REVIEW OF THE PROTECTED AREAS SYSTEM IN OCEANIA

Annex

OCEANIA ISLAND LIST

Prepared for

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by

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Annex: Oceania Island List

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OCEANIA ISLAND LIST

Introduction

This list includes over a thousand of the significant islands of Oceania. It has been designed both to summarize what is known (or at least is readily available) concerning each island, and also to indicate gaps in knowledge that need to be filled in. Headings without any data indicate where more such information is desirable.

Previous compilations have listed islands from south to north, north to south, or even in circular fashion. This list tries as far as possible to list islands from north to south and from west to east (although some parts of Papua New Guinea do not follow this pattern). The islands are grouped by biogeographic provinces as described in the Regional Ecosystems Survey (Dahl, 1980), although the order of the provinces has been rearranged to keep all the islands in the same country together even when included in more than one province. Some appropriate information on each country or territory, such as the land area, sea area within the exclusive economic zone, population, population density and estimated growth rate (based in most cases on statistics from the South Pacific Commission, 1984) is provided under the country heading at appropriate places in the island list.

Where information was available only on a country or island group basis, it has been included at the beginning of the country or island group. Remember that such information may need to be added to that listed under specific islands within the group, although group information does not necessarily apply to all islands within the group.

Kinds of information

Several kinds of information were collected for the list when they were available:

a) Basic descriptive information on each island, such as its area (in square kilometres) and maximum altitude or elevation (in metres), and the island type (continental, volcanic, atoll, low island, raised coral limestone, or some combination of these).

b) The major natural threats which could endanger an already vulnerable population or feature, such as cyclones (hurricanes or typhoons); volcanic eruptions; earthquakes, tsunamis (tidal waves), landslides and other effects of geological instability; severe drought; and susceptibility to major fires.

c) The human population (with the year of the census or estimate), types of development, urban areas and other indicators of human impact on the island. In the absence of a population figure, an island should be assumed to be inhabited unless otherwise stated.

d) A brief list of the major ecosystem types or biomes on and around the island, where this information was available. For some areas these data are very incomplete, and the failure to mention an ecosystem does not mean that it is not present, but only not recorded.

e) Features of special interest for conservation, such as seabird rookeries, sea turtle nesting areas, lakes or other unusual habitats, active volcanoes, and other information on the island's conservation importance.

f) Information on introduced or feral species known to cause major conservation problems.

g) The size and diversity of the flora and fauna, such as the total numbers of species, at least in the best-known groups, where such figures were available.

h) The numbers of endemic species (those species occurring only on a particular island or island group) and/or the percent endemism in the different plant and animal groups, as a convenient measure of evolutionary interest or uniqueness.

i) The scientific and common names of endemic species and other species of conservation interest, with brief information on their habitats and population sizes, and their status (Endangered, Vulnerable, Rare, Indeterminate, or K - insufficiently known). The status is capitalized if determined by the IUCN Conservation Monitoring Centre or indicated in a Red Data Book, and in lower case if obtained from other sources. An asterisk (*) after the name shows that there is some question concerning the taxonomic status of the species. For Papua New Guinea, time and space did not permit including complete lists of threatened species such as the bird list by Schodde (1978).

j) The names of protected areas on the island, with their IUCN category if known, and their land area in hectares. If the protected area is wholly or partly marine, the sea area is shown in parentheses () and not included in the totals. Further information on these areas is available in the IUCN Directory of Protected Areas in Oceania (IUCN CMC, 1985a). Recent official proposals for protected areas are also listed for some countries.

For islands with some demonstrated conservation interest, the entry in the island list is concluded with a series of ratings used to evaluate certain island characteristics. These include the natural conservation status or protection provided by the island's inherent situation, the ecosystem richness reflecting the number of types of ecosystems present, the species richness based on the number of species, the economic pressure related to the level of development and material lifestyle of the population, the human threat measuring the pressure of the people on the land and resources, the natural vulnerability based on the kinds of risks of natural catastrophes, the practicality of conservation action related to the factors facilitating the creation of parks and reserves, the reliability of the data on which the listing and evaluation are based, and two composite ratings for the potential for human impact on the island, and for the conservation importance of the island. The details of the basis for and calculation of all of these ratings are given in the Appendix to the main report. The ratings are intended to put the largely qualitative information about the islands into a form permitting some comparisons between and rankings of the islands of the region.

Problems with the data

This list is a preliminary attempt to synthesize so much information on an island by island basis in Oceania. As such it contains many weaknesses, and the results should be used with suitable caution.

a) The quantity of available information is highly variable from one part of the region to another, and even from one island to another. A few islands happen to have been studied in detail, perhaps by some scientific expedition, while others may never have been visited by a scientist. For many islands in Papua New Guinea, for instance, there was not even basic descriptive information in the sources available. Inevitably the better known islands stand out in such a regional survey, and this may in part be an artifact of the data available.

b) The region is still rather poorly known scientifically, partly because work on one island cannot be easily generalized to others. New species are still being discovered in obvious and well-known groups such as birds and reptiles. Other groups such as some types of insects have hardly been looked at at all.

c) Information on species was often only available at larger geographic scales such as island groups, countries or biogeographic provinces. This can make it difficult to know what specifically occurs on any given island. The regional distribution of many species is known or mapped, but islands are sufficiently variable that it is not possible to assume that a species occurs there just because the island is within the species' known range. Distributions can be highly irregular or spotty depending on chance dispersal or local conditions.

d) The data may be patchy in different ways. An island may be well known for birds or land snails, but hardly at all botanically, or vice versa. This can have a particular effect on measures such as the percent endemism, which may vary greatly from one type of organism to another. Hopefully this list will help to identify such gaps and encourage others to fill them.

e) The cross-checking of data from different sources revealed many errors, to the point that it sometimes seemed doubtful that the same island was being described. Even figures such as the island surface area or altitude differed by up to 50%. The type of island or the existence of specific features also sometimes varied between sources. Some errors were obviously typographical or due to incorrect (or even double) conversion between units of measure. In other instances the alternate figures have been included in parentheses in the list to show that a doubt needs to be resolved, as it was seldom possible to determine which source of information was correct. Unfortunately errors such as these tend to be perpetuated from one compilation or study to another, and some have probably been unwittingly carried over into this one where cross-checking with authoritative sources was not possible.

f) Much of the available information is seriously out of date. No island stays still in time, and conditions or features may change from the time when they were described. Many sources fail to give the dates for their data, and old information may be assumed to be current. Much island information dates from expeditions early in this century, or from World War II, and it should be confirmed or revised from up-to-date surveys before using it as the basis for important decisions or conservation actions. Dates have been added where

known to the types of information in the island list where this may be critical, as with population figures or the status of a species.

In spite of all these problems and sources of error, it should be possible to have reasonable confidence in the overall content of the list and the results of the review and analysis based on it. Enough different types of information have been brought together to diminish the impact of any single error or data variable.

OCEANIA ISLAND LIST - MODEL FORMAT

Province Number
PROVINCE NAME

Group information:
Species of conservation interest
Plants, etc. (Names) reported for island group

COUNTRY NAME (Status)

Land area in km^2 Sea area in km^2
Population 00,000 (year) Density in persons/km^2 Growth rate (est.) 0.0%/yr

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Island Group
Island Name (Former Name)
Area sq. km Altitude m
Island type:
Natural threats:
Human impact:
Ecosystems:
Special features:

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	0	0	0%	0	0
Insects					
Other invert.					
Rept-Amph.					
Birds	0	0	0%	0	0
Mammals					
Marine life					

Species of conservation interest
Plants
Genus species (Common Name) endemism, habitat, Status, population.
Insects
Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life
Protected areas
Name (IUCN category) size ha
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 0
Practicality of conservation action 0
Reliability of data 0
Human Impact 0
Conservation Importance 00

Province XII
MARIANA ISLANDS

The Mariana Islands include both the Northern Mariana Islands and the largest and most southerly island of Guam which is a separate United States territory.

