



Committee: Environment Sub-Commission 1 (EC1)

Issue: Preservation of New Caledonia's Biodiversity

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INTRODUCTION

The year 2010 was named the year as the International Year of Biodiversity (IYB) by the United Nations (UN). This anticipated to raise public awareness of the value of biodiversity and to reinforce conservation efforts and many of the conservation goals promoted by the IYB have resurfaced, throughout the years, during awareness campaigns of the UN (ex. The International Year of Forests (2011), the International Year of Soil (2015), the International Year of Sustainable Tourism for Development (2017)).

New Caledonia is a global biodiversity hotspot facing extreme environmental degradation and contains some 3371 native species of vascular plants, from which about 75% are considered endemic. This extraordinary floristic variety is threatened by increasing economic development, mainly based on mining and metal processing activities, as well as increasing human turbulences such as fires, urbanization and exotic species introductions. These have led to a reduction of 75% of the original vegetation cover since the arrival of man 3.5 thousand years ago. Establishment of conservation priorities in light of this environmental distraction requires thorough knowledge on the distribution of plant biodiversity.

New Caledonia is a member of the Pacific Community (SPC), the South Pacific Regional Environment Program (SPREP) and the South Pacific Tourism Organization (SPTO). New Caledonia is also an associate member of the International Organization of La Francophonie and has a non-voting seat on



the World Health Organization Western Pacific Regional Committee. The Kanak and Socialist National Liberation Front (FLNKS) is a member of the Melanesian Spearhead Group (MSG). In 2016, leaders decided to admit New Caledonia as a full member of the Pacific Islands Forum (PIF).

New Caledonia has close ties with its neighbours, particularly Vanuatu where it has had a cooperation agreement since 2002. Australia, Indonesia, New Zealand and Vanuatu each have a diplomatic representation in New Caledonia.

DEFINITION OF KEY TERMS

Biodiversity

“Biodiversity is the number and types of plants and animals that exist in a particular area or in the world generally”. Furthermore, biodiversity includes the total number of the ecosystems created by different species, as well as the genetic variety within each species (ex. Humans). The most common method of comparing the biodiversity of various places is counting the species in that place; however, due to the difference of value and interest of some species, biodiversity is weighted differently for different species. This is assessed by examining the taxonomy (genera, families, orders, classes, and phyla to which species belong). A second way to compare the biodiversity of some environments is to recognize their unique biodiversity, which may contain few species but rare ones.

Endemism

“Endemism is a taxon whose distribution is confined to a given area is said to be endemic to that area. The taxon may be of any rank, although it is usually at a family level or below, and its range of distribution may be wide, spanning an entire continent, or very narrow, covering only a few square meters”. This model is significant as in the past the construction of biogeographic regions was grounded on it.

Preservation

“Preservation is the act of keeping something the same or of preventing it from being damaged”.

BACKGROUND INFORMATION

Island and of New Caledonia

Some of the most distinctive plants in the world thrive on the island of New Caledonia. Along with these plants come an impressive number of species and endemics. From New Caledonia, the Rain Forests are the richest parts; however, they have suffered large losses of native habitat.

New Caledonia has five endemic plant families (Amborellaceae, Oncothecaceae, Papracrypyiaceae, Phellinaceae, and Strasburgiaceae) out of a total of 196 families found on the islands. Nearly 14% of the total vegetation and 79.5% of the species are endemic, which is greater than that of all other Pacific island groups, with the exception of Hawaii’s (89 per cent) and New Zealand’s (81.9 per cent). However, compared with New Caledonia’s 2,973 species, Hawaii contains only 956 and New Zealand has fewer total species and fewer total endemics, even though, size-wise, New Zealand’s North Island is seven times larger than New Caledonia.

To pinpoint the location of New Caledonia it is important to know that the national borders of Indonesia by land and Australia, Fiji, Norfolk Island, Papua New Guinea, the Solomon Islands and Vanuatu by sea.

New Caledonia’s Vegetation and Wildlife

Plant numbers make difficult the creation of a personifying theme to New Caledonia’s unique biodiversity. Part of what makes New Caledonia so unique is a large number of ancient lineages and absence of widespread genera and families. New Caledonia has a remarkable diversity of aboriginal nonflowering plants, including conifers, with 44 species out of 15 genera. Eric Dinnerstein, chief scientist for WWF, in a recent National Geographic article said that when in New Caledonia, he feels like he is walking in a forest the dinosaurs walked in.

