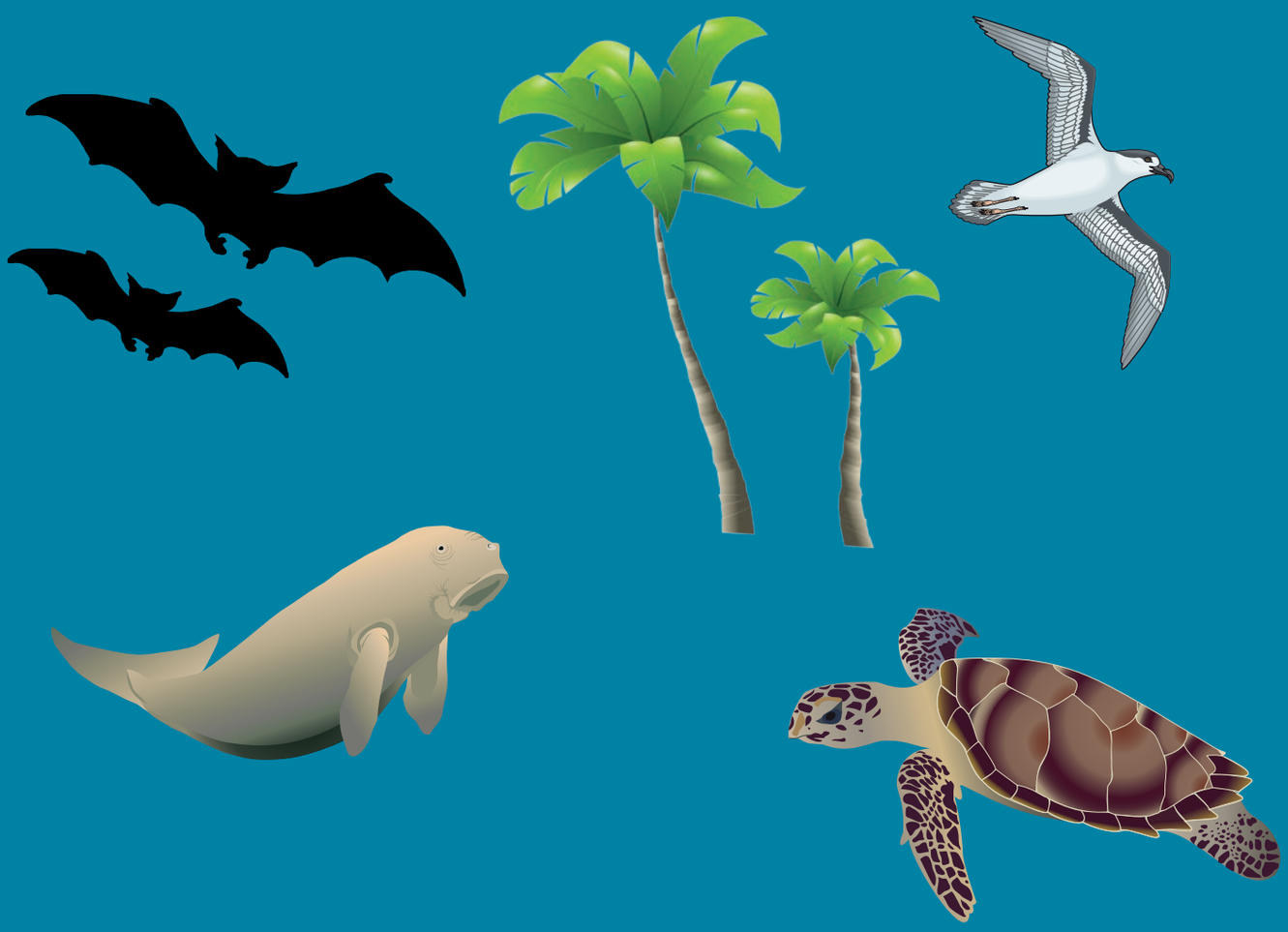
VESS
VANUATU ENVIRONMENTAL SCIENCE SOCIETY

Threatened Species Factsheets



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About the Project

The **Threatened Species Project** implemented by the Vanuatu Environmental Science Society (VESS), aims to increase awareness of biodiversity conservation in Vanuatu, as part of the East Melanesian Islands Biodiversity Hotspot. Awareness activities include hosting national and international events, such as International Coastal Clean-up day and awareness workshops held in communities in Vanuatu's Key Biodiversity Areas (KBA).

The awareness workshops with conservation leaders across Vanuatu aim to increase knowledge of the ecosystem services that the prioritised threatened species of Vanuatu provide to the local communities. The project's outcome is to provide community conservation groups with knowledge and conservation actions that can be incorporated into management plans for community conservation areas. Materials produced include factsheets on all CEPF priority species, 6 KBAs, and teacher's resources incorporating threatened species knowledge into lessons.

Sponsors

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The **Critical Ecosystem Partnership Fund** (CEPF) is a joint initiative of l'Agence Française de Développement, Conservation International, the European Union, the Global Environment Facility, the Government of Japan, the MacArthur Foundation and the World Bank.

The CEPF is a global leader in enabling civil society to participate in and benefit from conserving some of the world's most critical ecosystems. They provide grants to nongovernmental and private sector organizations to help protect biodiversity hotspots, Earth's most biologically rich yet threatened areas, including the East Melanesian Islands.

About VESS

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Vanuatu Environment and Science Society (VESS) is a local charitable association concerned with protecting and conserving the plants, animals and ecosystems of Vanuatu. VESS believes science is a key tool in conservation, environmental protection and sustainable development and using science, along with indigenous knowledge, allows communities to make informed choices so people can live harmoniously with their environment.

VESS's aims are to share existing scientific information pertaining to the environment with all levels of the community from government agencies to local villagers and to fill knowledge gaps where the science is missing with robust scientific studies using local scientists. VESS also aims to inform members of the public about environmental issues by holding events and talks and encouraging engagement with citizen science projects.

Glossary

Biodiversity: The variety of all living organisms, ecosystems and processes, in both terrestrial and aquatic environments.

Biological indicator: Organisms or species whose characteristics show the presence of environmental conditions.

Climate Change: The build-up of man-made gases in the atmosphere that trap the sun's heat, causing changes in the global weather patterns.

Community Conservation Area (CCA): Protected areas of natural resources, registered with the Department of Environmental Protection and Conservation, that are managed by the community with ownership of the land to preserve and benefit from the biological resources for the future.

Echolocation: The use of sound and echoes to determine where objects are in space, as well as their size and shape.

Elevation: Height above sea level; altitude.

Emergent tree: The tallest trees of the forest or bush.

Endemic: A species found only in one area (region or country), and nowhere else.

Erosion: The gradual wearing down of a resource, eg top soil or rock.

Food Web: A model that connects different feeding relationships of organisms in an ecosystem.

Habitat Destruction: The damage or removal of suitable environments for living organisms, leading to a reduction in biodiversity.

Invertebrates: Animals without an internal backbone (vertebra). Includes all insects, worms crustaceans, molluscs, coral etc.

IUCN Red List Categories:

Near Threatened: When a species is close to qualifying as vulnerable to extinction.

Vulnerable: When the best available evidence of threats and species abundance indicates a species is at very high risk of extinction.

Endangered: When the best available evidence of threats and species abundance indicates a species is at very high risk of extinction.

Critically Endangered: When the best available evidence of threats and species abundance indicates a species is at an extremely high risk of extinction.

Keystone Species: A species whose impact on an ecosystem is greater than expected for its abundance, and whose loss would cause greater than average change in the ecosystem and processes. A species which has a critical role in supporting their ecological community.

Limestone: Sedimentary rock composed mainly of marine organism skeletons such as dead coral and shells.

Mangrove: Trees that grow in tropical sheltered coastlines, with roots above the ground.

Nutrient Cycling: The movement of nutrients from the physical environment into living organisms and back into the physical environment.

Ornamental plants: Attractive plants grown for how they look.

Run-off: Water that flows over the land picking up contaminants and sediment such as fertilisers and building materials, and ends up in larger water bodies (rivers or the ocean).

Species: A group of individual organisms in a natural population, who can breed with one another, producing fertile offspring.

Sustainable: Development that is useful in the present, and uses resources carefully so there is still enough for future generations to use.

Factsheet Index

Mammals – Blue

Birds – Yellow

Reptiles – Green

Plants – Orange

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Threatened Species Factsheet No. 1

DUGONG

What are they called?

Scientific:
Dugong dugon
Common English: Dugong, Sea Cow
French: Dugong
Bislama: Kaofis
Vernacular: There are many vernacular names e.g.: Pongponglo (Vanual Lava), Puendras (South-east Malekula) Bondas (Epi) Kaunamu (SouthTanna)

A little about them:

Dugongs are herbivores (plant-eaters) that feed mostly on seagrass, up to 40 Kg every day. Female dugongs have their first calf when they are between 7 and 17 years. The have calves every 2 - 5 years depending on the quality and quantity of the seagrass available. If there is not much seagrass the time between calves will be longer the females will mature and have their first calf later.

They live in many countries in the Pacific and Indian ocean basins. They can be found in coastal regions of the tropics and sub-tropics, usually found where there is seagrass in shallow calm waters protected from strong waves.