Species of conservation interest

Plants

64 native ferns, 3 endemic; 1 native cycad

478 dicotyledon taxa, 221 natives, 78 endemics, including:

Serianthes nelsonii (Leguminosae) endemic to Guam and Rota, Endangered (RDB)

Heritiera longipetiolata (Sterculiaceae) group endemic, Endangered (RDB)

Tabernaemontana rotensis endemic to Rota and Guam, rare

Insects

2 butterflies

Other invertebrates

4 Partulidae (land snails)

Reptiles-amphibians

10 species, 1 endemic (not including Guam)

Birds

111 species, 28 resident, 5 introduced (not including Guam)

Anas oustaleti (Marianas Mallard) group endemic, southern Marianas (extinct on Guam), Endangered (RDB) *

Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB)

Gallinula chloropus guami (Marianas Gallinule or Common Moorhen) group endemic subspecies, Pagan, Saipan, Tinian, Guam, Rare (RDB)

Ptilinopus roseicapilla (Marianas Fruit Dove) group endemic, Guam, Rota, Tinian, Saipan, Aguijan, Vulnerable (RDB)

Corvus kubaryi (Marianas Crow) group endemic, Rota and Guam, Endangered

Acrocephalus luscinia (Nightingale Reed Warbler) Marianas, Carolines and Nauru, extinct on Guam and uncommon on Saipan

Mammals

Pteropus mariannus mariannus (Marianas Fruit Bat) group endemic

Marine life

1 endemic soft coral

3 endemic gastropods on southern islands

2 endemic fish

COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS (United States Commonwealth)

Land area 471 km^2 Sea area 1,823,000 km^2
Population 17,600 (1981) Density 37 persons/km^2 Growth rate (est.) 4.4%/yr

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Northern Mariana Islands

Farallon de Pajaros (Uracas)

Area 2 sq. km Altitude 319 m
Island type: high volcanic cone
Natural threats: volcanic eruptions, cyclones
Human impact: uninhabited, seldom visited
Ecosystems: recent colonisers of fresh volcanic material
Special features: active volcano, several recent eruptions including 1943; seabird rookery.

Maug Islands

Area 2 sq. km Altitude 227 m
Island type: 3 islet remnants of volcanic cone, North (227 m), East (215 m) and West (178 m), with steep cliffs of columnar basalt; submerged coral limestone terrace at 25 m depth off West Island.
Natural threats: cyclones
Human impact: former Japanese weather station and fish processing plant 1939-1944; otherwise uninhabited since 1695.
Ecosystems: scrub and grasses, coconuts on East Island; rocky shore and lagoon with algal mat and scattered corals; fringing reef off West Island.
Special features: seabird rookery; proposed as marine sanctuary
Species of conservation interest
Plants
59 species including several group endemics but no island endemics
Lysimachia mauritiana
Insects
Other invertebrates
Reptiles-amphibians
Birds
11 seabirds, 2 shore birds, 3 land birds:
Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB)
Aplonis opaca aeneus (Micronesian Starling) subspecies endemic to northernmost Mariana Islands
Halcyon chloris owstoni (White-collared Kingfisher) subspecies endemic to the northernmost Mariana Islands
Mammals
Pteropus mariannus (Marianas Fruit Bat) group endemic
Marine life
232 fish species, 130 invertebrate species including 24 opisthobranchs, 60 algae
Protected Area:
Protected under the constitution (strict nature reserve I) 200 ha
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 2
Human Impact 0
Conservation Importance 15

Ascuncion Island

Area 7?sq. km Altitude 891 m
Island type: high volcanic cone, radially dissected
Natural threats: volcanic eruptions, cyclones
Human impact: coconut plantations on lower slopes, visited occasionally
Ecosystems: rain forest in ravines, grasslands and fernlands on upper slopes
Special features: active volcano; best forest development in northern islands, of considerable conservation interest; proposed as marine sanctuary.
Species of conservation interest
Plants
new endemic tree
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius lapcrouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB), locally not threatened by introduced predators
Mammals
Marine life
Ratings
Natural conservation status 3
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 2
Practicality of conservation action 2
Reliability of data 2
Human impact 0
Conservation Importance 19

92 **Agrihan** 400

Area 47 sq. km Altitude 965 m
Island type: high volcanic cone, radially dissected
Natural threats: cyclones, volcano
Human impact: small resident population; coconuts, lower slopes cultivated
Ecosystems: rain forest in ravines, Miscanthus grasslands on upper slopes
Special features: dormant volcano; forest of conservation interest, summit unexplored botanically.
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB)
Gallinula chloropus guami (Marianas Gallinule or Common Moorhen) group endemic subspecies, Pagan, Saipan, Tinian, Guam, Rare (RDB), local status unknown.
Mammals
Marine life

Ratings
Natural conservation status 1
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 2
Practicality of conservation action 2
Reliability of data 2
Human Impact 1
Conservation Importance 15

199 ~ Pagan

Area 48 (46.6) sq. km Altitude 570 (529) m
Island type: cluster of volcanoes, linked by lava and ash
Natural threats: volcanic eruptions (1981), cyclones
Human impact: small population, some cultivation
Ecosystems: light forest and scrub, grasslands, swamp
Special features: active volcanoes with eruption continuing since 1981; freshwater lake with hot sulfur springs, brackish lake; some forest of conservation interest; proposed as marine sanctuary.
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB)
Gallinula chloropus guami (Marianas Gallinule or Common Moorhen) group endemic subspecies, Rare (RDB)
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 2
Practicality of conservation action 1
Reliability of data 1
Human Impact 1
Conservation Importance 14

✓ Alamagan

Area 11 sq. km Altitude 744 m
Island type: high volcanic
Natural threats: cyclones, volcano
Human impact: small resident population
Ecosystems: rain forest on lava flows, grasslands on ash slopes, tree ferns on upper slopes.
Special features: dormant volcano; upper slopes of conservation interest
Species of conservation interest
Plants
Cyathea alamagensis (tree fern) group? endemic
Styphelia mariannensis only Micronesian locality
Insects

Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, probably present, Rare (RDB)
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 1
Conservation Importance 13

✓ Guguan

Area 4 sq. km Altitude 301 m
Island type: 2 volcanic cones, deep ravines, coastal cliffs
Natural threats: volcanic eruptions, cyclones
Human impact: uninhabited
Ecosystems: northern cone bare cinders and other volcanic material, southern cone with lowland rain forest.
Special features: 1 active and 1 dormant volcano; seabird rookery; proposed as marine sanctuary.
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB), possibly present
Mammals
Marine life
Ratings
Natural conservation status 3
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 2
Practicality of conservation action 2
Reliability of data 1
Human Impact 0
Conservation Importance 17

✓ Sarigan

Area 4.9 sq. km Altitude 549 m
Island type: volcanic cone, radially dissected, coastal cliffs
Natural threats: cyclones
Human impact: formerly inhabited
Ecosystems: rain forest in ravines, Miscanthus grassland on upper slopes
Special features: archaeological sites; feral goats and pigs; proposed as marine sanctuary.

Species of conservation interest
Plants
128 species recorded
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB) 10-15 reported 1978
Mammals
Marine life
Protected area
Protected under the constitution (strict nature reserve, 1)500 ha
Ratings
Natural conservation status 2
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 1
Human Impact 0
Conservation Importance 15

97 ✓Anatahan 30.9 787
Area 32 sq. km Altitude 788 m
Island type: high volcanic cone, dissected with ravines and ridges
Natural threats:cyclones
Human impact: disturbed by Japanese colonists and W.W.II military activities; small resident population.
Ecosystems: rain forest, grassland on upper slopes
Special features: crater with grassy floor and intermittent lake; forest of some conservation interest.
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB), possibly present
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 1
Conservation Importance 13

✓ Farallon de Medinilla

Area 0.9 sq. km Altitude 81 m
Island type: raised coral ridge with flat top, coastal cliffs and chasm between two parts.
Natural threats: cyclones
Human impact: uninhabited; formerly totally undisturbed; used as a military bombing range since 1971.
Ecosystems: limestone scrub
Special features: signs of frequent landslides

✓ Saipan

Area 122.9 sq. km Altitude 474 m
Island type: high volcanic surrounded by raised coral platforms
Natural threats: cyclones
Human impact: pop. 12,366 (1973); heavily colonized and cultivated by Japanese 1914-1944; stripped of vegetation by W.W.II fighting; reseeded with Acacia; former administrative centre of U.S. Trust Territory, population centre and capital of Northern Marianas.
Ecosystems: scrub and secondary vegetation of Acacia confusa, Casuarina and coconuts; grasslands; possibly cloud forest on Mt. Tapachau; many introduced species.
Special features: Lake Susepe; enclosed marine grotto; green turtle nesting on Tanapag beach; Tanapag Lagoon proposed as marine sanctuary.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		1			
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds

- Anas oustaleti (Marianas Mallard)* group endemic, Lake Susupe and mangrove area north of Garapan, Endangered (RDB), not sighted since 1979.
- Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB), possible recolonization in late 1970s.
- Gallinula chloropus guami (Marianas Gallinule or Common Moorhen) group endemic subspecies, Lake Susupe, Rare (RDB), 2 reported on Lake Susupe (1975).
- Cleptornis marchei (Golden Honeyeater) endemic
- Acrocephalus luscinia luscinia (Nightingale Reed Warbler) 6 colonies at Lake Susupe, uncommon
- Ptilinopus roseicapilla (Marianas Fruit Dove) group endemic, Guam, Rota, Tinian, Saipan, Vulnerable (RDB), uncommon locally (1977).

Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1

Economic pressure 1
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 7
Conservation Importance 16

Tinian

Area 102 sq. km Altitude 170 m
Island type: raised coral
Natural threats: cyclones
Human impact: pop. 714 (1973); formerly heavily cultivated by Japanese; some cultivation; large airstrip; proposed military development.
Ecosystems: limestone forest and scrub, mostly secondary growth; many introduced plants.
Special features: small Lake Hagoi in centre; important archaeological sites; patch reef south of harbour proposed as marine sanctuary.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		1			
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Gallinula chloropus guami (Marianas Gallinule or Common Moorhen) group endemic subspecies, Lake Hagoi and Marpo Swamp, Rare (RDB), only 1 observed locally (1974).
Monarcha takatsukasae (Tinian Monarch) endemic
Ptilinopus roseicapilla (Marianas Fruit Dove) group endemic, Guam, Rota, Tinian, Saipan, Vulnerable (RDB), rare on Tinian
Anas oustaleti (Marianas Mallard)* group endemic, Endangered (RDB), possibly present, Lake Hagoi.
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 1
Conservation Importance 14

✓ Aguijan

Area 7 sq. km Altitude m
Island type: steep cliffs to north
Natural threats: cyclones
Human impact: visited occasionally
Ecosystems:
Special features: feral goats and pigs; proposed as marine sanctuary
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Acrocephalus luscinia rigor (Nightingale Reed Warbler)
Ptilinopus roseicapilla (Marianas Fruit Dove) group endemic, Vulnerable (RDB).
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 0
Conservation Importance 9

87 ✓ Rota 95.7

Area 85 sq. km Altitude 491 m
Island type: high volcanic surrounded by raised coral terraces
Natural threats: cyclones
Human impact: pop. 1,104 (1973); market gardening
Ecosystems: rain forest on upper terraces with rare and endemic plants; grasslands and scrub on volcanic slopes; fringing reef.
Special features: vegetation of considerable conservation interest; parts of fringing reef and submarine terrace proposed as marine sanctuary.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		1			
Mammals					
Marine life					

Species of conservation interest
Plants
Serianthes nelsonii (Leguminosae) endemic to Rota and Guam, Endangered (RDB)
Tabernaemontana rotensis, rare on Rota, one tree on Guam
Hernandia labyrinthica group endemic, rare
Boerlagiodendron sp., group endemic
Heritiera longipetiolata (Sterculiaceae) group endemic, Endangered (RDB)
Xylosoma nelsonii Rota and Guam

Insects
Other invertebrates
Reptiles-amphibians
Birds

Ptilinopus roseicapilla (Marianas Fruit Dove) group endemic, Guam, Rota, Tinian, Saipan, Vulnerable (RDB), common locally (1977).

Zosterops conspicillata rotensis (Rota Bridled White-eye) endemic subspecies, forest on Sabana plateau, Indeterminate (RDB)

Corvus kubaryi (Marianas Crow) endemic to Rota and Guam, Endangered (RDB), less than 100 (1976).

Mammals
Marine life

Ratings

Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 2
Conservation Importance 17

GUAM (Unincorporated Territory of the United States)

Land area 541 (402, 450) km^2 Sea area 218,000 km^2
Population 107,000 (1981) Density 197 persons/km^2 Growth rate (est.) 2.0%/yr

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Guam

Area 541 sq. km Altitude 393 m
Island type: raised coral in north (152 m); old weathered volcanic in south
Natural threats: cylcones
Human impact: heavy damage during W.W.II; extensive urban development around Agana and elsewhere; major military bases; some agriculture.
Ecosystems: lowland rainforest on limestone with considerable endemism (remaining fragment along extreme northern rim); some ravine and beach forests; possible cloud forest on Mt. Lamlam; savanna and grasslands, scrub; poor mangroves; marsh, reed swamp and other aquatic habitats; fringing reef, lagoons and barrier reef (CRD).
Special features: Lake Fena (man-made); seabird rookeries at Anae islet and Orote Point; former sea turtle nesting beaches; caves in south with endangered swiftlet; feral pigs and other domestic animals, introduced giant African snail (Achatina fulica), elk, monitor lizard (Varanus indicus) and Philippine Rat Snake (Boiga irregularis, 1947) with effects on native flora and fauna.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	330	20	6%	2	
Insects	15	1	7%		
Other invert.	9				
Rept-Amph.	10	1	10%		4
Birds	12	2	17%	3	
Mammals	4	1	25%	2	1
Marine life					

Species of conservation interest

Plants

931 [or 550] species of flowering plants and ferns, of which at least 330 are native, 69 are endemic to the Mariana Islands; 20 endemics and more than 30 non-endemics threatened on Guam, including:

- Serianthes nelsonii (Leguminosae) endemic to Guam and Rota (4 remaining trees on Guam), Endangered (RDB)
- Heritiera longipetiolata (Sterculiaceae) group endemic, Endangered (RDB)
- Tabernaemontana rotensis (Apocynaceae) one remaining tree on Guam
- Hernandia ovigera (Hernandiaceae)
- Merrilliodendron megacarpum (Icacinaceae) known from two areas
- Xylosoma nelsonii (Flacourtaceae)
- Fagraea galilai (Loganiaceae) two sites including Mt. Lamlam
- Solanum guamense few plants known
- Ceratopteris gaudichaudii from freshwater areas
- Potamogeton mariannensis from freshwater, Cotal area

Insects

15 species of butterfly, 1 only on Guam

Neptis guamensis endemic, not seen since type collection in 1916

Other invertebrates

9 native land snails, including 4 Partulidae (tree snails):

- Partula gibba
- Partula salifana
- Partula radiolata
- Samoana fragilis

Reptiles-amphibians

Ramphotyphlops (?) pseudosaurus (Typhlopidae) endemic?

Birds

95 species, 17 resident, 7 introduced

12 indigenous terrestrial bird species, 2 endemic

- Rallus owstoni (Guam Rail) endemic, Vulnerable (RDB), fewer than 100 (1984), declining.
- Ptilinopus roseicapilla (Marianas Fruit Dove) group endemic, northwest forest, Vulnerable (RDB), estimate of 241 on Guam (1981).
- Myiagra freycineti (Guam Flycatcher or Broadbill) endemic, endangered, fewer than 100 (1983).
- Gallinula chloropus guami (Marianas Gallinule or Common Moorhen) group endemic subspecies, Rare (RDB), 100-200 (1983)
- Gallicolumba xanthonura xanthonura (White-throated Ground Dove), 150-200 (1983).
- Aerodramus vanikorensis bartshi (Vanikoro Swiftlet), less than 50 (1983).
- Halcyon cinnamomina cinnamomina (Guam Micronesian Kingfisher) endemic subspecies, Endangered (RDB) or vulnerable, conflicting reports of 3000 or 250-300 remaining (1982-83).
- Rhipodura rufifrons uraniae (Rufous-fronted Fantail), less than 200 (1983).

Zosterops conspicillata conspicillata (Bridled White-eye), vulnerable, less than 50 (1984).
Myzomela cardinalis saffordi (Cardinal Honeyeater), estimated 250-300 (1983).
Aplonis opaca guami (Micronesian Starling), 1000 birds (1983).
Corvus kubaryi (Mariana Crow) Endangered (RDB), 150-200 birds (1983).

at least 4 bird species or subspecies are now extinct on Guam

Mammals

Pteropus marianus marianus (Mariana Fruit Bat) endangered by poaching.
Pteropus tokudae (Little Marianas Fruit Bat) only in northern mature forest, may be extinct
Emballonura semicaudata (Sheath-tailed Bat) may be extinct
Dugong dugon (Dugong), Vulnerable (RDB), very rare locally

Marine life

Protected areas

Anao Conservation Reserve	263 ha
Pati Point Natural Area	112 ha
Haputo Ecological Reserve Area (102 ha including reef and coastal waters)	73 ha
Orote Peninsula Ecological Reserve Area (66 ha including water area)	12 ha
Masso River Reservoir Area	67 ha
Guam Territorial Seashore Park (V) (6,075 ha including reef and coastal waters)	3,645 ha
War in the Pacific National Historical Park (V) (779 ha including water and coral reef areas)	374 ha

Ratings

Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 2
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 3
Human Impact 9
Conservation Importance 27

Province XIII
CAROLINE ISLANDS

The Caroline Islands were all formerly part of the United States Trust Territory of the Pacific Islands under the United Nations. Their present political evolution is leading to two separate countries, the Republic of Belau and the Federated States of Micronesia, both retaining ties of free association with the United States. While the United Nations trusteeship had still not been terminated officially (as of early 1986), the new entities already function in fact.

Species of conservation interest

Plants
- 201 native ferns, 26 endemic; 1 native cycad
- 922 dicotyledons, including 609 native taxa, 267 endemics, 4 listed as endangered.

