Nations

The UN Sustainable Development Goals (SDG's) are a 15-year 'blueprint to build a better and more sustainable future for all'. The 2030 Agenda for Sustainable Development (including the SDG's was adopted by all UN member states in 2015. Whilst these goals are interdependent the principal goals that involve biodiversity are; <u>14</u> "Life below water" because "people depend on marine and coastal biodiversity for their livelihood" and

<u>15</u> "Life on Land" because "Two billion hectares of land on Earth are degraded affecting some
3.2 billion people, driving species extinction and intensifying climate change".

The United Nations Environment Program (UNEP) was founded in 1972 and is based in Nairobi, Kenya. The UNEP delivers on the environmental dimensions of the 2030 Agenda for Sustainable Development (the SDG's).

The UNEP has considered pollution and climate issues and in 1988 convened an Ad Hoc Working Group of Experts on Biological Diversity. The work of this group resulted in the signing of the Convention on Biological Diversity (CBD) at the 1992 'Earth Summit' in Rio de Janeiro. The CBD recognised for the first time in international law that biodiversity is "a common concern of humankind" and is an integral part of the development process.

The Conference of Parties (COP) to the Convention on Biological Diversity has met 14 times and was due to meet in Kunming in October 2020. CBD COP 15 is the biggest biodiversity conference in a decade. What's expected is a new plan to save life on earth. The "Post 2020 Global Biodiversity Framework" will outline what countries need to do, individually and collectively to achieve the CBD vision of "living in harmony with nature" by 2050.

The OECD (the Organisation for Economic Cooperation and Development) are an organisation of 37 'Western' countries who cooperate to stimulate economic progress and world trade. OECD conduct independent policy comparisons and statistical analyses. For example, in April 2020 they released a 'Comprehensive overview of Global Biodiversity Finance<sup>78</sup>. These types of analyses are important inputs to the CBD discussions as well as providing guidance to governments.



Figure 4 OECD report found governments spend \$70Bn to help biodiversity vs \$500Bn to harm biodiversity. The nongovernment ratio is much worse.

The IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services) is an intergovernmental body that aims to strengthen the science-policy interface in biodiversity and ecosystem services. Whilst formally independent from the UN it was established in 2012 after encouragement from the UN General Assembly and is headquartered in Bonn in Germany. I have mentioned their 'Global Assessment' report elsewhere.

#### For the sake of other species.

We want to build an institution that operates for the sake of other species. We are not aiming at a revolution and anarchy like Extinction Rebellion. We want to be balancing voices to 'people first' approaches in our world. As a small organisation we have limited capacity to advocate. We are more building a network of 'reliable witnesses' so, as changes happen to species, someone is watching.

Some important private efforts I have come across.

### Half Earth

The Half Earth project is the brainchild of Ed Wilson, a leading light in advocating for biodiversity in the US. He is the Pellegrino University Research Professor, Emeritus in Entomology for the Department of Organismic and Evolutionary Biology at Harvard University, a lecturer at Duke University, and a Fellow of the Committee for Skeptical Inquiry. He is a Humanist Laureate of the International Academy of Humanism. He is a two-time winner of the Pulitzer Prize for General Nonfiction (for On Human Nature in 1979, and The Ants in 1991) and a New York Times bestselling author for The Social Conquest of Earth, Letters to a Young Scientist, and The Meaning of Human Existence.

Ed Wilson and Half Earth are important advocates for taking an approach which is 'for the sake of other species'. He has called for a stronger voice from evolutionary biologists and for philosophers to take a back seat to for a while. Especially in the practical search for meaning and therefore direction. Meaning comes from relationships whether that be friend, foe, predator, or parasite. This direction can be for an individual, a company, a country or global leadership of life in the Cosmos.



*Figure 5 Ed Wilson is an expert on social biology, especially of ants.* 

versity/report-a-comprehensive-overview-of-globalbiodiversity-finance.pdf

8

https://www.oecd.org/environment/resources/biodi



Managing conservation reserves Establishing conservation reserves involves restrictions on private land use. Landowners have strong incentives to make land more financially productive or allow development for a capital gain. The Nature Conservancy, Bush Heritage Australia and other philanthropic conservation agencies buy land and set it aside.



Figure 6 National Parks are human institutions. They depend on ongoing political and cultural support.

Government Agencies like the NSW Biodiversity Conservation Trust tender to reserve high priority biodiversity assets on private land and make an ongoing maintenance payment. In 2 years, they have established 199 agreements to protect 41,700ha for \$110M. These approaches make significant progress for biodiversity.

These approaches are however human institutions. The arrangements need a broad long-term community support to be sustained through economic and political change. The management approaches of all land managers are of interest to the ecoconnected community.