What do they look like?

Dugongs are large marine mammals, closely related to Manatees. They can grow up to 3 m in length and weigh up to 500 Kg. They have a thick layer of fat giving them distinctly rotund body. They have a flat mouth facing downwards so they can eat seagrass at the sea floor. They have powerful fluked tail like dolphins and whales. They do not have a dorsal fin.

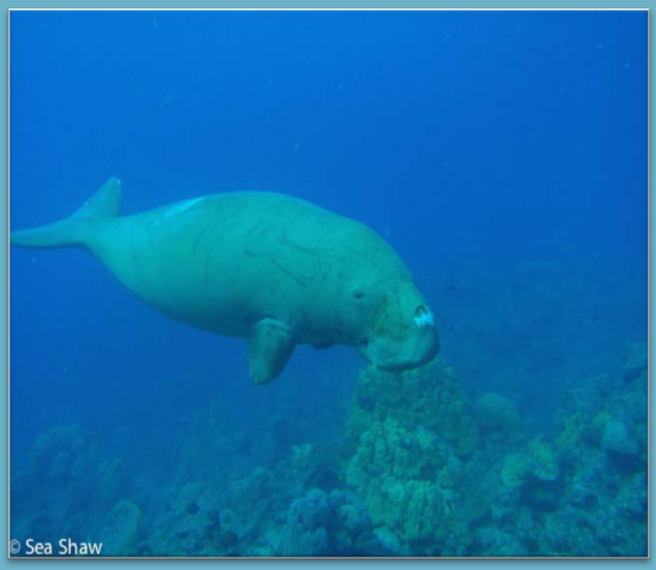
Did you know?

- Dugongs closest land relatives are elephants.
- Dugongs have lungs and need to come the surface to breathe about every 6 minutes.
- Dugongs can dive up to 36 meters deep.
- Dugongs swim at about 10 km/hour when cruising but can swim in bursts of 20 km/hr.

Dugongs are classified on the IUCN Red List as Vulnerable (VU) to extinction

Why are they threatened?

- Caught in fishing nets.
- Hit by boats and cut by propellers.
- Declines in seagrass meadows for example due to:
  - Poor water quality as a result of run-off from the land.
  - Coastal development.
  - Damage by boats anchors.



Want to know more?

- *Read our Booklet on Dugongs and their seagrass habitats by Christina Shaw*
- *Read Ecology and Conservation of the Sirenia by Helene Marsh, Thomas J. O'shea & John E. Reynolds III*
- *Visit: www.iucnredlist.org*
- *Visit: www.dugongconservation.org*

What do they do for us?

- They are friendly, curious animals and seeing them can make us feel happy.
- Has high cultural value for some communities.
- Sometimes referred to as the "gardeners of the sea" as they plough the sea floor and mix the nutrients while feeding thereby playing an important role in nutrient cycling.
- The regular presence of dugongs is an indicator of a healthy seagrass bed.
- Attraction to tourists.

What we can do for them?

- ✓ Don't leave fishing nets unattended in area where dugong are regularly seen.
- ✓ Properly dispose old unwanted fishing nets.
- ✓ Be careful when using boats and anchors over seagrass beds.
- ✓ Know where your seagrass areas are, monitor them and keep them healthy.
- ✓ Report any dugong sighting to VESS.

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Threatened Species Factsheet No. 2

BANKS FLYING FOX

What are they called?

Scientific:
Pteropus fundatus

English: Banks Flying fox

French: volpe volante delle Banks

Bislama: Smol Waet flaeng fokis

local language:

A little bit about them:

These are small fruit bats. They are endemic to Vanuatu. The science books say that they are only found on Mota and Vanua Lava in the Banks group. But local people say that they see them in Gaua and Mota Lava as well. They roost in trees individually or in small groups.

We don't know much about their biology or ecology because they haven't been studied very much by scientists. They have been seen feeding on flowers of coconut, Nakafika, pandanaus and Naveli tree.

What do they look like?

The body of these bat are about 15 cm long. They are the smallest of the three flying foxes in Vanuatu but not as small as the Fiji Blossom Bat. Their bodies are a reddy-brown or yellow brown colour, darker on the back then on their bellies. Their faces are grey and the top of the head is paler. They have a orange neck. They do not have a tail.

Did you know?

- They live in a very small area, one of the smallest areas of any flying fox in the world.

Banks flying fox are classified as Endangered (EN) on the IUCN Red List.

Why are they threatened?

- They only live on two small islands which are close together so if any disaster happens such as a cyclone it could wipe out the whole population of these flying foxes.
- Habitat loss from natural disasters and land clearing for agriculture and gardens.
- They may be hunted for food.

What do they do for us?

- They pollinate many plants including food producing plants.
- They disperse seeds. This can be important for reestablishing vegetation after disturbance such as cyclones.
- As they fly they can cycle nutrients around the forest.
- The guano can be used as a fertilizer.
- Roosting sites could be tourist attractions.

What can we do for them?

- ✓ Identify roosting sites and protect them.
- ✓ Find out more about them – observe where they live, what they feed on and when they have their babies.
- ✓ Take pictures and record when you see them.
- ✓ Report the sightings and observations to VESS or DEPC.
- ✓ If people want to eat flying fox they should hunt the pacific flying fox (also know as the black flying fox) as it is not threatened with extinction and not eat the flying foxes that are threatened including the Bank's Flying Fox.

Want to know more?

- ❖ Read more on the book ***Mammals of the South-West Pacific & the Moluccan Islands*** by Tim Flannery.
- ❖ Visit: www.iucnredlist.org

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Threatened Species Factsheet No. 3

FIJIAN BLOSSOM BAT

What are they called?

Scientific:
Notopteris macdonaldi
Other English:
Pacific Blossum Bat, Long-tailed Blossom Bat or Long-tailed Fruit Bat
French:
Bislama: Rat tael bat
Vernacular (local name):
Misek misek (Tanna)
Parat Ta Le Manar (Gaua)

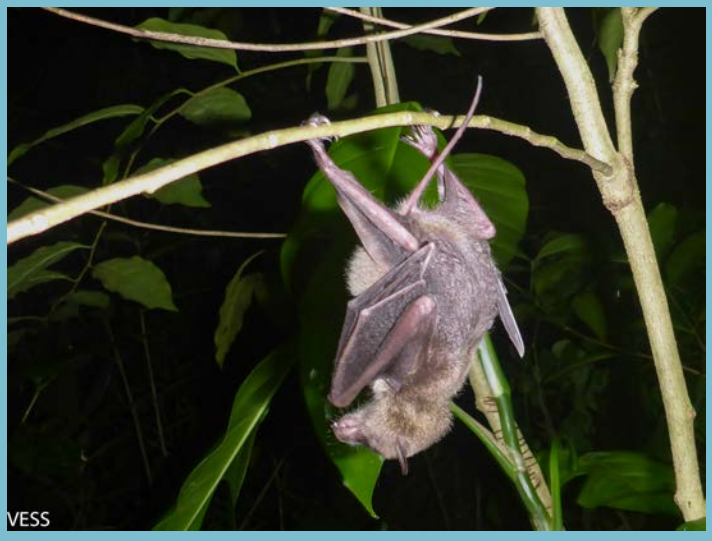
A little bit about them:

In Vanuatu they are found on Ambae, Aneityum, Efate, Emae, Erromango, Gaua, Malakula, Malo, Mota Lava, Espirito Santo and Tanna.

They roost in caves in large colonies and come out to feed in the forests or in gardens. They eat flowers and fruits and can travel to different areas depending on what is flowering in which season.

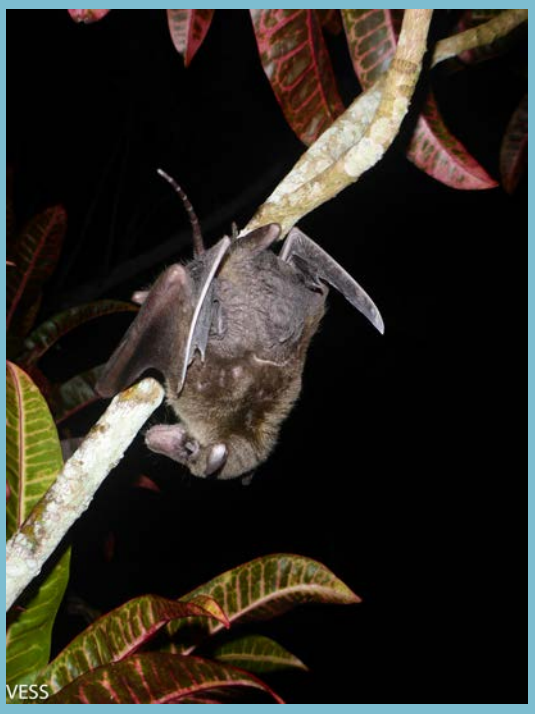
What do they look like?

These bats are very distinctive. They have elongated snouts and a very long free tail. Their tail is not attached to their wings, so it looks like a rat's tail. The wings meet in the middle lower back giving that area a naked and wrinkled look. They are light brown in colour. Their bodies are about 10 cm in length. They are smaller then the fruit bats but bigger



Did you know?