Insects

Other invertebrates
- important land snail genera

Reptiles-amphibians
- 24 species including 4 endemics, 1 endemic genus

Birds
- Gallicolumba kubaryi (Caroline or Truk Islands Ground Dove) group endemic, Pohnpei and Truk
- Aerodramus vanikorensis (Island Swiftlet)*, Belau, Truk, Pohnpei, Kosrae.

Mammals

Marine life 300 species of coral

REPUBLIC OF BELAU [PALAU] (in free association with the United States)

[The new spellings of Belau and its place names are gradually coming into official usage, although Palau is still retained in some international contexts.]

Land area 494 km^2 Sea area 629,000 km^2
Population 12,400 (1981) Density 25 persons/km^2 Growth rate (est.) -0.3%/yr

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Belau (Palau Islands)

Species of conservation interest

Plants
- rich flora, many endemics including:
- Gulubia palauensis (Rock Island Palm) group endemic
- Ptychosperma palauensis (Belau Palm) group endemic

Insects
- 2 butterflies

Other invertebrates
- Videna spp. (Trochomorphidae, land snails), remarkable species radiation.
- 3 Partulidae (tree snails)

Reptiles-amphibians
- endemic species of ranid frog
- Aulacoplax leptosoma (Scincidae, Pandanus Skink) monospecific genus, group endemic
- Crocodylus porosus (Estuarine or Saltwater Crocodile), Endangered

Eretmochelys imbricata (Hawksbill Turtle) common
Dermochelys coriacea (Leatherback Turtle) common

Birds

149 species, 43 resident, 4 introduced (including outer islands)
31 land birds, including 8 endemics
Gallicolumba canifrons (Belau Ground Dove) group endemic, endangered
Ptilinopus pelewensis (Belau Fruit Dove) group endemic
Pyrroglaux podargina (Belau Scops Owl) group endemic, endangered
Psamathia annae (Belau Bush Warbler) group endemic
Myiagra erythrops (Belau Broadbill or Mangrove Flycatcher) group endemic
Rhipidura lepida (Belau Fantail) group endemic
Pitohui tenebrosus (Morning Bird) group endemic
Megazosterops palauensis (Belau White-eye) monospecific genus, group endemic
Anas superciliosa pelewensis (Belau Grey Duck) group endemic subspecies, endangered
Megapodius laperouse senex group endemic subspecies, Rare (RDB)
Caloenas nicobarica pelewensis (Belau Nicobar Pigeon) group endemic subspecies, Endangered (RDB)
Erythrura trichroa pelewensis (Belau Blue-faced Parrot Finch) group endemic subspecies, Babeldaob, Ngerekebesang, Chelbacheb Islands, Indeterminate (RDB) or Rare.
Artamus leucorhynchus pelewensis (Belau White-breasted Wood-swallow) group endemic subspecies, Rare (RDB).

Mammals

Dugong dugon (Dugong), Vulnerable (RDB), 50 (1978)

Marine life

one of the highest levels of species diversity in the Pacific Islands

Ngeruangel (Ngaruangl Reef)

Coral islet (0.2 ha; 1 m), coral reef, seabird rookery; no vegetation or inhabitants

Ngcheangel (Kayangel)

Area 1.7 sq. km Altitude 2 m
Island type: small atollwith 4 sandy islets along east side, lagoon 4-6 m deep, small pass.
Natural threats: cyclones
Human impact: pop. 140 (1980); some cultivation; reef pass enlarged with explosives.
Ecosystems: atoll forest and scrub, coconuts (31 plant species); atoll reefs and lagoon with patch reefs, high species diversity (CRD).
Special features: some seabirds and turtles; introduced Bufo marinus (Cane Toad) and Varanus indicus (Monitor Lizard).
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds

Megapodius laperouse senex group endemic subspecies, Rare (RDB), high densities on part of the atoll.

Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 0

Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 2
Conservation Importance 10

416 ✓ Babeldaob (Babelthuap)
Area 397 sq. km Altitude 122 (210) m
Island type: old weathered volcanic or continental, with some raised coral to south.
Natural threats: cyclones
Human impact: pop. 3,336 (1980); subsistence agriculture; heavily colonized by Japanese before W.W.II.
Ecosystems: lowland rain forest rich in species, riverine, swamp and beach forests; mangroves; scrub, savanna and grasslands; freshwater habitats; fringing reefs, barrier reefs, seagrass beds and lagoons.
Special features: feral pigs
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse senex group endemic subspecies, Rare (RDB), precarious.
Caloenas nicobarica pelewensis (Belau Nicobar Pigeon) group endemic subspecies, Endangered (RDB)
Erythrura trichroa pelewensis (Belau Blue-faced Parrot Finch) group endemic subspecies, Indeterminate (RDB) or Rare.
Artamus leucorhynchus pelewensis (Belau White-breasted Wood-swallow) group endemic subspecies, savanna woodlands, Rare (RDB) several hundred (1978).
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 3
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 1
Conservation Importance 17

✓ Oreor (Koror)
Area 9.3 sq. km Altitude m
Island type: volcanic to west and raised coral to east
Natural threats: cyclones
Human impact: pop. 7,685 (1980); Japanese town of 20,000 destroyed in W.W.II; capital of Belau, with some urbanization, port facilities, aquaculture
Ecosystems: lowland rain forest, mangroves, coral reefs and lagoons
Special features:

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse senex group endemic subspecies, Rare (RDB), locally rare.
Gallicolumba canifrons (Belau Ground Dove) group endemic
Pyrroglaux podargina (Belau Scops Owl) group endemic
Caloenas nicobarica pelewensis (Belau Nicobar Pigeon) group endemic subspecies, Endangered (RDB), small flock observed (1980).
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 1
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 10
Conservation Importance 15

Ngerekebesang (Arakabesan)
Area 5 sq. km Altitude m
Island type: volcanic
Natural threats: cyclones
Human impact: large resort
Ecosystems: reefs
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Caloenas nicobarica pelewensis (Belau Nicobar Pigeon) group endemic subspecies, Endangered (RDB)
Erythrura trichroa pelewensis (Belau Blue-faced Parrot Finch) group endemic subspecies, Indeterminate (RDB) or Rare.
Mammals
Marine life
117 corals in 40 genera
bivalves abundant
125 fish species
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 1
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1

Human Impact 1
Conservation Importance 15

Ngerchaol (Ngargol)

Ngemelachel (Malakal)

163 corals in 48 genera, 66 fish species in one area

Chelbacheb (Rock Islands)

Ulebsechel (Auluptagel)(41 sq. km); **Ngeteklou** (Gologugeul); **Bukrreirong** (Kamori); **Ngeruktabel** (Urukthapel)(19 sq. km; 207 m); **Tlutkaraguis** (Adorius); **Butottoribp**; **Ongael**; **Ngebedangel** (Ngobasangel); **Ulong** (Aulong); **Mechercher** (Eil Malk)(1 sq. km); **Bablomekang** (Abappaomogan)

All raised coral islands with rugged surface, dense limestone forest, fringing reefs, some unique marine lakes

Species of conservation interest

Plants

Insects

Other invertebrates

Reptiles-amphibians

Birds

Megapodius laperouse senex group endemic subspecies, Rare (RDB), still common on Ngeruktabel and Macharchar (1980).

Caloenas nicobarica pelewensis (Belau Nicobar Pigeon) group endemic subspecies, Ngeruktabel, Macharchar, Endangered (RDB)

Erythrura trichroa pelewensis (Belau Blue-faced Parrot Finch) group endemic subspecies, Indeterminate (RDB) or Rare.

Mammals

Marine life

Ratings

Natural conservation status 2
Ecosystem richness 1
Species richness 2
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 0
Conservation Importance 16

Ngerukuid (Orukuizu, Seventy Islands)

Area 2.59 sq. km Altitude 30 m

Island type: many small raised coral islands with undercut shores

Natural threats: cyclones

Human impact: uninhabited; formerly protected by taboo; illegal poaching and dynamiting for fish.

Ecosystems: limestone rain forest, coastal scrub, coral reefs (CRD)

Special features:

Species of conservation interest

Plants

Insects

Other invertebrates

Reptiles-amphibians

Birds

Pyrroglaux [Otus] podargina (Belau Scops Owl) group endemic
Megapodius laperouse endemic to Marianas and Belau, Rare

Mammals

Dugong dugon (Dugong) Vulnerable (RDB)

Marine life

Protected area

Ngerukuid Islands Wildlife Reserve 259 ha

Listed in World Register of Threatened Parks and Protected Areas because of dynamiting of coral reefs, decline of dugong population, and pouching of turtle eggs and coconut crabs.

