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Protected and managed terrestrial and marine areas

Catherine Sabinot, Jean-Brice Herrenschmidt, Hervé Jourdan, J.F. Silvain,
J.F. Agnèse, G. Boeuf, Gilbert David, P. Grandcolas, C. Vieux

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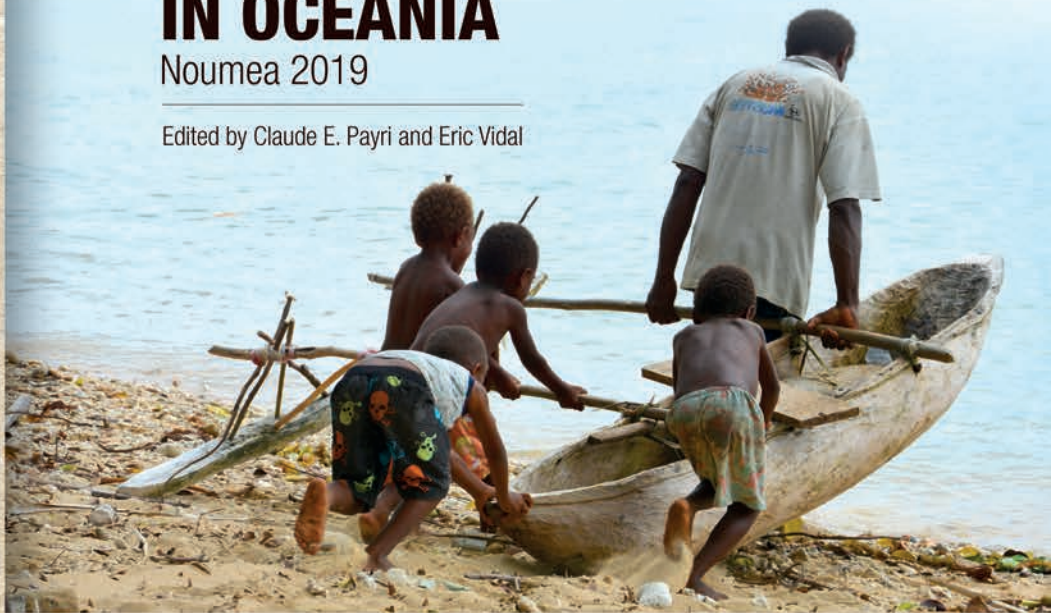
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BIODIVERSITY, A PRESSING NEED FOR ACTION IN OCEANIA

Noumea 2019

Edited by Claude E. Payri and Eric Vidal



Cipa pai picaapwi kârâ âboro mâ Göröpuu mâ Nâwië

Manaaki tangata, Manaaki whenua, Manaaki moana, kia kotahi whakahaere ki mua

Waa cèki céfé tö vèâ pâfâ Kâmö, Bwêêjë mâ Nérhëë mâi

Tausia lelei o tatou tagata, laueleele, ogasami, malaga fa'atasi i le agaga e tasi

Ta'ofi ke ma'u fakatasi le Tagata, le Kele mo le Moana

Icaasikeune la itre atr, hnadro me hnagejë

Co aodeneni Ngome ne Rawe ne Cele

Strengthening connections between people, islands and the ocean in the Pacific

E hakatahi'ia to te Enana i te Henua me te Tai

Me vakaqacotaki na veiwakani ni tamata vata kei na nodra vei yanuyanu kei na nodra vanua kei na wasa liwa kei na kedra yau bula vakavolivolita na Pasifika.

Kraon, solwota mo pipol emi wan oltime

Kia vai kôrari noa te Tagata, te Henua e te Moana

E natira'a mana tö te ta'ata i te moana 'e te fenua

Tâ'ofi ke ma'u fakatahi te Ha'atagata, te Fenua mo te Moana

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Ntano ngo ntas epei Namouriana

Maintenir unis les Hommes, la Terre et l'Océan

Buildim wan yunion wetem ol pipol, ol aelan mo solwara mo ol plant mo anamol long Pasifik

Ke fakamaŋlohingŋi ange ƚŋae nganhi fehokotakingŋanga ƚŋo e kakai ƚŋo e nganhi ƚŋgotu motu ƚŋo e Pasifiki pea mo honau nganhi fonuɔɔ, kae umanŋa ƚŋae moana, pea moe menŋa monŋui kotoa pe ƚŋoku iai.