Like New Caledonia's vegetation, its wildlife is represented often by unique species and ancient lineages, but many types of widespread species are gone. There are no native amphibians, 3 types of snakes, and only 9 mammals, all of which are bats, with two of them being considered endangered (*Chalinolobus neocaledonicus* and *Miniopterus robustior*). All of New Caledonia's 68 lizards are from just three families. The birds of New Caledonia comprise mostly of modern forms; however, one ancient family, Rynochetidae, is endemic to New Caledonia and is currently represented by one species, the kagu, which also happens to be the national bird of New Caledonia and is listed by IUCN (1996) as endangered along with the Australasian bittern, New Caledonian lorikeet and New Caledonian owlet-nightjar. Even like that, the most hazardous existence, however, may belong to the New Caledonian rail, which IUCN (1996) listed as critical. IUCN (1996) listed five other bird species as exposed to extinction.

Current Status

The New Caledonia rainforests have suffered large losses of native habitat, as they used to occupy 70% of the land area and now occupy 21.5 %. Logging operations are becoming localized and the degree of mining has been ascending back since the flourishing years in the 1960s and 1970s, as a result, these two operations have been decreasing. However, New Caledonia still produces nearly 50% of the world's nickel and contains 40% of its known deposits in the whole world. The impact of these land uses has proven to be severe, as deforestation and mining have given New Caledonia some of the worst soil erosion. The availability of forests for hunting is increased by both logging and mining and threatens some local species (ex. the New Caledonian imperial-pigeon).

The protected area network of New Caledonia is poor both in size, as it only covers about 3% of the total land area, and in resources, meaning that the protected areas are only slightly more than paper parks, with the Rivière Bleue Park being the exception. It is well managed and has some of the only resident

park personnel, as well as the only kagu populations that are on the rise as a result of controlling predators. One obvious gap in this protection network is the lack of protected areas in the Loyalty Islands.

Types and Severity of Threats

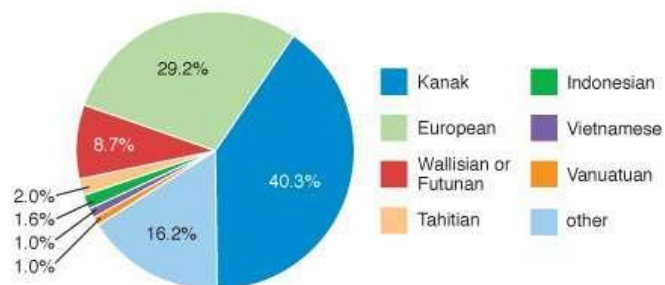
The main threats to New Caledonia's rain forests, as discussed above, have been and will continue to be widespread logging, mining and wildlife hunting. At the same time, imported species are a growing problem in New Caledonia, as they create problems for native species (pigs, goats, cats, dogs, and rats). New Caledonia also has Java deer that are widely hunted. In addition to that and scraping forest floor plants, people often start fires to attract deer. In addition to the fire, Bouchet et al. (1995) explained, "Lighting fire has also become an expression of protest from young rural unemployed males. It is not exaggerated to write that fires plague New Caledonia, west and east coast alike, from July to December." The severe impacts of this act may determine the long-term perseverance of native communities of the ecoregion.

People

In New Caledonia, Melanesians make up more than 40% of the population and Europeans about 30%.

The Polynesian minority comprises Wallis and Futuna islanders, who make up about 10% of the total population, and smaller numbers of Tahitians. Descendants of

Ethnic composition (2009)



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Indonesian and Vietnamese migrant workers also form small proportions of the residents and are located mainly in inner-city areas.

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There is no official language, but French and Kanak have distinct legal acknowledgement, but at the same time, almost 30 different Melanesian dialects are spoken, with most Melanesians being proficient in more than one.