Ratings

Natural conservation status 2
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 2
Human Impact 0
Conservation Importance 16

Ngemlis (Ngemelis Islands)

Area sq. km Altitude m
Island type: slightly raised coral
Natural threats: cyclones
Human impact: proposals for phosphate mining in area
Ecosystems: limestone forest and scrub; fringing reefs with high species diversity.
Special features: spectacular submarine cliffs off fringing reef

Ratings

Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 0
Conservation Importance 13

Ngercheu (Ngergoi)

Species of conservation interest

Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Caloenas nicobarica pelewensis (Belau Nicobar Pigeon) group endemic subspecies, Endangered (RDB)
Mammals
Marine life

Ngedbus (Ngesebus)

Species of conservation interest

Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse senex group endemic subspecies, Rare (RDB)
Mammals
Marine life

Ngerchong (Ngeregong)
Ngebad (Ngabad)

✓ **Beliliou** (Peleliu)

Area 12.7 sq. km Altitude 30 m
Island type: raised coral
Natural threats: cyclones
Human impact: pop. 617 (1980) decreasing; phosphates mined after 1935; heavy fighting during W.W.II.
Ecosystems: limestone forest (mostly secondary regrowth), scrub; 2 tidal creeks with mangroves; fringing and barrier reefs.
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Pyrroglaux podargina (Belau Scops Owl) group endemic
Megapodius laperouse senex group endemic subspecies, Rare (RDB), still common locally (1980).
Caloenas nicobarica pelewensis (Belau Nicobar Pigeon) group endemic subspecies, Endangered (RDB), low numbers (1980).
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 1
Conservation Importance 11

✓ **Ngeaur** (Angaur)

Area 8.4 sq. km Altitude 61 m
Island type: raised coral, no surface water
Natural threats: cyclones
Human impact: pop. 243 (1980), decreasing; heavily mined for phosphate until 1955, abandoned mining facilities; large airstrip.
Ecosystems: secondary limestone forest and scrub; fringing reefs
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse senex group endemic subspecies, Rare (RDB), still common locally (1980).
Mammals
Marine life

Sonsorol Islands
Fana

Sonsorol

Area 1.9 sq. km Altitude m
Island type: two low coral islands on reef, no lagoon
Natural threats: cyclones
Human impact: pop. 79 (1980, including Pulo Anna)
Ecosystems: dense vegetation, fringing reef
Special features:

Pulo Anna

Low coral islet (0.9 sq. km), no lagoon; dense vegetation and fringing reef; pop. 16 (1960s, see Sonsorol)

Merir

Atoll with 1 islet (0.9 sq. km), lagoon?; coconuts; coral reef; visited occasionally; green turtle nesting area.

Tobi

Low coral islet (0.65 sq. km), no lagoon; fringing reef; pop. 73 (1980); phosphate mined 1940.

Helen (Helen Reef)

Area 1.94 sq. km (216 sq. km including reef and lagoon) Altitude m
Island type: atoll with one islet to north, lagoon 60 m deep
Natural threats: cyclones
Human impact: remote and uninhabited; visited by poaching fishing boats
Ecosystems: coconuts and atoll scrub; lagoon and wide atoll reefs (1,200 m) (CRD).
Special features: poaching of giant clams and other reef life; otherwise undisturbed; green turtle nesting area.
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 0
Conservation Importance 8

[Province XIII, continued]

✓ FEDERATED STATES OF MICRONESIA (in free association with the United States)

Land area 701 km^2 Sea area 2,978,000 km^2
Population 79,500 (1981) Density 113 persons/km^2 Growth rate (est.) 3.3%/yr

Per capita GNP '81 = [illegible]

Species of conservation interest
Plants
Insects
4 species of butterflies
Other invertebrates
Reptiles-amphibians
Birds
28 land birds including 9 endemics
Mammals
Marine life

[YAP STATE]

✓ Ngulu

Atoll with 8 islets (0.43 sq. km); coconuts and breadfruit; small population; turtle nesting area.

✓ Yap Islands (Waqab) 105.4 sq km

1367

Yap (56 sq. km; 178 m; pop. 3443); Gagil Tamil (Gagil-Tomil) (29 sq. km; pop. 1336); Maap (Map) (11 sq. km; pop. 317); Rumung (4 sq. km; pop. 131)

Area 100 sq. km Altitude 176 m
Island type: continental (metamorphic) and old volcanic; 4 main islands within broad reef and lagoon
Natural threats: cyclones
Human impact: pop. 5,227 (1980); state government centre at Colonia; subsistence agriculture, coconuts.
Ecosystems: mostly disturbed: lowland rain forest, savanna and grasslands, Pandanus; mangroves, seagrasses, lagoons and broad fringing reefs with high species diversity.
Special features: strong cultural traditions

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		?			
Insects					
Other invert.					
Rept-Amph.					
Birds		2			
Mammals					
Marine life					

Species of conservation interest
Plants
several endemic plants
Insects
Other invertebrates
Reptiles-amphibians

Birds
76 species, 19 resident, 3 introduced (including outer islands)
Monarcha godeffroyi (Yap Monarch) endemic
Rukia oleaginea (Yap White-eye) endemic
Mammals
Dugong dugon (Dugong), Vulnerable (RDB), very rare locally
Marine life
190 species of corals
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 6
Conservation Importance 17

Ulithi

Area 4.7 sq. km Altitude m
Island type: atoll with 40 islets, largest in Caroline Islands
Natural threats: cyclones
Human impact: pop. 720 (1980), decreasing; naval staging post in W.W.II, several ships sunk in lagoon; airstrip.
Ecosystems: atoll lagoon and reefs
Special features: turtle nesting area

Fais

Area 2.8 sq. km Altitude 18 m
Island type: raised coral platform, phosphate deposits
Natural threats: cyclones
Human impact: pop. 210 (1980); phosphate mined; coconuts
Ecosystems: limestone forest, 3 native ferns, 117 angiosperms, including 59 introduced; coconuts; fringing reef
Special features: possibly some endemic species
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 2
Conservation Importance 11

Sorol

Atoll with 11 islets (0.9 sq. km), closed lagoon; pop. 7 (1980)

Eauripik

Atoll with 6 small islets (0.23 sq. km): 5 with coconuts, 1 awash at high tide; pop. 122 (1980).

✓ **Woleai**

Area 4.5 sq. km Altitude m
Island type: atoll with 21 islets
Natural threats: cyclones
Human impact: pop. 720 (1980); coconuts and breadfruit
Ecosystems: atoll reefs and lagoon
Special features:
Species of conservation interest
Plants
84 plant species
Insects
Other invertebrates
Reptiles-amphibians
Birds
Acrocephalus luscinia (Nightingale Reed Warbler)
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 4
Conservation Importance 9

✓ **Ifalik** (Ifaluk)

Atoll with 3 islets (1.5 sq. km); coconuts and breadfruit; pop. 391 (1980); well studied.

✓ **Faraulep**

Atoll with 3 small islets (0.4 sq. km); pop. 135 (1980), decreasing

✓ **Gaferut**

Area 0.11 sq. km Altitude 30 m
Island type: raised coral
Natural threats: cyclones
Human impact: uninhabited; phosphate mined 1935, buildings remain
Ecosystems: forest with Tournefortia; fringing reef
Special features: important seabird rookery; sea turtle nesting area
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 0
Conservation Importance 13

✓ **Olimarao**

Atoll with 2 islets (0.22 sq. km) on reef surrounded by lagoon, coconuts; uninhabited but visited occasionally.

Elato

Atoll with 2 groups of islets (0.5 sq. km); coconuts and mangroves; pop. 51 (1980); turtle nesting area.

Lamotrek

Atoll with 3 islets (0.98 sq. km); pop. 245 (1980)

Species of conservation interest

Plants

Insects

Other invertebrates

Reptiles-amphibians

Birds

Acrocephalus luscinia (Nightingale Reed Warbler)

Mammals

Marine life

West Fayu

Area 0.62 (or 0.06?) sq. km Altitude m

Island type: atoll with 1 islet, no lagoon, extensive reef

Natural threats: cyclones

Human impact: visited occasionally

Ecosystems: coral reefs

Special features: important seabird rookery; turtle nesting area

Ratings

Natural conservation status 3

Ecosystem richness 0

Species richness 0

Economic pressure 0

Human threat 0

Natural vulnerability 1

Practicality of conservation action 0

Reliability of data 1

Human Impact 0

Conservation Importance 11

Satawal

Low coral island (1.3 sq. km; 5 m); coconuts and scrub (6 native ferns, 97 angiosperms including 46 introduced); fringing reef; pop. 386 (1980).

Pikelot

Area 0.1 sq. km Altitude m

Island type: low coral islet, extensive fringing reef

Natural threats: cyclones

Human impact: visited occasionally

Ecosystems: atoll forest and scrub; fringing reefs

Special features: important seabird rookery; turtle nesting area

Ratings

Natural conservation status 3

Ecosystem richness 0

Species richness 1

Economic pressure 0

Human threat 0

Natural vulnerability 1

Practicality of conservation action 0

Reliability of data 1

Human Impact 0

Conservation Importance 13

[TRUK STATE]

Pulusuk

Low coral island (2.6 sq. km) with central depression, fringing reef; pop. 214 (1980), decreasing.