Waa cèki céfé tö vèâ pâfâ Kâmö, Bwêêjë mâ Nérhëë mâi

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The authors of the book would like to warmly thank the many people who made it possible to translate the “tagline” of this synthesis work into Oceanian languages, especially the members of the various Oceania language academies, the invited speakers, and the numerous colleagues who forwarded our request. Following this exercise, a large number of different adaptations of this “tagline” have emerged, once again reflecting the vibrant cultural and philosophical diversity of this region of the world.



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Part 2

PROTECTED AND MANAGED TERRESTRIAL AND MARINE AREAS



As we are facing the urgency of safeguarding biodiversity, protected areas address the need to apply a precautionary principle (option value) to living things and their evolution at a global scale. In Oceania, for effective, socially and politically sustainable conservation of biodiversity, it is essential to reconcile the global agenda, designed to prevent the collapse of biodiversity, with the preservation of local lifestyles and the services that people get from biodiversity. Preserving biodiversity and ecosystem services using protected areas must consolidate Nature's contribution to the well-being of Oceanians.

Pentecost Island, Vanuatu © F. Cayrol/LabEX-CORAIL - UNIC.

THE SPECIFIC FEATURES OF OCEANIAN PROTECTED AREAS

A protected area is a planning and management tool that enables the coordination of conservation and resource management. If it is to be relevant, however, its purpose and the balance between protecting species and preserving ecosystem services must be clearly defined from the very beginning in consultation with local populations.

Key message 1 – In Oceania, the management structure and purposes of protected areas are highly diverse, and their effectiveness depends on many factors

For a long time, Oceania's protected areas have been conceived as places to manage local uses and practices, but they are increasingly becoming no-take reserves that are designed to protect habitats and biodiversity sustainably. Besides, we observe a recent and progressive semantic shift towards the notion of so-called “managed” areas. These “managed” areas designate a protected area combining the preservation of ecosystem services and natural resources that are closely associated with the lifestyles and cultural foundations of local island societies.

In practice, in the field, the management methods and purposes targeted by protected areas are diverse, and almost always plural: no-take reserves that “fully” protect an ecosystem, habitat, function, or species are rare. In many instances, the objective is also to maintain a “pantry”, (safeguard a customary social role), facilitate research, recognize territorial legitimacy, etc. Therefore, in Oceania, the pragmatic implementation of the boundaries and management methods of a protected area must include this diversity of purposes and interests of the different stakeholders.

Customary authorities are often central to management policies, particularly for protected areas located on customary territories. Depending on the cases and local capacities, whether inspired or not by traditional management modalities, management systems remain empirical. These systems do not always respond to growing threats, and their effectiveness depends heavily on social and customary organizations and demographic pressures.



Chief Assembly Institution, Port Vila © IRD/H. Jourdan.



The Fjorland National Park, South Island, is the largest of the 14 national parks in New Zealand, with an area of 12,500 km² ©Lincks/E. Bonnet-Vidal.

Key message 2 – The majority of Oceania's protected areas are either small or very large

In Oceania, small and very large protected areas co-occur, but those of medium size are rare. A fairly systematic concern is to try upscaling protected areas. Indeed, while small areas are valuable for the management of local resources, they are regarded as insufficient to achieve effective conservation of biodiversity and ecosystem functions. As a result, besides initiatives for the creation of large protected areas in Oceania that are strongly supported by large environmental NGOs, particularly in the marine environment, experimental and pragmatic dynamics are favoring other approaches. These include increasing the number of small protected areas, rather than creating large protected areas that are difficult to control, and managing them as networks to maintain the connection between protected areas (this is the strategy of the LMMA network, for example, see box). Another approach is to target ecologically coherent areas to take into account the expected future environmental changes. Experiments are being carried out to anticipate the effects of climate change. Some of the research plan to increase the size of small terrestrial protected areas to include high-altitude habitats and facilitate the movement/migration of species to these more favorable “refuges”.