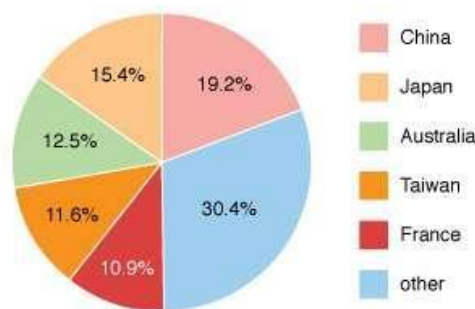
Economy

New Caledonia's economy is dependent on services, nickel mining and aids from France along with agriculture, forestry and fishing. Import-substitution industries (ex. the manufacture of soft drinks and beer, soap, epoxy resin etc.) have had almost no impact on the economy due to the small local market.

Even though the gross domestic product (GDP) per capita is one of the largest, if not the largest, in the South Pacific, the distribution of wealth is not equal between ethnic groups, with Melanesian households earning about only 25% the income of European households. The distribution of wealth is not the only thing that is not distributed equally, as land resources on the main island are also the same.

Although most of the Melanesian population depend heavily on agriculture, about two-thirds of the land is in the hands of European families, from

Major export destinations (2014)



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whom only a few are engaged in agriculture or farming. Europeans also control trades, commerce and careers and hold most of the high-ranking directorial posts in the government and as a result official, unemployment is significantly higher among Melanesians compared to Europeans.

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Taxes in New Caledonia come basically from imported goods, sales and business revenues. The vast majority of total tax receipts come from the capital's metropolitan area.

Resources and power

In New Caledonia, there are the biggest known reserves of nickel ore in the world, as well as large deposits of chromium, cobalt, iron, magnesium and noncommercial deposits of coal, which are found on the west coast. However, the search for oil has not been successful. Hydroelectric power provides nearly half of New Caledonia's energy needs and more than 75% of the energy produced is used in nickel purification.

Services and trade

Exports consist mostly nickel; however, New Caledonia has a chronic balance-of-trade deficit, as in 2016, it exported 2.28 billion dollars and imported 4.11 billion dollars, resulting in a negative trade balance of 1.82 billion dollars. The European Union (EU) is the major trading partner, mainly France, but other important trading partners include Japan, Singapore, Australia, South Korea, the United States, New Zealand and China. France makes large donations to the country's budget, especially for health, education, and the maintenance of military and security services.

Government and society

Under the Nouméa Accord of 1998, New Caledonia has limited autonomy within the French legal system and the French president is also the head of state in New Caledonia. The higher ups of the government are a high commissioner, appointed by France, and the president of the New Caledonian government, while the French government retains authority over defence, internal security, and various other matters. New Caledonia sends three representatives to the French parliament: two to the National Assembly and one to the Senate.

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Health and educational facilities are of higher quality in the capital city than anywhere else in New Caledonia, as the more-isolated islanders have access to few schools and health centres. Education is free and compulsory between the ages of 6 and 16; however, even though elementary and secondary school attendance is very high, almost universal, relatively few non-Europeans advance to higher education. The school system generally follows the syllabus of schools in France and French is the only language of instruction in state-supported schools. The University of New Caledonia is located in Nouméa and was founded in 1999.

MAJOR COUNTRIES AND ORGANISATIONS INVOLVED

New Caledonia

New Caledonia is located in the southwestern Pacific Ocean; about 1,500 km east of Australia and it is comprised of numerous islands, which make up more than 99% of the total land area. It includes the island of New Caledonia, where the capital, Nouméa, is located along with the Loyalty Islands, the Bélep Islands and the Île des Pins. New Caledonia also includes a number of distant



uninhabited isles (Huon and Surprise islands in the D'Entrecasteaux Reefs, the atolls of the Chesterfield Islands and the Bellona Reefs, Walpole Island, Beautemps-Beaupré Atoll, and Astrolabe Reefs). The main island, which is also the biggest and where the capital is located, is surrounded by a coral reef, extending from Huon Island, north, to the Île des Pins, south. Except for the central part of the west coast, which is bordered only by a fringing reef, it is a true barrier reef enclosing a large lagoon. There are numerous passages in the reef, usually at the mouths of rivers.