Manila Reef

Puluwat

Atoll with 2 large and 3 small islets (3.4 sq. km); breadfruit and coconuts; pop. 495 (1980).

Pulap

Atoll with 3 islets (0.85 sq. km); coconuts and breadfruit; pop. 432 (1980).

Namonuito

Atoll with 10 islets (4.4 sq. km); coconuts and some fringing atoll forest, atoll reefs; pop. 440 (1960s).

Neoch (Kuop)

Atoll with 4 islets (0.5 sq. km)

Truk Islands (Chuk)

Volcanic and coral islands enclosed in large lagoon and barrier reef; many ships sunk in lagoon in W.W.II; fishing with explosives common.

Species of conservation interest

Plants

Clinostigma carolinensis (Truk Palm) endangered

Semecarpus kraemeri (Truk Poison Tree) endangered

Insects

Other invertebrates

Reptiles-amphibians

Birds

73 species, 28 resident, 2 introduced (including outer islands)

Myiagra oceanica (Truk or Oceanic Flycatcher) group endemic

Gallicolumba kubaryi (Truk Islands Ground Dove) endemic to Carolines

Metabolus rugensis (Truk Monarch) monospecific genus, group endemic, Moen, Uman, Udot, Tol, Rare (RDB)

Ducula oceanica teraokai (Truk Micronesian Pigeon) Endangered (RDB)

Acrocephalus luscinia (Nightingale Reed Warbler) uncommon

Mammals

Marine life

Tol group

Polle

Pata

Wonei

Tol

Area 34 sq. km Altitude 439 (480) m

Island type: high volcanic, indented coastline

Natural threats: cyclones

Human impact: pop. 6,781 (1980); former Japanese settlement

Ecosystems: disturbed lowland vegetation; 12 ha of montane rain forest on top of Mt. Winibot with endemic plants; mangroves; fringing reefs.

Special features: top 100 m of Mt. Winibot of considerable conservation interest.

Endemism:	Total sp.	No. endemic	% endemic	E	V&I
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		1			
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Rukia ruki (Truk Greater White-eye) endemic, top of Mt. Winibot, Endangered (RDB)
Metabolus rugensis (Truk Monarch) monospecific genus, group endemic, Rare (RDB)
Ducula oceanica teraokai (Truk Micronesian Pigeon) Endangered (RDB)
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 11
Conservation Importance 13

Fanapanges (Fala-Bequets)
(1.6 sq. km; 61 m), fringing reef; pop. 411 (1980)

Romonum (Ulalu)
Low island (75 ha), fringing reef; pop. 422 (1980)

Udot
Area 4.9 sq. km Altitude 152 m
Island type: volcanic
Natural threats: cyclones
Human impact: pop. 1,083 (1980)
Ecosystems: fringing reef
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Metabolus rugensis (Truk Monarch) monospecific genus, group endemic, Rare (RDB)
Mammals
Marine life

Eot
(49 ha; 61 m), fringing reef shared with Udot; pop. 189 (1980)

Totiu (Tarik)

Parem (Param)
(61 m), fringing reef and mangroves; pop. 226 (1980)

Siis (Tsis)
(65 ha; 91 m), fringing reef and beach; pop. 324 (1980)

Fefan (Fefen)
Area 13.2 sq. km Altitude 298 m
Island type: high volcanic
Natural threats: cyclones
Human impact: pop. 3,096 (1980), increasing
Ecosystems: montane rain forest on Mt. Chukusou; some mangroves; fringing reef.
Special features:
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 15
Conservation Importance 10

Uman
Area 4.7 sq. km Altitude 244 m
Island type: high volcanic
Natural threats: cyclones
Human impact: pop. 2,320 (1980), increasing
Ecosystems: montane rain forest on Mt. Uroras; some mangroves; fringing reef.
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Metabolus rugensis (Truk Monarch) monospecific genus, group endemic, Rare (RDB)
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 24
Conservation Importance 10

Etten (Eten)

Dublon (Tonowas)

Area 8.8 sq. km Altitude 349 m
Island type: high volcanic
Natural threats: cyclones
Human impact: pop. 3,233 (1980); former Japanese headquarters with large settlement; little undisturbed vegetation.
Ecosystems: former lowland rain forest; montane rain forest on Mt. Tolomen; some mangroves; fringing reef.
Special features:

Moen (Wono)

Area 18.8 sq. km Altitude 370 m
Island type: high volcanic
Natural threats: cyclones
Human impact: pop. 10,374 (1980), up from 3,800 in 1960s; state administrative centre; airport dredged from reef flat.
Ecosystems: former lowland rain forest; montane rain forest on Mt. Teroken; savanna; mangroves; fringing reef.
Special features: savanna of some conservation interest
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Metabolus rugensis (Truk Monarch) monospecific genus, group endemic, Rare (RDB)
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 30
Conservation Importance 11

Hall Islands

Fayu (East Fayu)

Area 0.39 sq. km Altitude m
Island type: coral island with central depression that collects water
Natural threats: cyclones
Human impact: visited occasionally
Ecosystems: fringing reef
Special features: important seabird rookery; recommended for protection
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1

Reliability of data 1
Human Impact 0
Conservation Importance 13

Nomwin
Atoll with 9 islets (1.8 sq. km) on circular reef, coconuts; pop. 324 (1980).

Murilo
Atoll with 5 islets (1.3 sq. km) north of reef, coconuts; pop. 328 (1980)

Nama
Low coral island (0.8 sq. km), coconuts and breadfruit; pop. 1,021 (1980)

Losap
Atoll with 8 islets (1 sq. km) on semicircular reef, coconuts and breadfruit; pop. over 827 (1980).

Namoluk
Area 0.834 sq. km Altitude m
Island type: triangular atoll with 4 islets, very deep (77 m) closed lagoon
Natural threats: cyclones (1958); tsunamis (1972)
Human impact: pop. 263 (1973), stable; subsistence agriculture
Ecosystems: atoll forest and scrub, coconuts; mangroves; atoll reefs and lagoon
Special features: green and hawksbill turtle nesting area
Species of conservation interest
Plants
119 species
Insects
Other invertebrates
Reptiles-amphibians
5 geckos, 5 skinks
Birds
21 bird species (11 breeding) including:
Acrocephalus luscinia (Nightingale Reed Warbler) 400-500
Aplonis opacus (Micronesian Starling) numerous
Myzomela cardinalis (Cardinal Honeyeater) common
Mammals
6 mammals (Pteropus fruit bat, 2 rats, domestic animals)
Marine life
67 molluscs
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 2
Human Impact 8
Conservation Importance 12

Mortlock Islands (Nomoi)

Etal
Atoll with 13 islets (1.8 sq. km) enclosing small lagoon; pop. 440 (1980)

Lukunor
Atoll with 6 islets (2.8 sq. km) on oval lagoon, coconuts; pop. 668 (1980)

Satawan

Large atoll with 11 main islets, numerous small islets (4.6 sq. km); coconuts; pop. 766 (1980), down from 1,800 (1960s).

[POHNPEI STATE)

Kapingamarangi

Area 1.1 sq. km Altitude m
Island type: circular atoll with 33 islets
Natural threats: cyclones
Human impact: pop. 510 (1980); coconuts
Ecosystems: atoll scrub as windbreak; atoll reefs and lagoon
Special features: turtles have become scarce
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Perochirus scutellatus (Gekkonidae) endemic
Birds
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 11
Conservation Importance 10

Nukuoro

Circular atoll with over 40 islets (1.7 sq. km); coconuts; pop. 308 (1980)

Minto Reef

Oroluk

Area 0.5 sq. km Altitude m
Island type: atoll 30 km by 23 km with 1 islet to northwest
Natural threats: cyclones
Human impact: pop. 10, only inhabited since mid-1970s; coconut plantations
Ecosystems: coconuts, atoll lagoon and reefs
Special features: important seabird rookery; sea turtle nesting area; recommended for protection
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 1
Conservation Importance 13

Ngatik

Atoll with 3 large and several small islets (1.7 sq. km); coconuts; pop. 564 (1980).