- They are only found in Fiji and Vanuatu!
- Not very much is known about where they are and where they roost in Vanuatu.
- Up to 2000 bats can be found in one roosting site!



Fijian Blossom Bats are classified as Vulnerable (VU) on the IUCN Red List.

Why are they threatened?

- There are only a few known roosting sites.
- Disturbance at roosting sites by people including tourists or people collecting guano.
- Loss of forests due to clearing for agriculture, gardens and other development.
- Hunted for food. Because they roost in large numbers, many bats can be killed when there Is a hunting expedition.

What do they do for us?

- They pollinate many plants including food producing plants.
- They disperse seeds. This can be important for reestablishing vegetation after disturbance such as cyclones.
- As they fly they can cycle nutrients around the forest.
- The guano can be used as a fertilizer.
- Roosting sites could be tourist attractions.

What can we do for them?

- Identify roosting sites and protect them.
- Find out more about them – observe where they live, what they feed on and when they have their babies.
- Take pictures and record when you see them.
- Report the sightings and observations to VESS or DEPC.
- If people want to eat bats they should hunt the pacific flying fox (also know as the black flying fox) as it is not threatened with extinction and not eat bats that are threatened including the Fiji blossom bat.

Want to know more?

- Read more on the book ***Mammals of the South-West Pacific & the Moluccan Islands*** by Tim Flannery.
- Visit: www.iucnredlist.org
- Nature Fiji: https://naturefiji.org/fiji-blossom-bat-notopteris-macdonaldi/

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Threatened Species Factsheet No. 4

FIJIAN MASTIFF BAT

What are they called?

Scientific:
Chaerephon bregullae
English:
Fijian Free-tailed Bat
French:
Bislama:
Vernacular (local name):

What do they look like?

These are small bats. Their bodies are about 6 cm long. They have very distinctive faces and long thick tails and the large ears with smooth margins. Their fur is brownish grey all over their body.

A little bit about them:

These are micro-bats that use sonar to find their food (echolocation). They eat insects and can be seen flying around to catch them in coconut groves, on farmland, in forests and even over the sea, near to the coast.

They are found on Malo and Santo but their biggest population is in Fiji.

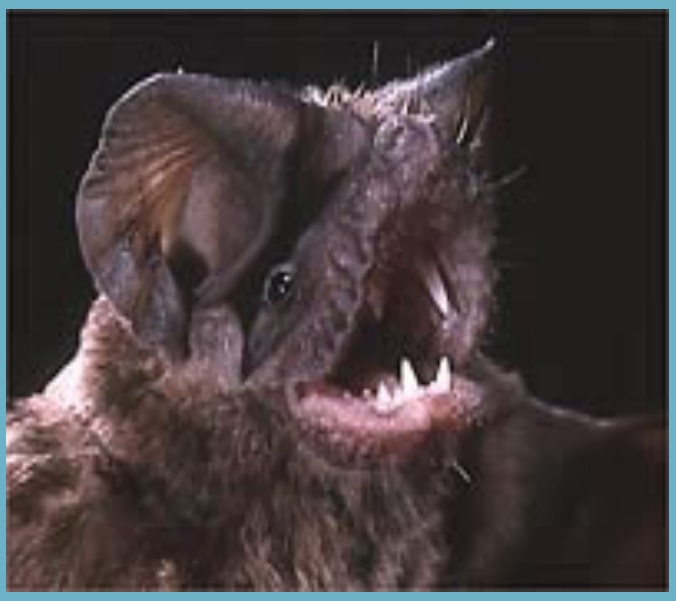
Not very much is know about them.

They roost in large numbers often thousands, inside caves. They breed seasonally with the young being born around December.

Source: http://www.planet-mammiferes.org

Did you know?

- This bat is the only mastiff bat that lives in Vanuatu.
- This bat is only found in Vanuatu and Fiji.
- It used to live in Tonga as well but it became extinct from Tonga in prehistoric times.



Source: http://www.planet-mammiferes.org

Fijian Mastiff Bats are classified as Endangered (EN) on the IUCN Red List.

Why are they threatened?

- Disturbance of their roosting sites (caves).
- Hunted for food.
- They only roost and breed in a very few caves so the population is at risk if something happen to one or two of those caves.

Want to know more?

- Read more in the book ***Mammals of the South-West Pacific & the Moluccan Islands*** by Tim Flannery.
- Visit: www.iucnredlist.org

What do they do for us?

- Bats poo is known as guano and it is a very valuable source of organic fertilizer.
- They eat insects including some pests such as mosquitos and insects that eat crops.

What can we do for them?

- ✓ Identify roosting sites and protect them from disturbance.
- ✓ Record sightings, take pictures of mammals that you think could be Fijian Mastiff Bats.
- ✓ Observe and record which caves they roost in, where they go to feed and when they have young.
- ✓ Send the sightings information you collect to VESS or DEPC.

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Threatened Species Factsheet No. 5

Polynesian Sheath-Tailed Bat

What are they called?

Scientific: *Emballonura semicaudata*

Other English:

Polynesian sheath-tailed bat

French:

Bislama:

Vernacular (local names):

A little bit about them:

These are medium-sized microbats that roost in caves. They forage in forests using a special skill called echolocation. They are insectivorous which means they feed only on insects such as moths, butterflies, bees, beetles, ants and termites.

These bats may not exist in Vanuatu. The are only 2 records, one from the 18th century and the other a specimen labeled as from Santo in 1929. It is possible it was not labeled correctly and the bat was actually collected from Fiji, where the bats are more commonly seen.

What do they look like?

The Pacific Sheath-tailed Bat is has brown fur from head to tail. It has a small tail that is attached to the back edge of the wings. Their bodies are about 4 cm long and weigh about 8 g.

Source: Wikimedia Commons via Encyclopedia of Life

Did you know?

- No recent scientific expeditions have been able to find this bat in Vanuatu.

Pacific sheath-tailed bats are classified as Endangered (EN) on the IUCN Red List.

Why are they threatened?

- Disturbance of caves (roosting sites).
- The loss of their native forests foraging habitats due to agriculture, gardens and other development.
- They are only known to roost in a very small number of caves and if anything happens to any of the caves it could significantly impact the population.

Want to know more?

- Read more on the book: ***Mammals of the South-West Pacific & the Moluccan Islands*** by Tim Flannery.
- Visit: www.iucnredlist.org

What they do for us?

- Bats poo is known as guano and it is a very valuable source of organic fertilizer.
- They eat insects including some pests such as mosquitos and insects that eat crops.

What can we do for them?

- ✓ Protect any known roosting sites.
- ✓ Record sightings and take pictures of bats that you think could be Pacific Sheath-tailed bats and pass them on to VESS or DEPC so we can verify whether this bat does really exist in Vanuatu.

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Threatened Species Factsheet No. 6

VANUATU FLYING FOX

What are they called?

Scientific: *Pteropus anetianus*

Other English:

White flying-fox, red flying fox,

French:

Bislama: Waet flaeng fokis

Vernacular (local name):

There are lots of local names. Here are a few: Togol (Vanua Lava), Gelei berass (Ambrym) Nalvahan (Aneityum).

A little bit about them:

The Vanuatu flying foxes can be found in the same areas as the bigger black flying fox but the black ones tend to roost in large groups in big canopy trees such as the nabanga (banyan) whereas the Vanuatu flying foxes roost in small groups in smaller trees often coconuts. They feed on fruit and flowers of trees such as figs, bananas, breadfruit and coconut. They can be seen flying during the day more often than the other flying foxes in Vanuatu. They live on many islands in Vanuatu: Ambae, Ambrym, Aneityum, Aore, Efate, Emae, Emao, Epi, Erromango, Espirito Santo, Gaua, Lopevi, Maewo, Malakula, Malo, Moto Lava, Nguna, Pentecost, Tongoa, Ureparapara and Vanua lava. There are seven different subspecies.

What do they look like?

They have a yellow fur all over their bodies, black wings, no tail and large eyes.

This is a medium sized flying fox and their bodies are 18-20 cm in length. They are bigger than the Bank's flying foxes and have bigger teeth but are smaller than the pacific flying fox (black flying fox).

Photo credit: Thomson, B (2009)

Did you know?

- They are culturally significant: On Vao, Malekula, they have links to myths about the origin of men.
- There are sand drawings and custom stories about flying foxes.

Vanuatu flying fox are classified as Vulnerable (VU) on the IUCN Red List.

Why are they threatened?

- Their range (where they live) is very small and fragmented.
- They are hunted for food by people, especially after cyclones.
- Their habitat is threatened by agriculture, being cut down to make new gardens and other development.

What do they do for us?

- They pollinate many plants including food producing plants.
- They disperse seeds. This can be important for reestablishing vegetation after disturbance such as cyclones.
- As they fly they can cycle nutrient around the forest.
- The guano can be used as a fertilizer.
- Roosting sites could be tourist attractions.

What can we do for them?

- ✓ Identify roosting sites and protect them.
- ✓ If people want to eat flying fox they should hunt the pacific flying fox (also know as the black flying fox) as it is not threatened with extinction and not eat the flying foxes that are threatened including the Bank's Flying Fox

Want to know more?