Examples of marine protected areas in Oceania

The network of Locally Managed Marine Areas (LMMAs):

The LMMA network is unique. It brings together local communities, customary authorities, state managers, environmental protection officers, scientists, and sponsors. LMMAs are marine areas managed by local communities according to shared diagnostic approaches and community-based adaptive management. They are adapted to the local context and based on traditional knowledge and practices while also taking into account scientific knowledge. These marine protected areas aim to conserve and manage local resources, and exchanges of experience between LMMA managers strengthen the capacities of the communities involved. This network includes more than 2,000 protected areas. In Fiji, for example, in the LMMAs, the communities themselves have established 465 no-fishing reserves.

XXL marine areas:

Since the 2000s, several NGOs and states have campaigned to establish very large marine protected areas. Examples include the creation of the Phoenix Islands Protected Area (PIPA), which covers 408,250 km², and the Natural Park of the Coral Sea in New Caledonia, which extends over 1.3 million km². These initiatives are often criticized for being poorly operational in terms of management and for establishing protected areas “on paper” that are unable to respond to the increasing number of Asian fishing fleets across the Pacific. However, they reflect the willingness of Pacific Sovereign States to take control of their EEZs and resources.

Marine protected areas listed as UNESCO World Heritage Sites or as Man & Biosphere (MAB) sites:

The sites listed by UNESCO were first promoted by large states in a position to nominate large marine areas for the outstanding universal value of their ecosystems and to mobilize significant resources for the scientific demonstration and management of these areas. For example, the Great Barrier Reef (Australia), Papahānaumokuākea in Hawaii (USA), and coral reefs and associated ecosystems in New Caledonia (France) are inscribed on the World Heritage List mainly for their pristine natural features. However, in the implementation of their management, increasing attention

is being paid to the cultural dimensions of the indigenous peoples concerned. Other marine sites designated under a UNESCO label have also integrated cultural aspects as a priority: the Fakarava Biosphere Reserve in French Polynesia, the marine section of the Estate of Chief King Mata in Vanuatu, and more recently the marine section and the sacred reef pass of the cultural landscape of Taputapuātea in French Polynesia.



Niau Atoll is part of the Fakarava Biosphere Reserve, French Polynesia. School children learn how to set traps to catch introduced rodents © IRD/VE. Vidal.

Marine educational areas (MEAs):

The concept of “marine educational area” was born in 2012 in the Marquesas Islands (French Polynesia) from the imagination of children at Vaitahu Primary School (Tahuata Island) and with the support of the Motu Haka Federation, the former Marine Protected Areas Agency, the Government of French Polynesia, and the Marquesas Islands Community of Municipalities (CODIM). A “marine educational area” is a small coastal marine area that is managed in a participatory way by primary school children according to principles defined by a charter. It is an educational and eco-citizen project to promote knowledge and protection of the marine environment by young people. The school class is thus part of a territorial dynamic that calls on the expertise of the school and the municipality involved, but also that of local associations (e.g., users or environmental protection).

PROTECTED AREAS THAT ADDRESS HUGE ENVIRONMENTAL AND SOCIETAL CHALLENGES

Human pressures on natural habitats are increasing and multiplying, mostly because of the transformation of environments and uses. Resource extraction is intensifying, and natural habitats are increasingly fragmented and isolated. In Oceania, problems related to population growth and the rapide development of tourism, although embracing contrasting situation, are now also adding to the list. In this context, protected areas must evolve to address future challenges.