Pohnpei Islands (Ponape)

Pakin

Atoll with 5 islets (1.1 sq. km), good atoll reefs and lagoon; coconuts; visited occasionally

Ant

Area 1.8 sq. km Altitude m
Island type: atoll with several islets
Natural threats: cyclones
Human impact: visited occasionally
Ecosystems: coconuts; excellent atoll reefs with up to 100% coral coverage, lagoon.
Special features: possible green turtle nesting area
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 0
Conservation Importance 11

Pohnpei (Ponape)

Area 334 sq. km Altitude 791 m
Island type: high volcanic with deeply indented coast, high rainfall
Natural threats: cyclones
Human impact: pop. 20,318 (1980); former colonization by Japanese; urban development at Kolonia, capital of Federated States of Micronesia; agricultural development in lowlands.
Ecosystems: lowland and montane rain forests, cloud forest, river and swamp forests; mangroves; savanna and grasslands; mountain streams and other freshwater habitats; barrier reef and lagoon, seagrass beds.
Special features: Ruins on Nan Madol islet; archaeological sites.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	249	8	3%		
Insects					
Other invert.					
Rept-Amph.		1			
Birds	28	5	18%		3
Mammals					
Marine life					

Species of conservation interest
Plants
249 native angiosperms, including 8 endemic species
Insects
Other invertebrates
2 Partulidae (1 ground snail, 1 tree snail)
Reptiles-amphibians
Emoia ponapea (Scincidae) endemic

Birds

62 species, 31 resident, 3 introduced (including outer islands)

Gallicolumba kubaryi (Caroline or Truk Islands Ground Dove) group endemic, Pohnpei and Truk

Trichoglossus rubiginosus (Pohnpei Lory) endemic

Myiagra pluto (Pohnpei Broadbill or Flycatcher) endemic

Rukia longirostra (Pohnpei White-eye) endemic, mountainous interior, Rare (RDB).

Aplonis pelzelni (Pohnpei Mountain Starling) endemic, in forests above 200 m, Vulnerable (RDB).

Asio flammeus ponapensis (Pohnpei Short-eared Owl) endemic subspecies, Rare (RDB), 50 counted (1956), single individuals seen 1975 and 1977.

Acrocephalus luscinia (Nightingale Reed-warbler)

Mammals

Marine life

Coral Reefs upper intertidal

Ratings

Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 1
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 5
Conservation Importance 19

Mokil

Atoll with 3 islets (1.3 sq. km) on rectangular reef, small lagoon, coconuts; pop. 289 (1980), decreasing.

Pingelap

Atoll with 2 large and 1 small islets (1.7 sq. km) on square reef, small lagoon, coconuts, a few mangroves (57 plant species, 32 indigenous); pop. 368 (1980), down from 1,000 (1960s).

[KOSRAE STATE]

Kosrae (Kusaie)

Area 110 sq. km Altitude 628 m

Island type: high volcanic, deeply dissected chain of mountains to south, isolated peak to north (592 m), narrow coastal plain.

Natural threats: cyclones

Human impact: pop. 5,522 (1980), coastal plain cultivated

Ecosystems: lowland and montane rain forests, cloud forest, mangroves, fringing reef.

Special features: archaeological sites, ruins on Lele Island; small green and hawksbill turtle nesting area.

Endemism:	Total sp.	No. endemic	% endemic	E	VR
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds	11	1	9%	1(2)	
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
1 ground-living Partulidae (land snail)
Reptiles-amphibians
Birds
41 species, 15 resident, 2 introduced
Ptilinopus porphyraceus hernsheimi (Crimson-crowned or Purple-capped Fruit Dove) endangered.
Ducula oceanica oceanica (Micronesian Pigeon) Kosrae, Ailinglaplap and Jaluit
[Asio flammeus ponapensis (Short-eared owl) vagrant]
Acrocephalus luscinia (Nightingale Reed-warbler)
2 extinct species:
Porzana monasa (Kosrae Rail) extinct
Aplonis corvina
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 5
Conservation Importance 18

Province XIV
MARSHALL ISLANDS

MARSHALL ISLANDS (in free association with the United States)

Land area 181 km^2 Sea area 2,131,000 km^2
Population 31,800 (1981) Density 176 persons/km^2 Growth rate (est.) 3.0%/yr

Species of conservation interest
Plants
10 native ferns, 1 native cycad, 293 dicotyledon taxa including 88 natives
1 endemic grass on Bokaak
4 endemic Pandanus ssp. on Eniwetak
Insects
1 species of butterfly
Other invertebrates
Reptiles-amphibians
7 species of lizards
Birds
78 species, 18 resident, 2 introduced
Ducula oceanica ratakensis (Ratak Micronesian Pigeon), group endemic subspecies, Wotje and Arno, Indeterminate (RDB)
Zosterops conspicillata (Bridled White-eye) threatened
Mammals
Marine life

Ratak Chain
Bokaak (Taongi)
Area 3.24 sq. km Altitude 4 m
Island type: crescent-shaped atoll with 14 islets, dry and stony
Natural threats: cyclones
Human impact: uninhabited, formerly tabno; Japanese relay station and bomb dump destroyed in 1944.
Ecosystems: atoll scrub and grasslands with 8-9 species; atoll reefs and lagoon.
Special features: important seabird rookery (20 species, including 14 breeding); turtle nesting area.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	9	1	11%		
Insects					
Other invert.					
Rept-Amph.		1			
Birds					
Mammals					
Marine life					

Species of conservation interest
Plants
Lepturus gas[sa]paricensis (grass) endemic (also reported on Wake Island)
Insects
Other invertebrates

Reptiles-amphibians
Endemic race of lizards
Birds
Major breeding colonies of Puffinus pacificus, Sterna fuscata, Sula sula and Fregata minor.
Mammals
Marine life
Protected area: protected by order since 1958 524 ha
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 2
Human Impact 0
Conservation Importance 13

Bikar

Area 0.5 sq. km Altitude 3 m
Island type: diamond-shaped atoll with 3 islets, dry, phosphates present
Natural threats: cyclones
Human impact: visited occasionally; uninhabited, formerly taboo
Ecosystems: atoll forest (30 ha) with Pisonia, atoll scrub and vines
Special features: seabird rookery (18 species, including 14 breeding); important turtle (Chelonia mydas) nesting area.
Protected area: protected by order since 1958 52 ha
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 2
Human Impact 0
Conservation Importance 10

Utrik (Utirik)

Area 0.5 sq. km Altitude m
Island type: atoll with 1 large and 4 small islets
Natural threats: cyclones (1951)
Human impact: pop. 328 (1980), coconut plantation
Ecosystems: atoll forest and scrub on Ealuk Is., atoll reefs and lagoon
Special features: 10 bird species

Taka

Area 3.4 sq. km Altitude m
Island type: atoll with 6 islets, dry
Natural threats: cyclones (1951)
Human impact: visited occasionally; coconut plantation on part of islet
Ecosystems: low atoll forest, atoll scrub and grasses, atoll reef and lagoon.
Special features: seabird rookery on Etuk Is.; 7 bird species

Mejit

Area 1.8 sq. km Altitude m
Island type: low coral island, central pond with channel to sea
Natural threats: cyclones
Human impact: pop. 329 (1980); well cultivated
Ecosystems: coconuts and breadfruit; mangroves in channel; fringing reef
Special features:

Ailuk

Area 5.4 sq. km Altitude m
Island type: elongate atoll with 57 islets
Natural threats: cyclones (1951)
Human impact: pop. 420 (1980), coconut plantation
Ecosystems: coconuts, atoll scrub as windbreaks, atoll reefs and lagoon
Special features: 11 bird species

Jemo

Area 0.16 sq. km Altitude m
Island type: egg-shaped low coral islet on linear reef
Natural threats: cyclones
Human impact: visited occasionally, coconut plantation
Ecosystems: atoll forest and scrub as windbreak, large Pisonia trees; fringing reef.
Special features: 8 bird species, abundant; seabird rookery; green turtle nesting area; potential for protection.
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 0
Conservation Importance 9

Likiep

Area 10 sq. km Altitude m
Island type: atoll with 112 islets
Natural threats: cyclones
Human impact: pop. 487 (1980); coconut plantations
Ecosystems: atoll scrub, atoll reefs and lagoon
Special features: 5 bird species, not abundant

Wotje

Area 8 sq. km Altitude m
Island type: atoll with 56 islets
Natural threats: cyclones
Human impact: pop. 524 (1980); large Japanese garrison in W.W.II, much destruction
Ecosystems: coconuts; remnant atoll forest; grasses on smaller islets; atoll reefs and lagoon
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians

Birds
Possible remnant population of Ducula oceanica ratakensis (Ratak Micronesian Pigeon), Indeterminate (RDB)
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 4
Conservation Importance 5

✓ **Erikub** (Erikup)
Area 1.6 sq. km Altitude m
Island type: atoll with 13 islets, no fresh water
Natural threats: cyclones
Human impact: uninhabited, occasional visits
Ecosystems: atoll forest, atoll scrub, some coconuts; atoll reefs and lagoon
Special features:

✓ **Maloelap**
Area 10 sq. km Altitude m
Island type: triangular atoll with 60 islets
Natural threats: cyclones
Human impact: pop. 627 (1980), coconut plantations; airstrip
Ecosystems: atoll forest and scrub, coconuts and breadfruit, atoll reefs and lagoon.
Special features:

