



# State of conservation in **Oceania**

## KEY FINDINGS

2013





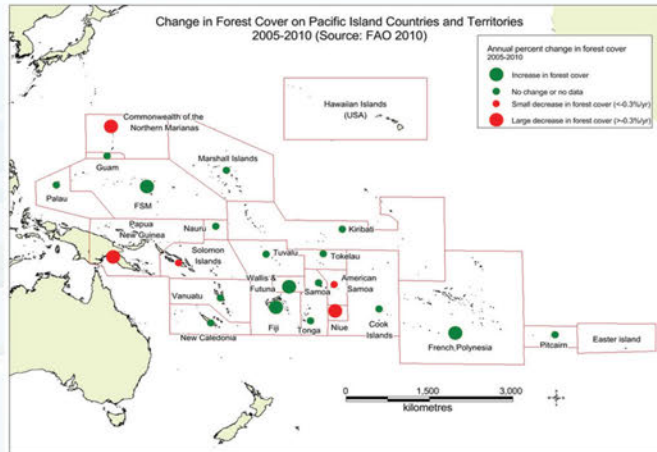
# State of Conservation in Oceania

For the 9th Pacific Islands Conference on Nature Conservation and Protected Areas, the Secretariat of the Pacific Regional Environment Programme (SPREP) commissioned an assessment of the status of biodiversity and conservation in Oceania. This comprehensive regional report summarises the key findings on the state of conservation in the 22 countries and territories of the Pacific islands region.

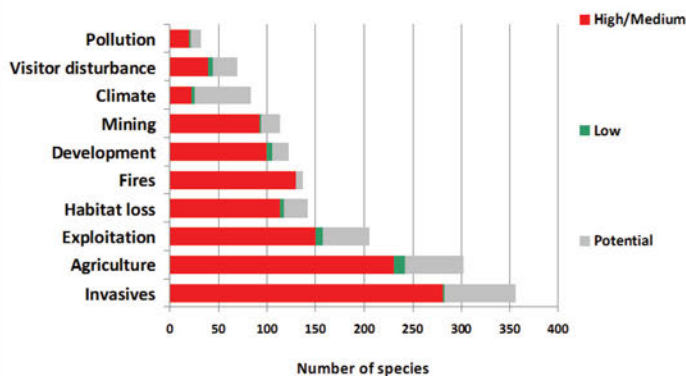


## Native forests

The rate of deforestation in the region as a whole has been higher than the global average since 1990 with 7.3% of the region's forest lost between 1990 and 2010. Commercial logging remains a major cause of deforestation in Melanesia, but less so in Polynesia and Micronesia. In many countries there has been a change in forest quality, as well as in forest area due to "open forests" and forests dominated by introduced invasive species.



Major pressures on native Pacific species with threat level

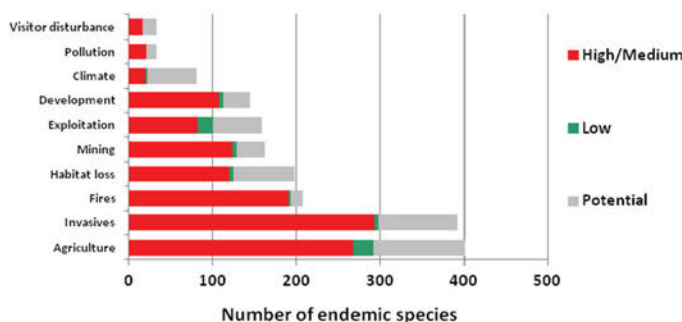


## Pressure on species

A variety of threats were observed to be impacting species. For terrestrial and freshwater species, invasive species impacted on the largest number of threatened species, followed by land-use change due to agriculture, farming and forestry activities and resource extraction.

In marine ecosystems, the greatest pressure comes from climate change (temperature rise and ocean acidification), eutrophication, physical disturbance, over-fishing, loss of habitat, sedimentation, competition and predation by crown-of-thorns starfish.