Key message 3 – The design of a protected area and the pragmatic implementation of its management method benefits from taking into account the diverse objectives and concerns of stakeholders as well as new societal and economic dynamics

Modernity brings its share of transformations in the household economy: employment is more frequent, societies are increasingly monetarized, and populations have to face new consumption needs. The increase in the migration of people and the development of urbanization require the adaptation of planning and environmental management policies. In such a context, the distinction between urban and non-urban areas, as well as the fluxes and exchanges between the two (natural resources, manufactured products, tourists, etc.), are

essential criteria to consider when planning protected areas. They are as important to take into account as customary territorialities and the interplay of powers and legitimacy between stakeholders in the various areas.

For many countries and territories in Oceania, protected areas are attractive tourist places that are politically supported as a source of economic development. While these sentinels of global change represent an opportunity for local as well as international environmental awareness and support participatory sciences (citizens contribute to ecological monitoring in these areas), they also generate a potential for pressure, even destruction, calling for the most considerable caution and the creation of protected areas that are inaccessible to mass tourism.



1



2



3

1. Uturoa Wharf in Ra'iatea Island, French Polynesia – 2,3. Thousands of tourists on Ouvea Island in 2007, before this type of cruise tourism was banned, New Caledonia © GIE Oceanide/J.-B. Herrenschildt.

Key message 4 – Protected areas in Oceania are opportunities for resilience to address food and health insecurity

About 80% of the population of Oceania depends on natural resources for food. However, the natural agricultural and lagoon heritage is eroding. For example, the number of varieties of taros, yams, and bananas is decreasing. It was not unusual, until about twenty years ago, to find 100 to 120 different plants in a traditional garden, but this is not true anymore. This food heritage, essential to the Oceanian lifestyle, no longer provides food security for the local populations that are increasingly dependent on imports, particularly rice. In the coming decades, in a global context of soaring demographics and climate change, access to the rice market could become increasingly difficult, raising the issue of resilience and food security for the peoples of Oceania.

In terms of health, preserving biodiversity also means ensuring the sustainability of a healthy diet that is severely affected by the massive introduction of fatty and sweetened manufactured food products, leading to an explosion of non-communicable diseases, as illustrated by extremely worrying rates of obesity and diabetes in Oceania. Besides, biodiversity and related knowledge allow the persistence of traditional medicines that are primarily based on the pharmacopeias ritually mobilized daily.



Traditional cultivated fields, Espiritu Santo Island, Vanuatu © IRD/H. Jourdan.



Fish market, Suva, Fiji © IRD/H. Jourdan.

Criteria to be considered in delineating protected areas and designing their management in Oceania:

- The ecological and heritage uniqueness of the area under consideration, both in terms of quality (populations, particular or endemic species) and functionality (biotopes, remarkable ecosystems, unique ecological processes).
- A high level of ecological connectivity, often established over a land-sea continuum, to protect functional areas in a context of fragmented territories.
- The endemic, and therefore unique, nature of many species and habitats, which gives strong regional or global significance to management policies.
- The contiguity of EEZs which forms an exceptionally large joint marine territory under the jurisdiction of the States and Territories of Oceania. This situation is an asset for planning marine environmental management policies throughout Oceania and ensuring that relevant ecological connectivities are maintained.
- The fact that Oceanian populations perceive their island environment as a symbiotic relationship and that it is not possible to translate “nature” or “biodiversity” into Oceanian languages.
- The fact that many Oceanians think of their territory as a land-sea continuum, facilitating the implementation of integrative protected areas.
- The specific land-ownership organization (diversity of land tenure statuses: private, public, customary) and the often collective nature of Oceania’s territories necessitates the involvement of many stakeholders in defining and sharing the challenges of the protected area and its management.
- The boundaries of terrestrial lands or customary territories facilitate the delineation of protected areas that align with valleys and watersheds.
- Areas where local knowledge is still and where the custodians of this knowledge are open to collaboration with the outside world are conducive to the cultural enhancement of biodiversity and its conservation.