France

New Caledonia is a French Overseas Territory. The referendum on New Caledonia's independence from France will take place on 4 November 2018, marking the beginning of the final stage in the 20-year long Nouméa Agreement process, which has provided greater autonomy to New Caledonia through the transfer of services provided and managed by France.

New Zealand

New Zealand has a long-standing relationship with New Caledonia as they are the closest neighbours in the Pacific. In 2016, to further strengthen their



relationship, both countries signed a Joint Cooperation Plan, which aimed to enhance bilateral cooperation and provide an outline of fixed priority areas such as trade and economic arrangements, education, health, sports and sustainable development. Together with the French Armed Forces, the New Zealand Defense Force in New Caledonia cooperates in a range of areas including disaster response, search and rescue, naval surveillance and training exercises. New Caledonia is New Zealand's fourth largest export partner in the Pacific, with food and fuel exports from New Zealand making up the majority of merchandises traded. Production in most areas is heavily supported and prices are controlled, while nickel resources are the pillar of New Caledonia's economy, accounting for 90% of its export income. The two countries also trade in services, like education, tourism and New Zealand also some services to the mining industry in New Caledonia.

Australia

Australia has a great history with New Caledonia when it comes to relations, extending across a range of domains, as in 2015, Australia celebrated its 75th anniversary of Australian diplomatic representation in New Caledonia. Australia has interests in working with the New Caledonian and French authorities in New Caledonia in a range of areas including promoting greater trade and investment, cooperating on regional and natural disaster relief, defence cooperation including visits and joint exercises and combating security threats and transnational crime. Moreover, Australia supports the Nouméa Accord process to determine New Caledonia's autonomy and integration in the Pacific region as well as the future governance.

TIMELINE OF EVENTS

Date	Description of Event
1998	The Nouméa Accord
1999	The Organic Law
2002	New Caledonia has close ties with its neighbors, particularly Vanuatu where it has had a cooperation agreement.
2007	The European Investment Bank (EIB) has extended two credit lines to New Caledonia 5 million euros to finance projects in the areas of renewable energy, environmental protection and waste management.
2007	NET-BIOME – a network for research activities on tropical and subtropical biodiversity. (by the EU)
2008	New Caledonia’s lagoons, with their diverse reefs and associated ecosystems, were designated a UNESCO World Heritage
2010	The European Investment Bank (EIB) has extended two credit lines to New Caledonia 10 million euros to finance projects in the areas of renewable energy, environmental protection and waste management.
2011	ENRTP – a program to manage natural resources in a sustainable manner. (by the EU)
2013	The 2,000-square-kilometer Entrecasteaux Atoll World Heritage Site was established as a fully protected area.
2014	New Caledonia has been granted an indicative amount of €29.8 million for the period 2014-2020.
2014	INTEGRE - A 12 million euro regional program for the

	alleviation of the impact of climate change in the Pacific.
April 2014	Creation of the marine management area, known as the Natural Park of the Coral Sea, which covers the territory's entire exclusive economic zone.
2016	New Caledonia – New Zealand Joint Cooperation Plan
March 2018	United Nations Special Committee on Decolonization Second Visiting Mission to New Caledonia
November 2018	The referendum on New Caledonia's independence from France (pending)

UN INVOLVEMENT: RELEVANT RESOLUTIONS, TREATIES AND EVENTS

2nd Visiting Mission by UN bodies

The visiting mission consisted of 4 member-states of the Special Committee: Cuba, Indonesia, Iraq and Papua New Guinea. It was based on a mutual agreement reached between the Government of France and the UN under its Charter mandate on the Declaration on the Granting of Independence to Colonial Countries and Peoples and subsequent relevant General Assembly resolutions specifically related to New Caledonia.

The objective of this mission was to gather first-hand information on the situation concerning the implementation of the Nouméa Accord and to support New Caledonia in its preparation for the referendum which will be held in latter in 2018. This mission will depend on the previous visiting mission dispatched by the Special Committee in March 2014, in order to assess the current situation at hand, in line with relevant resolutions of the General Assembly (GA) and the Special Committee (SPECON).

Resolution on the Question of New Caledonia

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On December 4, 1987, during the 92nd plenary meeting of the general assembly the resolution on the Question of New Caledonia was passed, A/RES/42/79.