Major pressures faced by single country endemic species in the Pacific



Endemic species are those found only on one Pacific island, or one group of islands. As a result, they are particularly vulnerable to the consequences of human activity. More than 2,000 single country endemics have been recorded amongst the 22 Pacific island countries and territories. Of these, 115 are Extinct and 12 are Extinct in the Wild (exist only in captivity), and 45% are classified as Threatened (Critically Endangered, Endangered or Vulnerable).



# Regional Level Assessment

A set of indicators was used to assess the current state of conservation in the Pacific Islands of Oceania. From this analysis, it is clear that a number of actions should occur by 2020, not only to allow countries to meet their obligations under the Convention on Biological Diversity (CBD) and achieve the Aichi Targets, but also to ensure a region that retains its rich diversity of resources.

Maintaining ecosystem health and sustainability should be as fundamental a goal as economic development. The adoption of sustainable practices can empower local communities, help maintain the cultural richness of Pacific Ocean countries and territories, and reduce the human footprint on the Pacific.

## Summary of Indicator Assessments at Regional Level

ECOSYSTEMS			
	Indicator	Status	Trend
<b>Terrestrial</b> 	Forest Cover	State: Fair	State: Deteriorating
		Pressures and Threats: Fair	Pressures and Threats: Mixed
<b>Freshwater</b> 	Freshwater Ecosystems	State: Fair	State: Deteriorating
		Pressures and Threats: Fair	Pressures and Threats: Deteriorating
<b>Coastal</b> 	Mangroves	State: Fair	State: Improving
		Pressures and Threats: Fair	Pressures and Threats: Deteriorating
	Seagrasses	State: Fair	State: Deteriorating
		Pressures and Threats: Fair	Pressures and Threats: Deteriorating
<b>Marine</b> 	Coral Reefs	State: Fair	State: Mixed
		Pressures and Threats: Fair	Pressures and Threats: Mixed
	Ocean Health	State: Fair	State: Deteriorating
		Pressures and Threats: Fair	Pressures and Threats: Deteriorating
Utilised Species	Pressures and Threats: Fair	Pressures and Threats: Deteriorating	
SPECIES			
<b>Native Species</b> 	Threatened Species	State: Fair	State: Unknown
		Pressures and Threats: Fair	Pressures and Threats: Mixed
	Endemic Species	State: Fair	State: Unknown
		Pressures and Threats: Fair	Pressures and Threats: Mixed
Migratory Marine Species	Pressures and Threats: Fair	Pressures and Threats: Deteriorating	
Invasive Species	Pressures and Threats: Poor	Pressures and Threats: Deteriorating	
RESPONSE			
<b>Governance</b> 	Multilateral Environmental Agreements and Regional Policies and Frameworks	Fair	Improving
	National Policies and Legislation and NBSAPs	Poor	Improving
	Traditional Governance	Good	Improving
<b>Conservation Initiatives</b> 	Conservation Initiatives	Fair	Improving
	Protected Area Coverage	Poor	Improving