- ❖ Read their profiles in the Book ***Mammals of the South-West Pacific & Moluccan Islands***. By Tim Flannery
- ❖ Visit: www.iucnredlist.org

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Threatened Species Factsheet No. 7

BECK'S PETREL

What are they called?

Scientific:
Pseudobulweria becki
Other English: Becks Petrel
French: Petrel de Beck
Bislama:
Vernacular (local name):

A little bit about them:

These are large sea birds that are often encountered far offshore, flying alone. They have been seen on the seas of Papua New Guinea, Solomon Islands and Vanuatu around Efate, however they are only known to breed in Papua New Guinea.

The gathering of a group will usually indicate that they are breeding near by, although very little is known about their burrows and nesting.

The population of mature adults is still thought to be less than 250.

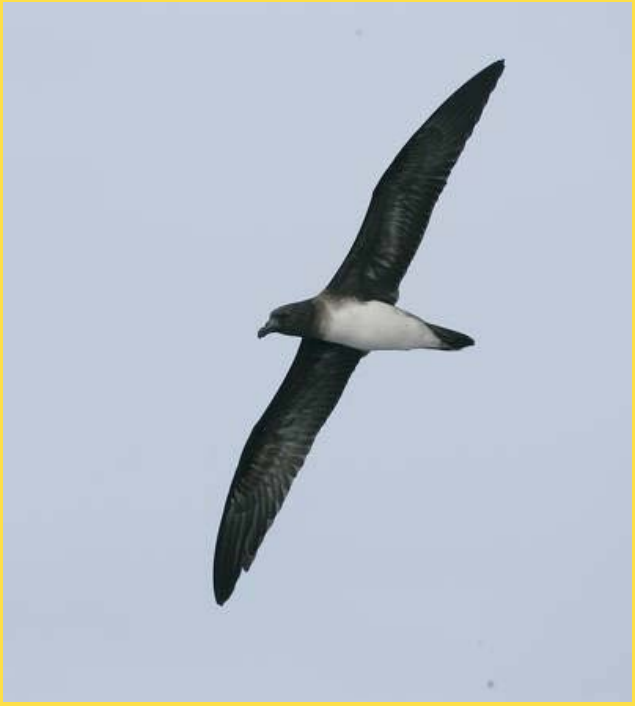
In the coasts, they prey on crabs (crustaceans) while out at sea, they feed on squid and octopus.

What do they look like?

Beck's Petrels can grow up to 29 cm long, and have wingspans of 70 - 76 cm.

Their bodies and wings are blackish brown while their belly is white. The bill and the tail are black, short and rounded.

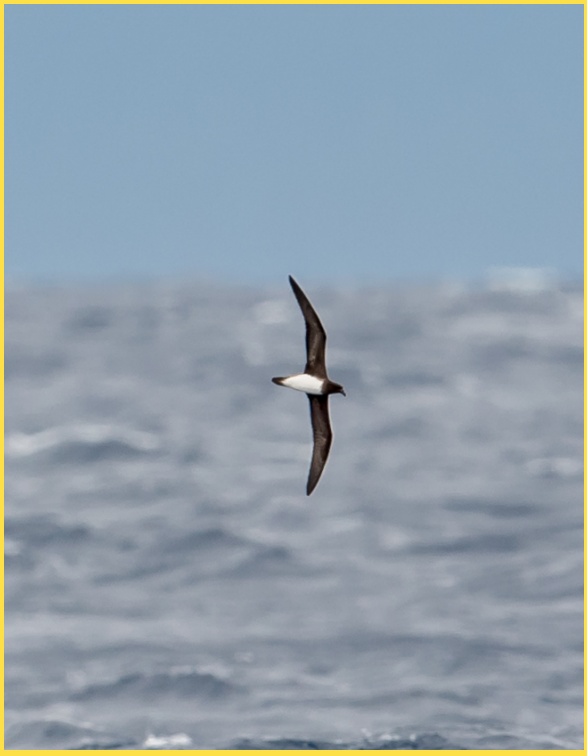
The feathers under their wings can range from dark to pale grey, often with a central line of white feathers under the wings.



Source: Birdlife Pacific, 2012

Did you know?

- There were just two known individuals in 1929.
- Though more have been found, they are still one of the rarest birds in the world!



Source: Kirk Zufelt

Beck's Petrels are classified as Critically Endangered (CR) on the IUCN Red List.

Why are they threatened?

- The small chicks and eggs are preyed on by introduced pigs, cats, dogs, rats and mice.
- Disturbance to breeding sites through clearing and development in nesting habitat.
- Seabirds, and Petrels in particular, consume plastics floating in the ocean. They die from either intestinal blockages or poisoning.

What do they do for us?

- Seabird droppings, known as guano, left on their roosting sites provides important nutrients to plants on their nesting island. Studies have shown that the plants on islands with seabirds grow taller and faster than those on islands without seabirds.
- Petrels are top predators of fish, mollusc and crustacean species, maintaining the health of ecosystems.

What can we do for them?

- ✓ Identify nesting and breeding sites and take conservation measures to protect them.
- ✓ Castrate and spay pet cats and dogs to reduce feral animals preying on adults, chicks and eggs.
- ✓ Reduce using plastics, especially single-use plastics, and ensure rubbish is disposed of responsibly.

Want to know more?

- Check out their Profile in the book: ***Birds of Melanesia*** by Guy Dutson
- Visit: www.iucnredlist.org

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Threatened Species Factsheet No. 8

COLLARED PETREL

What are they called?

Scientific:
Pterodroma brevipes;
P. brevipes magnificens
English: White-winged Petrel
French: Pètrel à collier
Bislama:
Vernacular (Local name):
Tekerkark (Tanna)

A little bit about them:

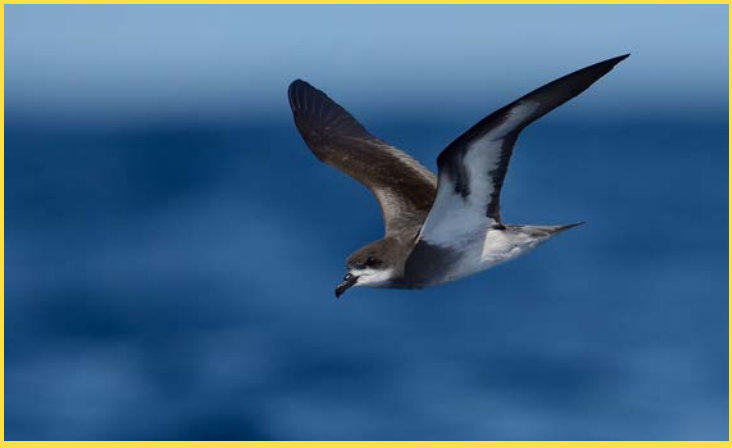
These are medium-sized seabirds that spend most of their time out at sea on their own.

They are known to breed in burrows on Vanua Lava and Tanna's hill and mountain regions. Their range on other islands is not well known but historically they have have been recorded in Aneityum and in Fiji and the Cook Islands. It is not known if Collared Petrels still breed in Aneityum.
Their diet is composed of squid, octopus and fish. They may also prey on small crabs when they are near the shore.

What do they look like?

Collared petrels can grow up to 30 cm and have wingspans of 70 cm. Their upper back feathers are dark, with dark markings on their wings over mostly grey feathers. They have distinctive white throats and foreheads with black heads and back of the neck.

The populations in Vanua Lava and Tanna are thought to be subspecies and their belly colour varies from dark grey in the north (with a slightly longer tail also) to variable and often pale in the south.



Source: Kirk Zufelt

Did you know?

- They make a variety of voice calls, including kek-kek-kek whistles, longer cher-cher sounds and low moaning.

Source: Kirk Zufelt

Collared Petrels are classified as Vulnerable (VU) on the IUCN Red List.

Why are they threatened?

- The small chicks and eggs are preyed on by introduced pigs, cats, dogs, rats and mice.
- Disturbance to breeding sites through clearing and development in nesting habitat.
- Seabirds, and Petrels in particular consume plastics floating in the ocean. They die from either intestinal blockages or poisoning.

Want to know more?

- Check out their Profile in the book: ***Birds of Melanesia*** by Guy Dutson
- Visit: www.iucnredlist.org

What do they do for us?

- Seabird droppings, known as guano, left on their roosting sites provides important nutrients to plants on their nesting island. Studies have shown that the plants on islands with sea birds grow taller and faster than those on islands without seabirds.
- Petrels are top predators of fish, mollusc and crustacean species, maintaining the health of ecosystems.

What can we do for them?

- ✓ Identify nesting and breeding sites and take conservation measures to protect them.
- ✓ Castrate and spay pet cats and dogs to reduce feral animals preying on adults, chicks and eggs.
- ✓ Reduce using plastics, especially single-use plastics, and ensure rubbish is disposed of responsibly.

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Threatened Species Factsheet No. 9

WHITE - NECKED PETREL

What are they called?

Scientific:
Pterodroma cervicalis &
Pterodroma occulta
Common English:
White-naped Petrel or Vanuatu Petrel *(subspecies)*
French: Pétrel à col blanc
Bislama:
Vernacular (local name):

A little bit about them:

These are large sea birds that are native to Vanuatu and closely related to shearwaters. They fly higher than most other petrels with wings bowed and angled.