European Union Cooperation

The European Union (EU) has conducted several activities with the help of the EU's general budget in order to benefit New Caledonia, such as NET-BIOME, which is a network for research activities on tropical and subtropical biodiversity, PACE-Net, a Pacific-EU dialogue on science and technology, ENRTP, a program to manage natural resources in a sustainable manner, ERASMUS and Comenius which are lifelong learning programs and BEST which is a program studying ecosystem services provided by coral reefs as well as management of the environment and natural spaces.

The 10th (2008-2013) European Development Fund (EDF) distributed 19.81 million euros to New Caledonia for vocational training, which had built on the 9th EDF (2002-2007). Thanks to the program, a partnership was created in the area between the government, the private sector and various social units. Under the 11th EDF (2014-2020), New Caledonia has been granted a significant amount of 29.8 million euros.

A 12 million euro regional program (INTEGRE) in order to alleviate the impact of climate change in the Pacific, including New Caledonia, was also supported financially by the EU.

PREVIOUS ATTEMPTS TO SOLVE THE ISSUE

GREEN Program in New Caledonia

Conservation International (CI) has been working in New Caledonia since 1996 and remains the only non-governmental organization working in all three of its provinces. They work with every social class (ex. local communities, municipalities, provincial and national governments, etc.).

The GREEN abbreviation comes from the French “Gestion Raisonnée de l'Environnement et des Espaces Naturels de Nouvelle-Calédonie,” translated as



“Integrated Management of the Environment and Natural Areas.” GREEN is an all-embracing program that brings together various projects in New Caledonia to demonstrate the benefits of maintaining nature’s abundance for people. Through the GREEN project, science and innovation are used to demonstrate how the appraisal, fortification and management of natural resources are vital to the national economy and human welfare.

The Natural Park of the Coral Sea

In April 2014, New Caledonia’s government announced its intention to create a marine management area, known as the Natural Park of the Coral Sea, which covers New Caledonia’s entire exclusive economic zone, which is about 1.3 million-square-kilometre, as this park would provide longstanding protections for the region’s marine habitats.

In order to organize this huge park, New Caledonia invited the Pew Bertarelli Ocean Legacy Project to join the management committee, as well as government representatives, local communities and associations, environmental organizations, NGOs and the private sector.

This project has resulted in the waters of New Caledonia being healthy, due to the restrictions on fishing fleets and destructive trawling techniques. However, as the pressure from commercial and industrial fishing is growing, the future health of the marine environment is still at stake.

New Caledonia: BEST pilot project

This project is comprised of many organizations working to implement global agreements on biodiversity, battling desertification, land deprivation and climate change. This project came 20 years after the first Earth Summit gave rise to three interconnected Conventions: the Convention on Biological Diversity (CBD), the United Nations Convention to Combat Desertification and the United Nations Framework Convention on Climate Change – the so-called Rio Conventions.

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It was launched by New Caledonian, Guatemalan and Vietnamese senior officials during the United Nations Conference on Sustainable Development. This project connects national project teams with technical experts within the CBD, the GEF, World Bank, UNEP, FAO, IUCN, and Birdlife International, in order to fortify the achievement of multiple benefits.

POSSIBLE SOLUTIONS

Some solutions to minimize or even eradicate the threats endangering the biodiversity in New Caledonia could be ways to preserve the marine environment in order to preserve the corals, as well as the marine species inhabiting the waters of the Pacific. Before that, however, some ways to minimize the marine pollution in the area should be found. This could be something like establishing security guards for the protection of the marine environment at the port, as well as the beaches along with a high fine in case of destruction or harming of New Caledonia's biodiversity.

Organizing a beach clean-up parties, which will comprise of the whole community, reducing the rubbish by using biodegradable products and making sure only rain goes down the stormwater drain, as most drains flow straight to the sea meaning that anything could travel there are some of the solutions in reducing marine pollution, which is one of thing threatening marine biodiversity. Finally, as mentioned above, the Natural Park of the Coral Sea is still in danger, so delegates could suggest some measures to protect it and empower it.