# Protected Areas

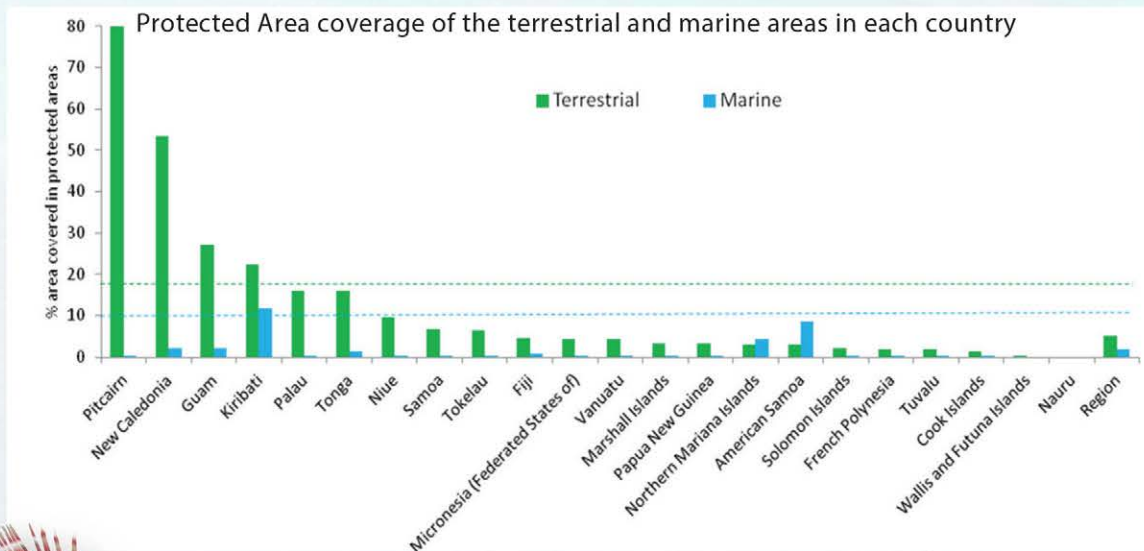
The establishment of protected areas is a key mechanism for countries to conserve their biodiversity. The traditional approach to conservation in Oceania, in the form of community managed areas, also plays a fundamental role in the conservation of biodiversity in the Pacific and will continue to do so.

Under Aichi Target 11, Parties to the CBD have committed to expanding protected areas (and other effective area-based mechanisms) to cover 17% of the terrestrial surface and 10% of the marine surface, "especially areas of particular importance for biodiversity".



## Terrestrial areas

Oceania has a total land area of approximately 559,591km<sup>2</sup>. Protected terrestrial areas cover 27,805 km<sup>2</sup> of this land, or 5% of the total land across the region. Only four countries have reached the terrestrial target set out under the international CBD Aichi Target 11: Pitcairn Islands (81%), New Caledonia (51%), Guam (27%) and Kiribati (22%). Five countries have a negligible proportion (<2%) of their land protected.

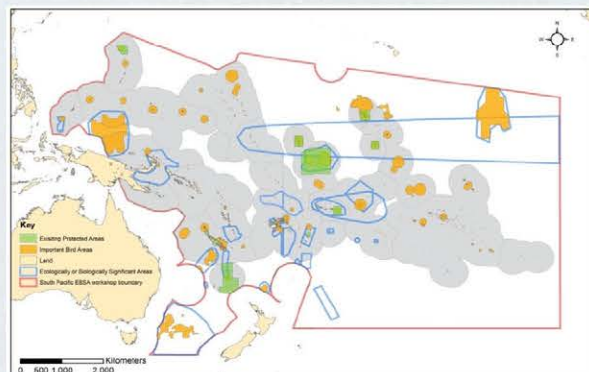


## Marine areas

Oceania has an area of ocean of approximately 62,761,420km<sup>2</sup> including international waters or 28,645,345km<sup>2</sup> of Exclusive Economic Zones (EEZs). In 2013, Protected Marine Areas cover 575,857 km<sup>2</sup> of this area (less than 2%). Only Kiribati has exceeded the marine target set out under CBD Aichi Target 11, with 12% of its territorial waters protected. Most countries and territories (17 out of 22) have a negligible proportion (<2%) of their territorial waters protected.

In the Pacific islands, 26 Ecologically or Biologically Significant Marine Areas (EBSAs), with a combined area of 13,755,764 km<sup>2</sup>, have been identified (see map on right).

EBSAs are marine areas in need of protection in open-ocean waters and deep-sea habitats. The majority of overlap with more than one country and cross international waters.