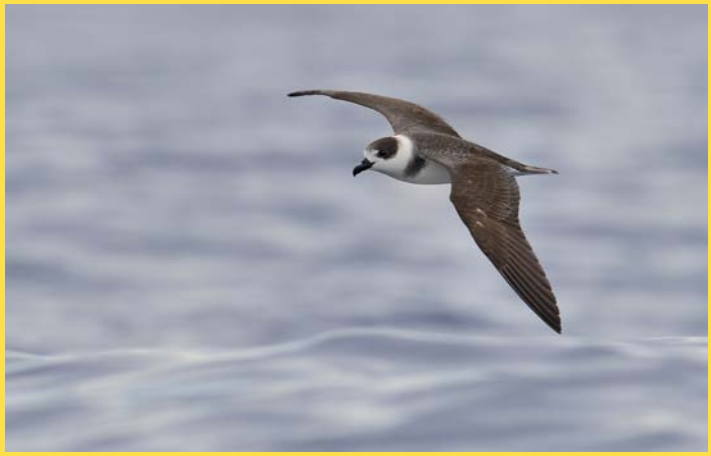
The nest in crevices in rocky outcrops, up to 300m-600m altitude. The Vanautu subspecies is only known to breed in Vanua Lava in Vanuatu.

They feed mainly on fish, cephalopods and crustaceans which includes squid, octopus and crab.

What do they look like?

White necked petrels are large seabirds, growing up to 43cm with a wingspan of 1m. They have a clear white collar the whole way around their throat and neck, a dark head and grey upper parts and wings. Their bellies are white with some colouring under the wings.

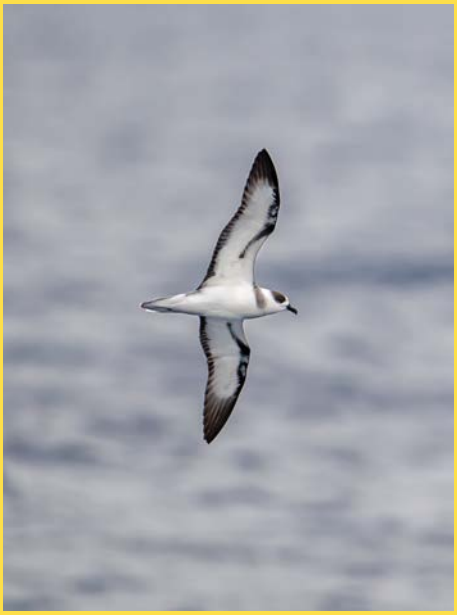
When fully spread, a dark "M" marking becomes visible extending from one wing-tip to the other across the back.



Source: Kirk Zufelt

Did you know?

- They only return to land after dark to nest.
- Unlike other seabirds, White-Necked Petrels rarely follow ships.



Source: Kirk Zufelt

White - Necked Petrels are classified as Vulnerable (VU) on the IUCN Red List.

Why are they threatened?

- The small chicks and eggs are preyed on by introduced pigs, cats, dogs, rats and mice.
- Disturbance to breeding sites through introduced goats, clearing and development in nesting habitat.
- Seabirds, and Petrels in particular consume plastics floating in the ocean. They die from either intestinal blockages or poisoning.

Want to know more?

- Check out their Profile in the book: ***Birds of Melanesia*** by Guy Dutson
- Visit: www.iucnredlist.org

What they do for us?

- Seabird droppings, known as guano, left on their roosting sites provides important nutrients to plants on their nesting island. Studies have shown that the plants on islands with sea birds grow taller and faster than those on islands without seabirds.
- Petrels are top predators of fish, mollusc and crustacean species, maintaining the health of ecosystems.

What can we do for them?

- ✓ Identify nesting and breeding sites and take conservation measures to protect them.
- ✓ Castrate and spay pet cats and dogs to reduce feral animals preying on adults, chicks and eggs.
- ✓ Reduce using plastics, especially single-use plastics, and ensure rubbish is disposed of responsibly.

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Threatened Species Factsheet No. 10

POLYNESIAN STORM PETREL

What are they called?

Scientific:
Nesofregetta fuliginosa

Other English:
White Throated storm petrel/ Samoan storm petrel

French: Oceanite a gorge blanche

Bislama:

Vernacular (local name):

A little bit about them:

These are medium-sized sea birds that bound and skip in erratic zig-zags close to the surface of the sea.
They feed on small fish, squids, lobsters, shrimps and crabs.
They lay their eggs in nests under vegetation or in rock-crevices or in burrows dug in sand (often extremely fragile). They have been found on Aneityum and Tanna in Vanuatu but are very rare.

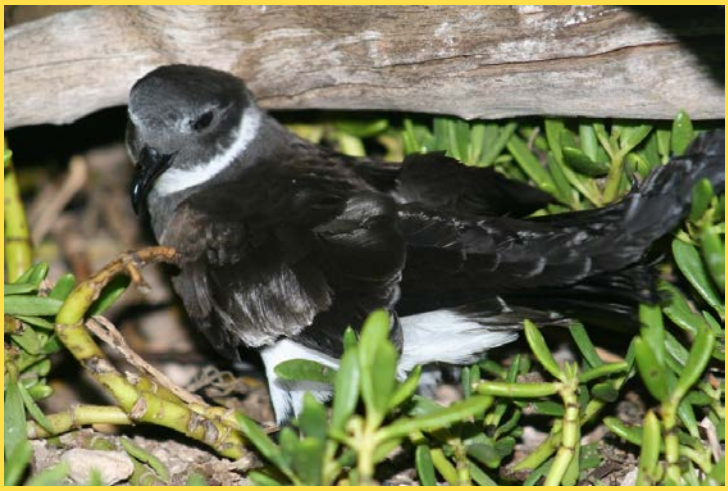
What do they look like?

This medium sized Petrel grows to up to 24cm. They have a dark brown back, including the back of the neck, and white collared throat. They have a black bill, broad rounded wings and black feed that project beyond their long forked tail during flight.
There are different forms varying in the amount of white on their underside. In Vanuatu, the common form has more white on the belly and wings while the other have black streaks on white.

Source: Kirk Zufelt

Did you know?

- Myths and folklores claim that the sudden appearance of a Polynesian Storm Petrel at sea signifies the coming of a storm.
- Females lay a single egg every nesting season.



Source: Ray Pierce Pacific

Polynesian Storm Petrels are classified as Endangered (EN) on the IUCN Red List.

Why are they threatened?

- The small chicks and eggs are preyed on by introduced pigs, cats, dogs, rats and mice.
- Disturbance to breeding sites through clearing and development in nesting habitat.
- Seabirds, and Petrels in particular consume plastics floating in the ocean. They die from either intestinal blockages or poisoning.

What do they do for us?

- They recycle nutrients, particularly phosphate between the land and sea through their eating and waste known as guano, fertilizing plants.
- Polynesian Storm Petrels are top predators of fish, mollusc and crustacean species, maintaining the health of ecosystems.

What can we do for them?

- ✓ Identify nesting and breeding sites and take conservation measures to protect them.
- ✓ Castrate and spay pet cats and dogs to reduce feral animals preying on adults, chicks and eggs.
- ✓ Reduce using plastics, especially single-use plastics, and ensure rubbish is responsibly disposed of.

Want to know more?

- Read more about them in the book ***Birds of Melanesia*** by Guy Dutson.
- Visit: www.iucnredlist.org

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Threatened Species Factsheet No. 11

ROYAL PARROTFINCH

What are they called?

Scientific:
Erythrura regia or *E. cyaneovirens*

Other English: Red-headed Parrotfinch

French: Diamant royal

Bislama:

Vernacular (local name):
Tabut (Tongoa & Emae)
Batukira (Nokovula village Santo)

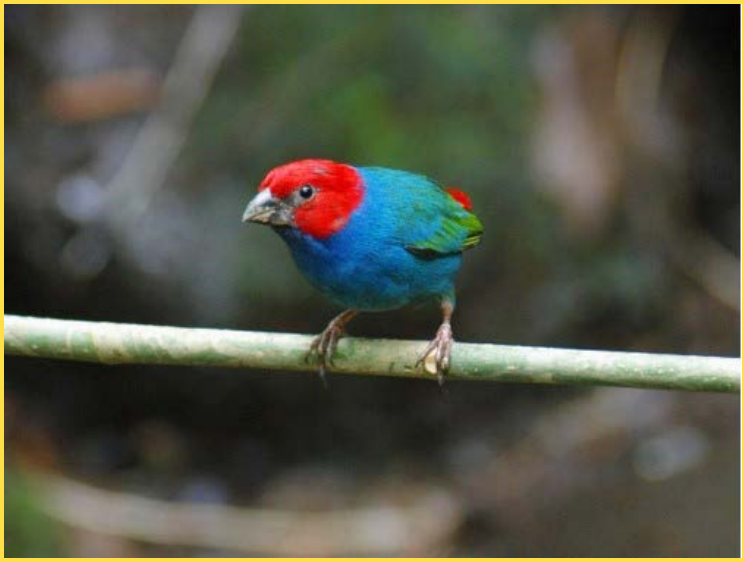
A little bit about them:

They are small colourful birds found in closed canopy forests and are native to Samoa and Vanutu in the pacific, with the Vanuatu subspecies found on Santo, Epi, Emae and Tongoa. There are also historical records of Royal Parrotfinches from many other islands in Vanuatu, including in Tafea.