### Taxonomy Australia workshop

Ecoconnections Founder Duncan Farquhar is a Member of Taxonomy Australia, a Program of the Australian Academy of Science. The mission of Taxonomy Australia is "to discover and document all remaining Australian species of plants, animals, fungi and other organisms...*in a generation*".

In April/May 2020 Taxonomy Australia held a national meeting via videoconference to develop a roadmap for the mission. This meeting was very well run and saw strong cohesion across the Australian Taxonomic community. Readers might like to follow developments via the Taxonomy Australia website.



Figure 7 Australia is one of 17 'Megadiverse' countries. "...of the more than 600,000 predicted species in Australia, only 30% have so far been discovered, documented and named."

### Projects

Ecoconnections has made progress in finding effective R&D investments. Funds raised from ecoconnections allow us to support this research. Whilst Taxonomy is our larger research focus growing the ecoconnected network is an important goal as well. For this reason we can support a wide range of projects. Three new projects are listed below.

### Taxonomy in New Guinea

New Guinea is highly biodiverse and provides great opportunity for Taxonomists. Dillian Nason discovered 14 new frog species during work for her honours degree. Dillian will be encouraged to develop a network of local QuestaGame players to further her survey work of amphibians. Where funds allow the taxonomic effort will be expanded beyond amphibians.

Amphibian taxonomy will be considered in the general strategic context of Taxonomy for New Guinea.



### Support an emerging artist:

Ecoconnected people are encouraged to do some art to express themselves and the place of their species in the universe. Sue Liu is an emerging wildlife artist raising funds to publish a series of hand drawn books. This project will support Sue's publication costs. To support this project type 'Sue Liu's Books' in the 'special delivery instructions' section at checkout as you ecoconnect someone (it can be yourself).



### Predators for productivity

Predators prevent or postpone pumping pesticide and promote productivity in potatoes, peas, parsley, and particularly perennials like Pinot noir, and pistachio. OK, so that's my fun. This project is a collaboration between QuestaGame, Ecoconnections, the Australasian Arachnology Society with Horticulturists and Viticulturists across the world.

Many spiders living in vineyards and horticultural enterprises across the world are undescribed. They are also doing a great job. Eating pests and keeping these agro-ecologies in balance. This project will encourage horticulturists, viticulturists and anyone working in agriculture to play QuestaGame and especially look for spiders and other predators.

To join in start playing and let us know the name of your industry association so we can turn your observations into advice.



### Building the ecoconnected community - tell 7 people.

You, the ecoconnected person, are our hero. The quiet awareness of your species that you have in the back of your mind is important. We fund research, review the world of biodiversity and taxonomy and connect people to build a world of quality relationships. Relationships based in a long-lasting understanding. If there is something, we can do to add value to your experience, to your ecoconnected life, let us know.

One way you can enjoy your ecoconnection is to share a fun fact about your species. These conversations usually take you away from your daily concerns and build a bond with the person that you share it with. That person might have been to the area where your species lives, have seen a relative of your species or be able to help develop insight into your species' life in another way. During the year I picked up a helpful hint. Saying a species name 7 times will help you get the pronunciation right and remember it. I think sharing your fun fact 7 times will also help keep your spark of awareness alive and growing.

Here are some fun facts people have shared:

- Egg farmer Anna is ecoconnected to Isogenoides doreatus or Michigan Stoneflies ""These cool little dudes have been clinging to rocks in prairie creeks for over 100 million years."
- Commuter Cam said "How cool, he has red socks" when he looked up a relative of his ecoconnection Stenocoris schaeferi, a rice bug.
- Eight-year-old Ella was super excited to be connected to crab spider Rhitymna cursor from Singapore. "he has 8 eyes and his elbows are turned forward, he's so cute!!" she said.



The more people that ecoconnect the more conversations will be had and the more we can do. We have some ideas for getting ecoconnected people together to share their 'fun facts' but these will have to wait until the current COVID19 Pandemic allows. Our social media channels are the best way to engage right now.

www.facebook.com/ecoconnect.me

www.facebook.com/groups/ecoconnect.me

www.linkedin.com/company/ecoconnections

#### LinkedIn group

### <u>Twitter</u>

To achieve our goal of connecting a person to every species we need people to ecoconnect. As always, your help in this is appreciated. This means talking about your ecoconnection. It could be giving an ecoconnection as a gift. It could be encouraging someone to make a bulk contribution to support one of our projects.

Christmas is an important time for us. An ecoconnection as special gift of 'right relationships' aligns with the first Christmas and can help reduce consumption at this time. We will have a Christmas social media campaign. Your help with likes and shares can help amplify this effort and help our budget go further.

If you are a researcher or have a project, we would love to hear from you too. We can support a wide range of projects and use ecoconnections to raise funds to get them off the ground. So, if you know someone who has a good project let us know.