Promoting the fundraiser happening currently for the protection of the Premier Biodiversity Hotspot of New Caledonia could also provide immense help, as the economic factor also plays a huge role in protecting the biodiversity of New Caledonia. In this project, Rainforest Trust and partner Dayu Biik seek \$818,090 in order to expand Mount Panié Wilderness Reserve by 50,000 acres for the creation of Thonié Wilderness Reserve. This will include the entire natural range of the Mount Panié Kauri and protect habitat for other

threatened species, such as the Critically Endangered Crow Honeyeater, Endangered Panié Litter Skink and Bold-Stripe Gecko.

BIBLIOGRAPHY

“Biodiversity Meaning in the Cambridge English Dictionary.” Gender Pay Gap Definition in the Cambridge English Dictionary, dictionary.cambridge.org/dictionary/english/biodiversity#dataset-example.

Pimm, Stuart L. “Biodiversity.” Encyclopædia Britannica, Encyclopædia Britannica, Inc., 23 May 2018, www.britannica.com/science/biodiversity.

“Preservation Meaning in the Cambridge English Dictionary.” Gender Pay Gap Definition in the Cambridge English Dictionary, dictionary.cambridge.org/dictionary/english/preservation.

Foster, Sophie, and D.L. Shineberg. “New Caledonia.” Encyclopædia Britannica, Encyclopædia Britannica, Inc., 14 June 2018, www.britannica.com/place/New-Caledonia-French-unique-collectivity-Pacific-Ocean.

Groves, Colin Peter. “Biogeographic Region.” Encyclopædia Britannica, Encyclopædia Britannica, Inc., 27 Aug. 2017, www.britannica.com/science/biogeographic-region/Dispersalist-and-vicariance-biogeography#ref588334.

“Island of New Caledonia, Northeast of Australia.” WWF, World Wildlife Fund, www.worldwildlife.org/ecoregions/aa0113.

“New Caledonia.” OEC - Sweden (SWE) Exports, Imports, and Trade Partners, atlas.media.mit.edu/en/profile/country/ncl/.

New Zealand Ministry of Foreign Affairs and Trade. “New Caledonia.” New Zealand Ministry of Foreign Affairs and Trade, www.mfat.govt.nz/en/countries-and-regions/pacific/new-caledonia.

“New Caledonia and Dependencies - International Cooperation and Development - European Commission.” Social Protection Statistics - Unemployment Benefits - Statistics Explained, 11 July 2014, ec.europa.eu/europeaid/countries/new-caledonia-and-dependencies_en.

“United Nations Special Committee on Decolonization Undertakes Visiting



Mission to New Caledonia, 9-18 March | Meetings Coverage and Press Releases. United Nations, United Nations, www.un.org/press/en/2014/qacol3261.doc.htm.

“United Nations Special Committee on Decolonization Undertakes Second Visiting Mission to New Caledonia, 12-19 March | Meetings Coverage and Press Releases.” United Nations, United Nations, www.un.org/press/en/2018/qacol3316.doc.htm.

“GREEN Program in New Caledonia.” Conservation International, www.conservation.org/projects/Pages/green-program-new-caledonia-maintaining-natural-capital.aspx.

“New Caledonia and Dependencies.” Initiative Des Territoires Pour La Gestion Régionale De L'environnement, integre.spc.int/en/in-new-caledonia/the-project-in-new-caledonia.

“Preserving New Caledonia's Marine Environment.” Stateline, www.pewtrusts.org/en/research-and-analysis/fact-sheets/2015/07/new-caledonia-marine-preservation#1-the-benefits-of-creating-a-lar.

“New Caledonia: BEST Pilot Project.” IUCN, 1 Feb. 2017, www.iucn.org/content/new-caledonia-best-pilot-project.

“Protecting the Premier Biodiversity Hotspot of New Caledonia.” Rainforest Trust, www.rainforesttrust.org/project/protecting-premier-biodiversity-hotspot-new-caledonia/.

“A/RES/42/79. Question of New Caledonia.” United Nations, United Nations, www.un.org/documents/qa/res/42/a42r079.htm.

Wulff, Adrien S., et al. “Conservation Priorities in a Biodiversity Hotspot: Analysis of Narrow Endemic Plant Species in New Caledonia.” PLOS Medicine, Public Library of Science, journals.plos.org/plosone/article?id=10.1371/journal.pone.0073371.