They feed mainly on the fruit of the fig trees such as banyan trees, and little insects, their larvae and eggs attached to fruit and seeds.

What do they look like?

These small birds grow up to 12 cm. The head and the tail are bright red while the throat and breast are light blue. The wings and the rest of the underparts are blue-green. They have thick black bills with brown eyes and feet. Females have more green feathers on their upper back. Young birds are duller and mostly green, have a green-blue face and pale bill.



Source: Phil Bender

Did you know?

- Parrotfinches are not in the same family as parrots!
- The Vanuatu and Samoa subpopulations were thought to be different species, but new scientific evidence shows they are the same.

Source: Phil Bender

Royal Parrotfinches are classified as Vulnerable (VU) on the IUCN Red List.

Why are they threatened?

- Loss of habitat as forested land is being cleared for agriculture, gardens and other developments.
- The caged bird trade is threatening populations as individuals are illegally taken from the wild.

Want to know more?

- Read about them in the book ***Birds of Vanuatu*** by Heinrich L Bregulla
- Visit: www.iucnredlist.org

What do they do for us?

- Parrotfinches are good seed dispersers of fig species and also act as indicators of the abundance of fig trees.
- They control pest species of insect by eating the figs they need to lay in, and directly eating larvae.
- They can provide tourism opportunities through bird watching activities.

What can we do for them?

- ✓ Report any trading of them.
- ✓ Carefully manage land clearing to preserve important habitat, especially banyan trees.
- ✓ Record sightings of the birds to understand habitat and population numbers, and promote ecotourism.

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Threatened Species Factsheet No. 12

SANTA CRUZ GROUND-DOVE

What are they called?

Scientific: *Gallicolumba sanctaecrucis*

Other English:

Santa cruz ground dove

French: Gallicolombe de Santa Cruz

Bislama:

Vernacular (local name):

Pimo (Nolovula, Santo)

A little bit about them:

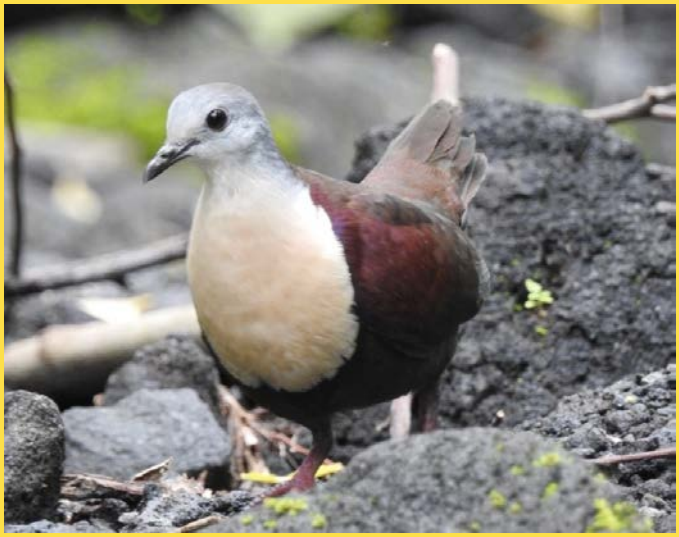
These are small round birds of the forest floor. They are only found in the Solomon Islands (Santa Cruz Islands) and on Santo in Vanuatu. They live in old growth forest, 300-1000m elevation.

It is believed the Santa Cruz Ground Dove forages only on the ground, but perches on low branches and roosts in trees.

Their diet includes seeds, berries and young shoots it finds when foraging the forest floor, insects and worms. It's call is a slow series of up to 15 low *woop* noises.

What do they look like?

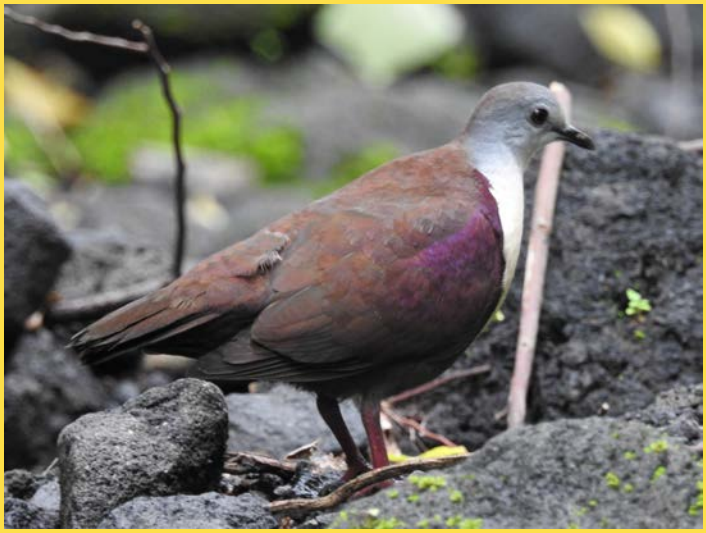
These small, plump birds grow up to 25 cm long. Males, seen below, have grey heads, very pale white/brown chests and a dark brown belly. The back and wings are grey-brown with glossy purple feathers on the wings. Females are duller with a reddish-brown head, neck and back. They have some green glossy feathers on their mostly brown back, and a grey belly. They each have black eyes with a short black bill, a short tail and red feet. Young birds are brown, sometimes with some purple on the wing.



Source: Ray Pierce Pacific

Did you know?

- They prefer to escape from an intruder by running to hide in the undergrowth, rather than fly.



Source: Ray Pierce Pacific

Santa Cruz Ground-Doves are classified as Endangered (EN) on the IUCN Red List.

Why are they threatened?

- Predation by invasive species such as rats, cats, dogs and pigs.
- Habitat loss caused by the clearing of land for development.
- Habitat loss due to the invasive vine *Merremia peltata* kills huge numbers of canopy trees in the Vatthe Conservation Area.
- Hunting by people.

What do they do for us?

- They feed on fruit and seeds enabling them to disperse seeds.
- Their foraging and scratching on the forest floor cycles nutrients in the forest ecosystem.
- Provide tourism opportunities through activities such as bird watching.

What can we do for them?

- ✓ Castrate and spay pet cats and dogs to reduce feral animals preying on adults, chicks and eggs.
- ✓ Enforce regulations in existing protected areas, and identify other nesting and breeding sites and take conservation measures to protect them.
- ✓ Increase awareness of the threats to this species and discourage hunting.
- ✓ Control *Merremia* vine.

Want to know more?

- ❖ IUCN website: www.iucnredlist.org
- ❖ Book: ***Birds of Melanesia*** by Guy Dutson

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Threatened Species Factsheet No. 13

Santo Mountain Starling

What are they called?

Scientific:
Aplonis santovestris

Common English: Mountain/Santo/Vanuatu Starling

French: Stourne des montagnes

Bislama:

Vernacular (local name): Mataweli (Nokovula, Santo)

A little bit about them:

They are medium sized bird found on the highest peaks of Santo island, usually between 1200-1700m elevation. They are reported to nest in holes in trees, low to the ground.

The birds have been seen feeding on insects, fruit and seeds. They are usually seen no more than 5m above the forest floor, although occasionally perch in the canopy. They fly quickly and directly in the sub-canopy.

What do they look like?

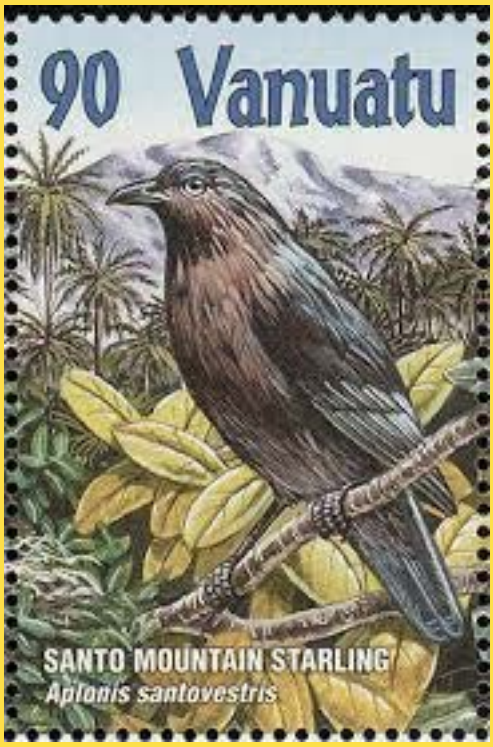
These birds can grow up to 17cm long. They have a black-brown forehead with white eyes and a firm black bill. They are a rusty/reddish brown colour all over, with a slightly paler belly and darker wingtips. The tail is short and darker.

They differ from the rusty-winged starling also found on Santo, as they have no grey patches and white eyes, not black.

Source: Handbook of the birds of the world Alive

Did you know?

- The mountain starling is the rarest of the endemic species in Vanuatu!