Key message 5 – Biodiversity and protected areas must be systematically included in land-use planning processes

In an Oceanian island environment, the conservation of biodiversity must two ways of understanding the place. On the one hand, customary organizations administer and design the management of the area where different sovereignties operate according to an approach based on the territories of families, clans, and chiefdoms. They take into account land-ownership structures, spheres of influence, cultural hotspots, and the legitimacy of each individual. On the other hand, local authorities address development using a spatial planning approach in the areas and sectors in which they have competence, to anticipate and organize urbanization, the development of economic activities, and environmental conservation.

However, the challenges of conserving natural environments and biodiversity extend beyond the boundaries of customary and administrative territories. In Oceania,

much of the land is customary or private, and protected areas are often created as a result of local opportunities. Each community, therefore, protects what it can on the territories where its sovereignty applies. As a result, the extent and scale of the protected areas are not necessarily the most relevant in terms of biodiversity and ecological processes.

In this context, the protection of biodiversity requires a careful balance between the planning of areas for the protection of the most relevant environments and the territorial projects carried out by local or customary authorities. For optimal protection, a land-use planning approach must be shared at different scales and systematically integrate the risks weighing on biodiversity, according to hybrid governance methods adapted to specific contexts. In practice, protected areas must be part of negotiated territorial projects, which requires the prior acknowledgment of local territorialities and the empowerment of local stakeholders in their own territorial and heritage domain.



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It is important for Vanuatu people to conserve biodiversity as our tradition and culture are closely linked with biodiversity. It is through our relationship with the natural ecosystem and biodiversity that Vanuatu people have co-existed in the archipelago for generations despite constant threats such as extreme weather events and volcanic eruptions. In recent times, our biodiversity is under threat from increased population growth, the adoption of modern living in place of traditional subsistence way of life, and climate change. Our generation, therefore, has to take a step to conserve our biodiversity for these ever-increasing threats. In doing so, we will allow the natural balance of co-existence between nature and our people for this generation and the future.

Jeremie Kaltavara, Senior Fisheries Biologist,
Vanuatu Fisheries Department, Vanuatu



Efate market, Vanuatu ©IRD/C. Sabinot.

STRENGTHENING A GOVERNANCE BASED ON INCLUSIVE SYSTEMS OF CO-MANAGEMENT

Despite a great heterogeneity of situations, human and financial capacities of States and local stakeholders, the protection of biodiversity via protected areas in Oceania have to be organized through inclusive co-management systems. And, because of the scale of the work, involving thousands of island communities scattered among the archipelagos, the 26 Oceanian Countries and Territories need strong support from the international community.

Key message 6 – Working towards inclusive systems of co-management and participatory governance, involving, in particular, customary authorities and users

In Oceania, the inclusive approach is at the center of processes for the creation and management of protected areas, engaging both the authorities involved in decision-making and the populations concerned by the protection, in particular, indigenous communities.

Indeed, in Oceania, there are several systems of authority and management. Over the past two centuries, colonization, religious influences, and migratory movements have marked history, producing a diversity of authority and management systems. The territories are characterized by fields of influence that are structured in different ways and result in more or less formalized divisions of competence. State systems, local authorities, customary authorities, religious and community organizations all have a share of influence and legitimacy in the development of environmental management regulations and decision-making. Involving the various authorities in the co-management of a protected area determines its ownership, respect, and effectiveness.

There are many stakeholders with different uses of environments and ecological expertise related to their practices. Groups of users who are not always professionals, such as fishers, hunters, and women, are essential for their management because they

have developed specialized practices in some of the territories.

All generations are concerned and feel involved in the design and management of protected areas. Knowledge custodians are often elders and worry about passing on their knowledge. At the same time, some young people, aware that they have spent little time with their elders practicing their traditional places and subsistence activities, want to reclaim “their” ecological and cultural knowledge and continue to gain on scientific knowledge about their environment. Thus, a dynamic of revalorization of languages, local knowledge, “knowledgeable” people, and territories is emerging. The mobilization, sharing, and dissemination of scientific knowledge, complementary to local knowledge, is expected and must be adapted to each context in different ways.

Women’s knowledge

When it comes to planning protected areas where biodiversity is relevant to traditional pharmacopeia or coastal fisheries, women are often a key group willing to share their knowledge. Their daily practice in fishing or gathering areas, their naturalistic knowledge, and know-how must contribute to the collective management of environments.