# Priority Areas in the Pacific Islands Region

The establishment of protected areas is a key mechanism for countries to conserve their biodiversity. Priority sites are now being identified throughout Pacific island countries and territories and these are highlighted in the State of Conservation in Oceania report.

**Alliance for Zero Extinction (AZE)** sites are a joint initiative of biodiversity conservation organisations from around the world. They aim to prevent extinctions by identifying and safeguarding key locations.

The **Key Biodiversity Areas (KBA)** identify networks of marine and terrestrial sites that are critical for the conservation of globally important biodiversity.

**Important Bird Areas (IBAs)** use birds to select key sites for conservation, identifying sites that are directly important for bird conservation, and which therefore represent potentially high priorities for formal protection and conservation actions. Birds have been shown to be extremely good indicators of overall biodiversity.

**Ecologically or Biologically Significant Marine Areas (EBSAs)** are marine areas with significant open-ocean water and deep-sea habitats. EBSAs are identified due to their rarity; special importance for threatened, endangered or declining species and/or habitats; vulnerability, fragility, sensitivity, or slow recovery; biological productivity and biological diversity.

Country	AZE coverage in km <sup>2</sup> (number)	IBA coverage in km <sup>2</sup> (number)		Number of identified KBAs		EBSA coverage in km <sup>2</sup> (number)	Terrestrial area (km <sup>2</sup> )	Territorial marine area (km <sup>2</sup> )
		Terrestrial	Marine	Terrestrial	Marine			
American Samoa	0	194 (4)	18,416 (4)	11	27	-	199	434,503
Cook Islands	0	190 (8)	63,056 (2)	0	0	1,239,252 (5)	240	1,972,850
Federated States of Micronesia	73 (2)	186 (18)	2,519,693 (7)	52	-	580,420 (4)	816	3,011,942
Fiji	556 (5)	3,116 (22)	57,023 (10)	13	5	-	18,274	5,229,493
French Polynesia	331 (7)	850 (33)	218,100 (19)	11	27	-	3,829	4,767,242
Guam	0	46 (2)	-	-	-	-	561	4,586
Kiribati	16 (1)	688 (13)	340,628 (11)		1	750,026 (1)	1031	3,459,400
Marshall Islands	0	206 (6)	107,174 (4)	3	4	0	279	2,004,580
Nauru	0	0	0	0	0	0	23	310,524
New Caledonia	892 (5)	3,708 (38)	162,900 (14)	25	12	-	19,139	1,421,719
Niue	0	54 (1)	0	0	0	0	268	318,244
Northern Mariana Islands	49 (1)	0	0	0	0	-	483	25,502
Palau	-	244 (8)	11,910 (2)	5	2	811,243 (2)*	501	608,154
Papua New Guinea	4,239 (7)	0	0	7		(2) 1,192,749*	469,806	664,750
Pitcairn Islands	52 (2)	75 (4)	-	3	-	-	41	839,480
Samoa	767 (1)	1,004 (6)	-	7	173 (7)	-	2,894	132,297
Solomon Islands	1,366 (5)	660 (1)	800 (1)	5	-	-	29,188	1,607,263
Tonga	0	(6)		4	-	177,221*	769	89,968
Tokelau	0	0	0	0	0	0	10	370,64
Tuvalu	0	0	0	0	0	0	26	900,000
Vanuatu	326 (1)	0	0	0	0	107,380 (1)	12,189	642,816
Wallis & Futuna	0	0	0	1	-	-	180	259,769
High Seas	-	n/a	1,240,000 (16)					34,116,075
EEZs								28,645,345
<b>TOTAL ACROSS REGION</b>	<b>8,666 (37)</b>	<b>5745</b>	<b>1,415,610</b>	<b>147</b>	<b>251</b>	<b>4,858,291</b>	<b>546,220</b>	<b>91,031,999</b>

\*Includes multi-country EBSAs  
- denotes no information available or not applicable