Source: www.beautyofbirds.com

Santo Mountain Starlings are classified as Vulnerable (VU) on the IUCN Red List.

Why are they threatened?

- Predation by invasive species such as rats, cats, dogs and pigs. As they are not native to Vanuatu, birds have no natural defense against them
- Habitat loss caused by the clearing of land for development.
- Sometimes hunted for food.

What they do for us?

- They disperse seeds from the fruit they eat, in their droppings.
- Their foraging and scratching on the forest floor cycles nutrients in the forest ecosystem.
- They are iconic birds of Vanuatu because they are not found anywhere else.

What can we do for them?

- ✓ Enforce regulations in existing protected areas, and identify other nesting and breeding sites and take conservation measures to protect them.
- ✓ Increase awareness of the threats to this species and discourage hunting.
- ✓ Castrate and spay pet cats and dogs to reduce feral animals preying on adults, chicks and eggs.

Want to know more?

- Book: ***Birds of Melanesia*** by Guy Dutson
- Visit: www.iucnredlist.org

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Threatened Species Factsheet No. 14

VANUATU IMPERIAL PIGEON

What are they called?

Scientific: *Ducula bakeri*

English: Vanuatu Mountain Pigeon or Baker's imperial pigeon

French: Carpophage de baker

Bislama: Nawimba

Vernacular (Local name):

Manutu (Nokovula, Santo) Gwona (Sungwadaga Maewo)

A little bit about them:

These birds are only found in the large northern islands of Vanuatu. These include the Banks group, Santo, Maewo, Ambae, Pentecost and Ambrym.

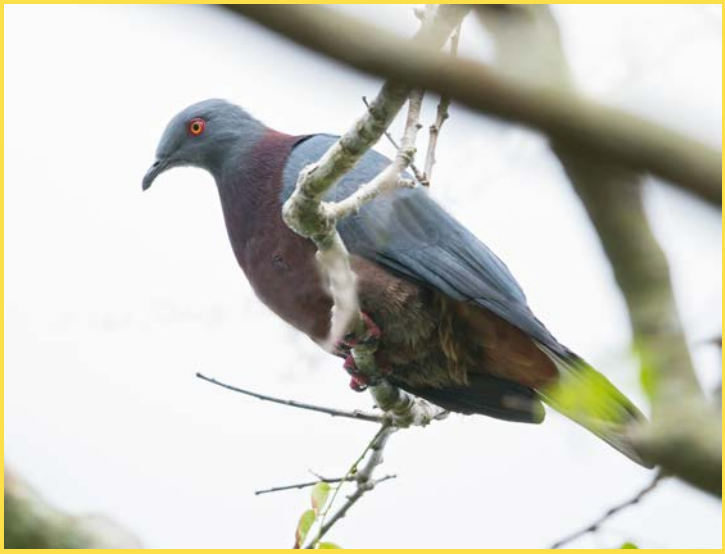
They prefer to live on hills and montane forests on elevations of 300m+ above sea level. They are usually seen alone or in pairs, sometimes in flocks up to 6 individuals.

These birds are fruitivorous meaning they feed on the fleshy fruit and berries of shrubs and native trees such as figs (Nambanga).

What do they look like?

These large pigeons grow to 40 cm and are dark grey in colour with a pale blue-grey head and purplish-maroon breast. They have a long tail and long bill.

The adult has a glossy look while the young are dull. They have darker purple underside feathers, and do not have a black knob on their bill or white throat compared to their similar relatives.



Source: Dubi Shapiro Photography

Did you know?

- These pigeons are shy, normally heard and rarely seen.
- Their call is a booming powerful twoo-hoo-hoo-hoo often repeated.

Vanuatu Imperial Pigeons are classified as Vulnerable (VU) on the IUCN Red List.

Why are they threatened?

- Habitat destruction as forests are cleared for logging, gardens and cattle ranches.
- Predation by invasive species such as rats, cats, dogs and pigs.
- Popular target for hunters.
- Many are kept in cages as pets making it impossible for them to meet and reproduce with other birds of the same species.

Want to know more?

- IUCN website: www.iucnredlist.org
- Book: **Birds of Melanesia** by Guy Dutson

What do they do for us:

- They disperse seeds from the fruit they eat, in their droppings.
- Their foraging and scratching on the forest floor cycles nutrients in the forest ecosystem.
- Create eco-tourism opportunities through bird watching sessions in the mountains.
- They are an iconic bird for Vanuatu because they are not found anywhere else.

What can we do for them?

- ✓ Increase awareness of the threats to this species and discourage hunting.
- ✓ Discourage pet keeping of wild birds, especially threatened species such as the Vanuatu Imperial Pigeon.
- ✓ Castrate and spay pet cats and dogs to reduce feral animals preying on adults, chicks and eggs.

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Threatened Species Factsheet No. 15

VANUATU MEGAPODE

What are they called?

Scientific:
Megapodius layardi

English: Vanuatu megapode or scrubfowl, Incubator Bird

French: Mégapode de Layard

Bislama: Skraptak or Namalau

Vernacular (local name):

A little bit about them:

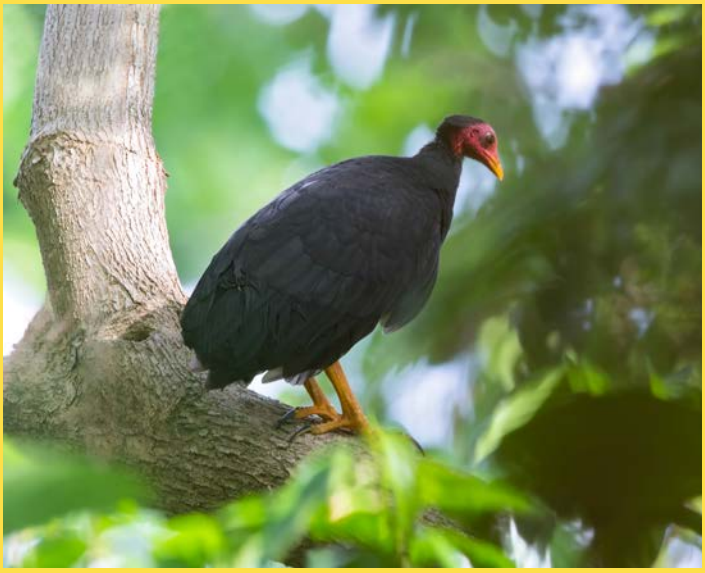
The Vanuatu megapode is a ground bird that lives on moist lowland forests. They can fly but spend most of their time on the forest floor scratching around for food. They can be found on most islands of Vanuatu, but appear to be extinct on Tanna.

Their diet is a mixture of fruits, seeds, worms and insects, usually found by racking and mixing the dead matter on the forest floor.

They do not sit on their eggs but bury them in large nest mounds they build from soil, leaves and organic matter in lowland forests. The fermenting vegetable matter heats their eggs.

What do they look like?

These are large dark blackish-brown birds that can grow up to 34 cm. Their forehead and face are covered with bright red bare skin. They have yellow legs and large feet.
The females are similar to the males but slightly smaller. Chicks are dark brown, with paler cheeks and brown legs.



Source: Dubi Shapiro Photography

Did you know?

- Megapode means “Large Feet”.
- Some Vanuatu Megapodes bury their eggs near volcanoes with heat vents and active craters to heat their eggs for them!

Vanuatu Megapodes are classified as Vulnerable (VU) on the IUCN Red List.

Why are they threatened?

- Overexploitation of the birds through hunting and collection of their eggs.
- Predation by invasive species such as rats, cats, dogs and pigs.
- Breeding sites are continuously cleared for agriculture, cattle ranching and logging.
- Fire, heavy rain and cyclones damage their breeding mounds and either buries the chicks inside or exposes them to predators.

What can we do for them?

- ✓ Increase awareness of the threats to this species and discourage hunting through community based taboos and workshops.
- ✓ Castrate and spay pet cats and dogs to reduce feral animals preying on adults, chicks and eggs. As they are not native to Vanuatu, birds have no natural defense against them.

What do they do for us:

- When scratching the ground for food, they mix the soil with dead leaves, logs, fruit etc helping to cycle nutrients.
- They control pest species by eating many insect species.
- They are an iconic bird for Vanuatu because they are not found anywhere else.
- Create eco-tourism opportunities through bird watching tours.

Source: Kirk Zufelt

Want to know more?

- Check out their profile in the Book: **Birds of Melanesia** by Guy Dutson
- IUCN website: www.iucnredlist.org

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Threatened Species Factsheet No. 16

PALM LORIKEET

What are they called?

Scientific:
Charmosyna palmarum
Other English:
Green Palm Lorikeet
French: Loriquet des palmiers
Bislama: Smol Nasiviru
Vernacular (Local name):
Denga (Nokovula Santo)
Vini (Tongoa)

What do they look like?

These small lorikeets grow to 16cm and are almost entirely green. The wings have a darker shade while the underparts are paler and yellowish. The feathers around the base of the bill are red with the bill itself being reddish orange. They have some olive brown feathers on the back of the neck, and a yellow tipped tail.

Females have less brown on the neck, and less red feathers on the chin.