Woman angling from the shoreline on the east coast of Efate Island, Vanuatu © IRD/C. Sabinot.

The power of consensus

In Oceania, the most effective shared management approach is not based on a principle of compromise, but consensus. Negotiations can take a long time, but it is the only way to reach decisions and choices that are sufficiently sustainable and understood by all. In this context, participatory methods adapted to the Oceanian context can help to achieve optimal acceptability and involvement of the relevant stakeholders.



Gifts offered for traditional customary gesture, Gohapin Tribe, New Caledonia © IAC/N. Petit.

Key message 7 – Strengthening the capacity, cohesion, and cooperation of the Oceanian States and Territories within regional organizations to mobilize international support for the establishment and management of protected areas

The States and territories of Oceania have a central role to play in ensuring strategic and regulatory coherence at the “Country” level, as well as in coordinating and supporting local stakeholders, for building significant regional dynamics in biodiversity protection using protected areas.

The financial and human capacities of small Oceanian States are often relatively limited compared to the scale of the ecological challenges, and they are already mobilized by the basic economic needs of rural populations. For these small States, the best strategy is to empower local authorities and community dynamics in the management of protected areas, as much as possible, and to dedicate their public services to fighting “supra-threats” such as wastes, EEZ management, climate change, and biosecurity.

Building their capacities and those of local communities depends on their collective ability, at the regional level, to speak out and gain influence at the international level. Without a cohesive regional mechanism, similar to their mobilization against the impacts of climate change, the remarkable biodiversity of Oceania and its potential collapse in the face of new large-scale threats associated with global change will continue to remain invisible to the international community, preventing the

The place of science in the delineation and long-term monitoring of protected areas

The delineation of protected areas is based on the selection of appropriate boundaries adapted to the optimal preservation of biodiversity. It requires the mobilization of scientific references and data - relict populations, rare and threatened species, species richness, diversity, uniqueness, functional diversity - that allow the characterization of reference states or baselines. These baselines serve as a reference to monitor habitats and biodiversity and to assess the effectiveness of protected areas and management measures. Sharing data over the long term by involving scientists, managers, and local stakeholders is also critical leverage, as is participatory science. Finally, access to data through open and fair science - data, results, methods, tools, interoperability - would facilitate a broader and more sustainable dissemination of knowledge.

development of protected areas commensurate with the challenges.

In terms of biodiversity, small island States in Oceania will only be able to make a significant contribution and participate in international agendas if they are collectively recognized, in the same way as their indigenous peoples, and local communities already are, as the custodians of the Pacific Ocean, and its exceptional island biodiversity heritage, for the international community. This recognition should receive international support, particularly financial support for the services they provide, as well as scientific support to continue the inventory of biodiversity, in collaboration with regional organizations (SPC, SPREP), and consolidate the existing dynamics of terrestrial and marine protected areas.

In a region characterized by fragmented small island States, the trend is towards reinforcing the capacity of administrations public authorities, and local stakeholders, facilitating the dissemination of knowledge on biodiversity, building capacity for coordination, involving local stakeholders in management and encouraging national and regional organizations to support them.

Finally, protected areas can be regarded as sentinel sites for monitoring trends and changes in biodiversity, as well as support sites for environmental education and knowledge sharing, while maintaining intergenerational ties. Protected areas are also a tool to raise awareness about biodiversity issues among policy-makers.



Coordination by C. Sabinot, J.-B. Herrenschmidt, H. Jourdan, J.-F. Silvain.
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Editorial support by V. Grizon.