# Species Protection

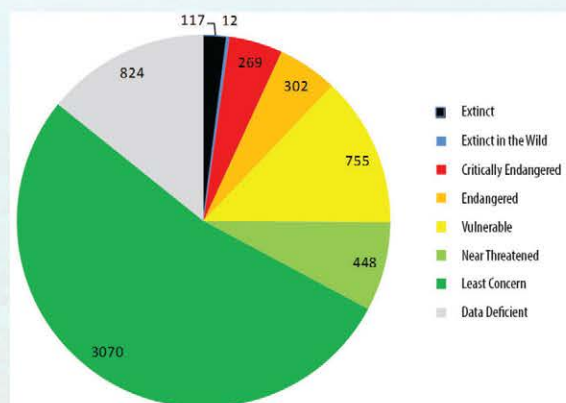
The Pacific islands of Oceania are characterised by a high degree of ecosystem and species diversity. The region contains thousands of isolated small coral atolls and higher volcanic islands, which has led to the high diversity of species found today. Extinction rates are disproportionately high on islands - 80% of all known species extinctions have occurred on islands.

The Melanesian island nations of Papua New Guinea, the Solomon Islands, New Caledonia, Vanuatu and Fiji are the most species rich countries, and also contain a high proportion of endemic species. The western Micronesian islands, which are closer to Papua New Guinea and other islands of Melanesia, tend to be more species rich than the isolated islands in the eastern parts of Polynesia; this equates to a much higher species biodiversity in Melanesia compared to the true islands in the east of the region, which contain proportionately more endemic species because of their isolation. The smaller low-lying nations such as Kiribati, Nauru, Niue, Tokelau and Tuvalu are generally less diverse and have fewer species.

## IUCN Red List species in the Pacific

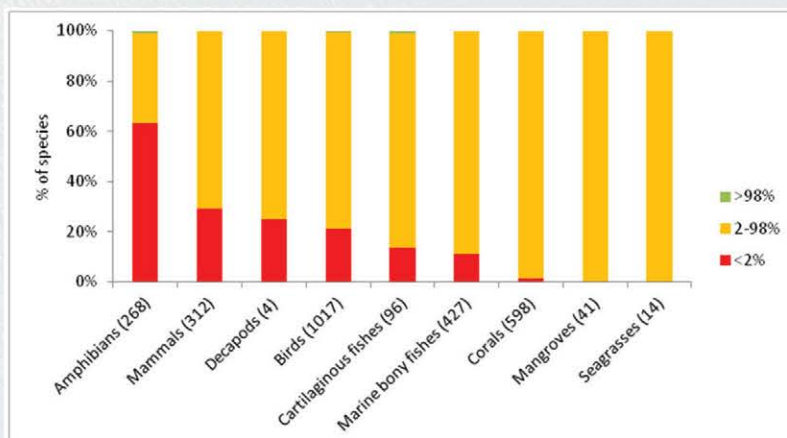
The current distribution, status, and extinction risk of species found in Oceania, were examined according to the IUCN Red List of Threatened Species Categories and Criteria.

The 2013 Red List includes assessments for 5,797 species found in the Pacific Islands. The Red Listed Species are grouped by Category (in Figure on right).



## Species groups and levels of coverage by protected areas

Spatial data on the distribution of individual species are available for nine taxonomic groups, comprising 2,777 species of mammals, birds, amphibians, marine bony fishes, cartilaginous fishes, corals, decapods, mangroves and seagrasses.



Note: Figures in parentheses indicate number of species

Protected areas in the region provide very little coverage for these species (Figure on left). Only 1% or less of birds, amphibians and cartilaginous fishes have their distributions completely covered by protected areas. While some species are partially protected, 63% of amphibians, 29% of mammals, 25% of decapods and 21% of birds are completely unprotected by any formal protected areas in the region.

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VISION: The Pacific environment - sustaining our livelihoods and natural heritage in harmony with our cultures

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