✓ **Aur**
Area 5.6 sq. km Altitude m
Island type: square atoll with 32 islets
Natural threats: cyclones
Human impact: pop. 449 (1980), coconut plantations
Ecosystems: atoll scrub, atoll reefs and lagoon
Special features: 22 native plant species, 10 introduced

✓ **Majuro**
Area 9 sq. km Altitude m
Island type: atoll with over 60 islets
Natural threats: cyclones
Human impact: pop. 11,893 (1980), capital with urban development, airport; causeway construction; coconut plantations
Ecosystems: coconuts and breadfruit, atoll scrub (30 native plants, 31 introduced); atoll reefs and lagoon (33 algae, 33 fish) (CRD).
Special features:

✓ **Arno**
Area 13 sq. km Altitude 2.4 m
Island type: atoll with over 100 islets
Natural threats: cyclones
Human impact: pop. 1500 (1980), coconut plantations
Ecosystems: coconuts and breadfruit, atoll scrub, Casuarina; mangroves; atoll reefs and lagoon (CRD).
Special features:

Species of conservation interest
Plants
44 native plant species, 81 introduced
Insects
Other invertebrates
Reptiles-amphibians
Birds
possible remnant population of Ducula oceanica ratakensis (Ratak Micronesian Pigeon) Indeterminate (RDB).
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 6
Conservation Importance 5

Mili

Area 16 sq. km Altitude m
Island type: atoll with over 90 islets, poor soil
Natural threats: cyclones
Human impact: pop. 762 (1980), coconut plantations; Japanese airfield
Ecosystems: coconuts, Casuarina, atoll reefs and lagoon
Special features:
Knox (Narik)

Ralik Chain

Ujelang

Area 1.7 sq. km Altitude m
Island type: elongate atoll with over 35 islets on narrow reef
Natural threats: cyclones
Human impact: German coconut plantation, no original population, resettled from Enewetak in 1947, pop. 390 (1960s), now uninhabited since late 1970s.
Ecosystems: coconuts on largest islet; grasses on smaller islets; atoll reefs and lagoon
Special features: 14 bird species, abundant; seabird rookery
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 0
Conservation Importance 8

✓ **Enewetak** (Eniwetok)
Area 5.8 sq. km Altitude 4 m
Island type: atoll with 30 islets
Natural threats: cyclones
Human impact: pop. 548 (1980); population evacuated 1946 to mid-1970s; nuclear weapons test site from 1947, barren areas and bomb craters, some restoration; site of active marine laboratory, now closed.
Ecosystems: atoll scrub, atoll reefs and lagoon (CRD)
Special features: 42 native and 53 introduced plant taxa, 4 endemic Pandanus varieties; extensively studied.
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 3
Human impact 5
Conservation importance 8

✓ **Bikini**
Area 7.3 sq. km reduced to 6 sq. km by tests Altitude m
Island type: atoll with over 23 islets
Natural threats: cyclones
Human impact: population evacuated 1946 to 1970s, returned for a few years (pop. 125 in 1977), then evacuated again; nuclear weapons test site, 1947, extensive blast and radiation damage, continuing contamination makes islands uninhabitable despite some cleanup.
Ecosystems: secondary scrub thickets, atoll reefs and lagoon
Special features: turtle nesting area

✓ **Ailinginae**
Area 3.5 sq. km Altitude m
Island type: atoll with a few islets
Natural threats: cyclones
Ecosystems: atoll forest and scrub, grasses on smaller islets, Casuarina on eastern islets; atoll reefs and lagoon
Special features: 5 bird species

✓ **Rongelap**
Area 7.8 sq. km Altitude m
Island type: atoll with 50 islets, dry, poor soil
Natural threats: cyclones
Human impact: pop. 233 (1980), coconut plantations in south
Ecosystems: atoll forest with Pisonia, and grasses in north; atoll reefs and lagoon.
Special features: 7 bird species

✓ **Rongrik** (Rongerik)
Area 2.1 sq. km Altitude m
Island type: elongate atoll with 13 islets
Natural threats: cyclones
Human impact: settled from Bikini in 1946 but later evacuated; damaged by radioactive fallout in 1954.
Ecosystems: atoll forest, coconuts, grasses on smaller islets; atoll reefs and lagoon
Special features: few birds (4 species); turtles formerly plentiful

✓ Wotho

Area 4.1 sq. km Altitude m
Island type: atoll with over 13 islets, fairly wet
Natural threats: cyclones
Human impact: small population, 76 (1980); coconut plantations
Ecosystems: considerable atoll forest with Ochrosia and Pisonia, atoll reefs and lagoon.
Special features: 15 bird species; seabird rookery; coconut crabs common
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 0
Conservation Importance 6

✓ Ujae

Area 1.6 sq. km Altitude m
Island type: elongated atoll with 15 islets, fairly wet
Natural threats: cyclones
Human impact: pop. 309 (1980); coconut plantations
Ecosystems: atoll forest with Ochrosia and Pisonia; atoll reefs and lagoon
Special features: 14 bird species; seabird rookery

✓ Lae

Area 1.6 sq. km Altitude m
Island type: atoll with many islets
Natural threats: cyclones
Human impact: pop. 237 (1980); coconut plantations
Ecosystems: atoll forest with Ochrosia and Pisonia; atoll reefs and lagoon
Special features: 10 bird species

✓ Kwajalein

Area 16 sq. km Altitude m
Island type: very large atoll with 92 islets
Natural threats: cyclones
Human impact: large population; W.W.II Japanese naval base with heavy fighting; major military installations and missile test site, airfield; large overcrowded civilian population only on Ebeye, pop. 6,629 (1980), density 21,529 persons/km^2.
Ecosystems: atoll forest on smaller islets; atoll reefs and lagoon.
Special features: Enewetak islet inside lagoon with excellent Pisonia forest taboo area; 15 bird species; seabird rookery; introduced Mynah.

✓ Lib

Area 0.8 sq. km Altitude m
Island type: low coral sand island, central depression with freshwater pond, fertile.
Natural threats: cyclones
Human impact: pop. 99 (1980); heavily cultivated (coconuts, breadfruit and pineapples).
Ecosystems: fringing reef
Special features:

✓ **Namu**

Area 6.2 sq. km Altitude m
Island type: atoll with over 50 islets on northeast rim
Natural threats: cyclones
Human impact: pop. 656 (1980); coconut plantations
Ecosystems: atoll reefs and lagoon
Special features:

✓ **Jabwot** (Jabat)

Area 0.6 sq. km Altitude m
Island type: low coral island, phosphates present
Natural threats: cyclones
Human impact: pop. 72 (1980)
Ecosystems: fringing reefs
Special features:

✓ **Ailinglaplap** (Ailinglapalap)

Area 15 sq. km Altitude m
Island type: atoll with over 50 islets on almost continuous reef rim
Natural threats: cyclones
Human impact: pop. 1,400 (1980), coconut plantations
Ecosystems: coconuts; mangroves in small depressions; atoll reefs and lagoon
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Ducula oceanica oceanica (Micronesian Pigeon) Ailinglaplap, Jaluit and Kosrae
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 5
Conservation Importance 5

✓ **Jaluit**

Area 3.6 sq. km Altitude m
Island type: large diamond-shaped atoll with over 80 islets, nearly continuous land rim.
Natural threats: cyclones
Human impact: pop. 1485 (1980); former German administrative centre; coconut plantations.
Ecosystems: coconuts; atoll scrub and grasslands; mangroves in small depressions; atoll reefs and lagoon
Special features: 40 native and 19 introduced plant species
Species of conservation interest
Plants
Insects

Other invertebrates
Reptiles-amphibians
Birds
Ducula oceanica oceanica (Micronesian Pigeon) Jaluit, Ailinglaplap and Kosrae.
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 16
Conservation Importance 5

Kili

Area 0.9 sq. km Altitude m
Island type: low coral island
Natural threats: cyclones
Human impact: pop. 492 (1980) of resettled Bikini islanders; German coconut plantations.
Ecosystems: coconuts; fringing reef
Special features:

Namorik

Area 2.6 sq. km Altitude m
Island type: atoll with 2 main islands, closed lagoon
Natural threats: cyclones
Human impact: pop. 629 (1980); cultivation of coconuts and bananas
Ecosystems: atoll reefs and lagoon
Special features:

Ebon

Area 5.8 sq. km Altitude m
Island type: atoll with 23 islets, 12 main islands; some phosphates
Natural threats: cyclones
Human impact: pop. 858 (1980); heavily cultivated
Ecosystems: coconuts, breadfruit, Pandanus and Casuarina; atoll reefs and lagoon.
Special features: crimson crowned fruit dove now extinct