LIST OF ACRONYMES

ABS	Access and Benefit Sharing
CBD	Convention on Biological Diversity
CePaCT	Centre for Pacific Crops and Trees
CNRS	National Center for Scientific Research (Fr)
CODIM	Marquesas Islands Community of Municipalities
COP	Conference of the Parties
CRESICA	Consortium for Research, Higher Education, and Innovation in New Caledonia
EEZ	Exclusive Economic Zone
FAIR science	Findable, Accessible, Interoperable but also Re-usable science
FRB	French Foundation for Research on Biodiversity
IAC	New Caledonian Institute of Agronomy
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IRD	French National Research Institute for Sustainable Development
IUCN	International Union for Conservation of Nature
CR	Critically Endangered (extremely high risk of extinction in the wild)
EN	Endangered (high risk of extinction in the wild)
LMMA	Locally-Managed Marine Areas
MAB	Man & Biosphere
MEAs	Marine Educational Areas
NGO	Non-Governmental Organization
PIPA	Phoenix Islands Protected Area
PIURN	Pacific Islands Universities Research Network
RESIPOL	Consortium for Research, Higher Education, and Innovation in French Polynesia
SDGs	Sustainable Development Goals
SIDS	Small Island Developing States
SISterrs	Small Island States and Territories
SPC	Pacific Community
SPREP	Secretariat of the Pacific Regional Environment Program
UNC	University of New Caledonia
UPF	University of French Polynesia



Isabelle Staron-Tutugoro is an artist, painter, and engraver from New Caledonia. Isabelle was born in Saint-Symphorien-sur-Coise, a village near Lyon (France). At the age of 22, she travelled to New Caledonia, fell in love with the colors and lights of nature, and decided to settle there. Her artwork is very inspired by Kanak culture and often depicts petroglyphs, Kanak bamboos, and Lapita pottery.

The turtles engraving, chosen to illustrate the book, is inspired by a fact that marked the childhood of Isabelle's son. In Poindimié, at the end of the 1990s, turtles used to return to the same place each year to lay their eggs. Pre-schools and primary schools used to take children to feed baby turtles and educate them about the importance of protecting not only the species but also our lagoon. Then comes a series on the fishes of the lagoon and the geckos, which are symbolic animals (totems!) of New Caledonia.

*Cover photo credit : Pirogue, Pentecost Island, Vanuatu and Community garden, Pentecost Island, Vanuatu ©F. Cayrol/LabEx-CORAIL-UNC
Rain forest, New Caledonia ©IAC/N. Petit.*

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Ntano ngo ntas epei Namouriana

Maintenir unis les Hommes, la Terre et l'Océan

Buildim wan yunion wetem ol pipol, ol aelan mo solwara mo ol plant mo anamol long Pasifik

Ke fakamañlohingï ange n̄gae nganhi fehokotakingganga n̄go e kakai n̄go e nganhi n̄gotu motu n̄go e Pasifiki pea mo honau nganhi fonuɔɔ, kae uman̄ga n̄gae moana, pea moe men̄ga mongui kotoa pe n̄goku iai.

Waa cèki céfé tö vèâ pâfâ Kâmö, Bwêêjë mâ Nérhëë mâi

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The planet's biodiversity is in danger! This unprecedented crisis is severely affecting the islands of Oceania, which are particularly vulnerable to the consequences of global change (warming, flooding, invasions, etc.). While the region as a whole contributes little to the climatic issues or even mitigates them, the Oceanian territories are strongly impacted.

The mobilization around the 2019 7th IPBES Plenary in Paris was an opportunity to promote the value of biodiversity and associated services in Oceania. While the conclusions of the Asia-Pacific chapter are clear, it is not too late to take action in this region where Man and Nature have developed very strong ties. To better understand the situation in these thousands of islands scattered over several tens of millions of square kilometers of ocean, a workshop dedicated to biodiversity in Oceania was organized in Noumea, New Caledonia, on the 24th and 25th of June 2019. This was a unique opportunity for seventy participants to discuss, debate and try to find solutions to face the seriousness of the situation.

This publication summarizes the main highlights and key messages of these two intense days of work, discussion and debate. It stresses the specificities of the biodiversity crisis in Oceania. Intended for decision-makers, but also for a wider audience, this document has the ambition to make the voices of Oceanians better heard on the international scenes dedicated to biodiversity and ecosystem services.



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