Being an ecoconnected 'hero' does not need to take over your life. "Living in harmony with nature" is the 2050 vision for the Convention on Biological Diversity. People will live and other species will live. Your quiet awareness will help allow us to live and let live. However, we do want to build a collective intelligence about this. So, telling at least 7 people will help us all. We do hope that you sense that you are important. That your relationship with your species is a living understanding and awareness. Your unique relationship is a part of the 'harmony'.



### Some 3 step 'how to' actions.

### How to ecoconnect someone.

- Decide you want to ecoconnect someone because they would benefit from being ecoconnected.
- 2. Talk to them about it and get their email address.
- 3. Pay for them at ecoconnect.me

### Support someone you ecoconnect.

- 1. Follow up and see what species they got.
- 2. Help them find a fun fact.
- 3. 'Like' it when they post their fun fact on social media.

If you ecoconnect for free.

- 1. You will get an email letting you know who paid for you.
- 2. Email your fun fact to the person who paid for you to thank them
- 3. Share and tell at least 7 people your 'fun fact'.

### Ecoconnect Choose – you can now choose an ecoconnection.

- If you or a friend has a special connection to a species, you can register this with us.
- 2. Talk to someone about this connection and get their email.
- Connect the person via the website and support them to share their fun fact as above.

Large contributors - Support people ecoconnected for free.

- 1. There may be people who email to thank you for ecoconnecting them.
- 2. You may like to ask these people for a fun fact and a statement you can publish.
- 3. Share these fun facts and wish those who thank you, well.

### Bulk ecoconnect people

- Decide how much money you would like to contribute and let us know.
- 2. Deposit funds into our account (we can discuss this first if required).
- 3. We will ecoconnect people from the free list and send you a receipt for this expense

### Fund a specific project

- If you have a specific project you would like to fund us to manage, let us know. We will ecoconnect people for free for this amount.
- 2. We can find appropriate providers and manage the project for you including any IP.
- Our intention is to make final reports publicly available where we can fully recognise your contributions.

We have had one large contributor so far. Large donors will be thanked and listed on the website. Robert Whyte has been listed for his large contribution. Many thanks to Robert.



Figure 8 Like most things in life you get out what you put in. As the ecoconnected community grows we can help you get the most from your species, for your species, from our R&D investments and from the community.



### Podcasts

Ecoconnections has a podcast series <u>available</u> via the major pod catchers. There are 6 podcasts so far.

- 1) An introduction to ecoconnections from Founder Duncan Farquhar
- 2) An introduction to Ecoconnections partner QuestaGame from Chairman Andrew Robinson
- Two podcasts with Professor Stephen Hopper former Director of Kew Gardens London on
  - a. A career as a Taxonomist and in leading world Taxonomy
  - b. Indigenous totems and these ancient living relationships with other species
- A discussion with author of the 'Field Guide to Australian Spiders' Robert Whyte.
- 5) A discussion of the challenges of Taxonomy in New Guinea with Frog Taxonomist Dillian Nason.



Figure 9 Ecoconnections podcasts are available through all major pod catcher apps



### From QuestaGame's Andrew Robinson

Great to see ecoconnect.me up and running this year. Not only are people now "ecoconnecting" and sharing the news, but 10% of the proceeds are funding our Pays to Know Nature program, which supports numerous on-the-ground conservation organisations. For more information about the Pays to Know Nature program, see https://questagame.com/paystoknow

When you connect to a species, you're triggering a chain of events that helps raise the value of nature in mainstream society. You learn about your species. You tell someone about it. They learn about your species, about your connection, and maybe they connect themselves. Your financial contribution, meanwhile, supports the sort of scientific research and conservation that can help give biodiversity - and your species - the value it deserves.

If we connect just one species to every person you know, and they do the same, we will, in a very short time, return biodiversity to its central place in our shared human awareness. It's not just good for the planet, either. It's good for each of us. Learning about new life forms is exciting. You can have fun playing QuestaGame or embark on an educational journey of a lifetime through BioExperitse.org.



Figure 10 QuestaGame puts a team of taxonomists in your pocket to help you understand life around you. Your observations formally contribute to global databases of scientific knowledge.

This is how we can, together, discover, learn about, map and help protect our planet's most precious asset - it's biodiversity. And this is how we can, together, create a sustainable environment for future generations.

You are the early adopters. There are a lot of people who don't see the contribution of ecoconnections. Thanks for your belief, thanks for your faith, thanks for your encouragement.



Contacts: Telephone 0438585148 <u>info@ecoconnect.me</u> <u>ecoconnect.me</u>

12 Albert Street Wagga Wagga NSW2650

Social Media:

<u>Facebook</u>

<u>LinkedIn</u>

LinkedIn group

<u>Twitter</u>

ABN 69976359479