A little bit about them:

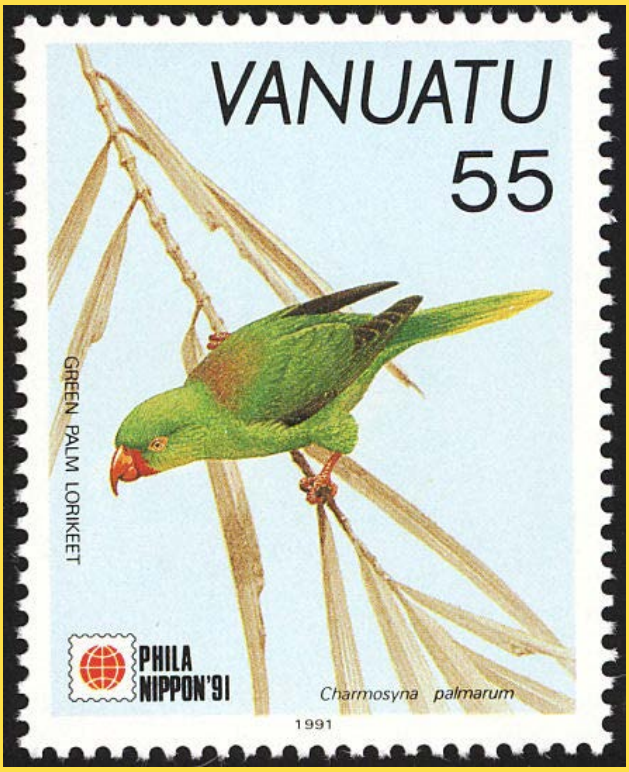
Palm lorikeets are small slender birds found on some islands in Vanuatu and the Solomon Islands. They are usually found in flocks up to 30 birds in mountain forests up to 1600m elevation, but also feeding in the canopy of flowering trees including coconuts in coastal areas. They travel between suitable habitats on and between different islands. Historically they are found on all Vanuatu islands except Torres.

They feed mainly on nectar and pollen from flowering trees, including coconut blossoms at the coast.

Source: Ray Pierce Pacific

Did you know?

- These birds have a fluctuating range with local extinctions and recolonisations over time.



Palm Lorikeets are classified as Vulnerable (VU) on the IUCN Red List.

Why are they threatened?

- Loss of habitat as forested land is being cleared for agriculture, gardens and other developments.
- Predation by invasive species such rats and cats.
- Parasitic disease Avian Malaria.
- Increase in extreme weather events cited as a future threat as a result of climate change.

What they do for us?

- Palm Lorikeets pollinate coconut and other palms by feeding on blossoms and spreading pollen between them.
- They increase the range of tree species by dispersing seeds from the fruit they eat, in their droppings.
- They can provide tourism opportunities through bird watching activities.

What can we do for them?

- ✓ Establish and register Community Conservation Areas (CCAs) that include habitat of the Palm Lorikeet
- ✓ Carefully manage land clearing to preserve important habitat.
- ✓ Castrate and spay pet cats and dogs to reduce feral animals preying on adults, chicks and eggs.

Want to know more?

- ❖ IUCN website: www.iucnredlist.org
- ❖ Book: ***Birds of Melanesia*** by Guy Dutson

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Threatened Species Factsheet No. 17

GREEN TURTLE

What are they called?

Scientific: *Chelonia mydas*

Common English: Green Turtle

French: Tortue verte

Bislama: Grinfala totel

Vernacular: Uga Vanua (Maewo Sungwadaga dialect) amongst others.

A little bit about them:

Green Seaturtles are reptiles. They live in the sea but return to land to lay eggs.

Hatchlings (baby turtles) hatch on the beach, race to the ocean and swim to the deep sea where they feed on both tiny plants and animals.

The adults return to the coast and are the only herbivorous (plant-eating) seaturtle and feed on seagrass and algae. Green Turtles grow very slowly and can take 25-50 years before they can lay eggs. Their nesting beaches are often thousands of kilometers away from where they normally live. Females travel to nesting beaches to lay every 2-5 years.

Green turtles can be seen throughout Vanuatu.

What do they look like?

These are large turtles often over 1m long as adults and weigh up to 230kg. Their shells are usually a mix of brown, dark-green and grey patterns. The underside of their shells are light yellow and white. Their shells are smooth.

They have small dark-brown heads and serrated jaws for tearing seagrass. They have only 2 scales between their eyes which is useful to tell them apart from other turtles. Hatchlings are very dark in colour with white edges on their body and flippers.

Source: Big Blue Vanuatu

Did you know?

- They are named "Green" because of the colour of the fat found under their shell.
- Females lay 40-150 eggs per nest!
- They can hold their breath up to five hours underwater.

Green Turtles are classified as Endangered (EN) on the IUCN Red List.

Why are they threatened?

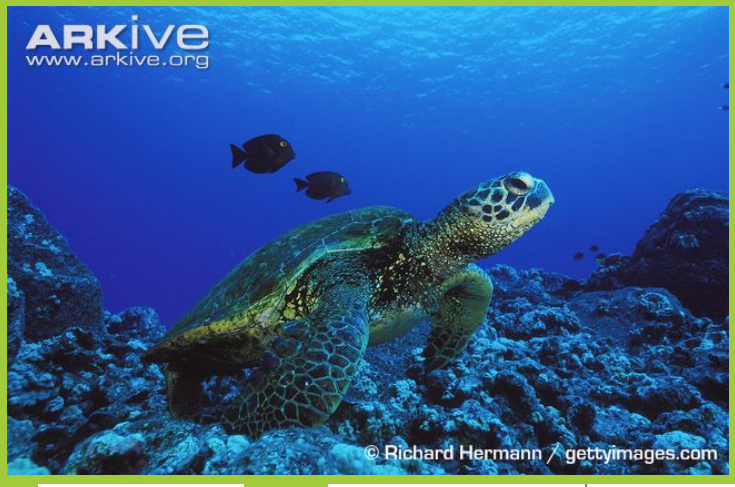
- Destruction of seagrass which is their habitat and food source.
- Being caught in fishing nets as bycatch or becoming stuck in old 'ghost' nets and drowning.
- Poaching of adults and eggs.
- Predation of hatchlings by birds, crabs and introduced species such as dogs and pigs.
- Accidently eating plastic rubbish kills adult turtles.
- Loss of nesting beaches

What do they do for us?

- They keep coastal and marine habitats, including seagrass beds healthy by cycling nutrients.
- Seagrass is especially important as a home for other marine organisms.
- This means there are healthier populations of fish and crustaceans which feed bigger organisms, including people!
- Create tourism opportunities as people like to see Green Turtles in their natural environment.

What can we do to help them?

- ✓ Use fishing gear that does not catch seaturtles by accident.
- ✓ Leave nesting turtles alone and do not remove their eggs.
- ✓ Improve seagrass health by reducing fertiliser and sediment runoff from coastal development, gardens and agriculture.
- ✓ Avoid using plastic wherever possible and put all rubbish in the bin so it doesn't end up in the ocean.



Want to know more?

- Read **the *Pacific Sea Turtle Education kit*** by SPREP
- Visit: www.iucnredlist.org

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Threatened Species Factsheet No. 18

HAWKSBILL TURTLE

What are they called?

Scientific: *Eretmochelys imbricata*

Common English: Hawksbill turtle

French: Tortue Caret

Bislama: Hawksbill Totel

Vernacular: Many communities don't have a specific name for this species but call them "small turtles".

A little bit about them:

They are marine reptiles native to Vanuatu. Seaturtles are large animals, but Hawskbills are the smallest seaturtles found in Vanuatu. They have an average weight of 60-80kg and their shell is about 90cm long.

They eat lots of marine animals including sponges, soft corals, jellyfish, sea urchins and crabs.

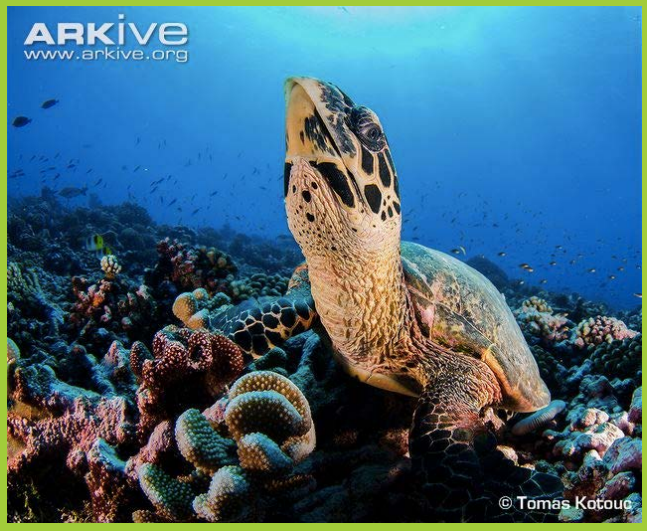
Hawksbills grow slowly and can take 20-35 years before females can lay eggs. They live in the sea but come on land to lay their eggs every 2-3 years.

Hawksbill turtles are found throughout Vanautu.

What do they look like?

Hawksbill Turtles are named for their pointed hooked beak. They have small and narrow heads, dark brown in colour. Their shells are bright and shiny, a mixture of reddish brown and light colours in attractive spots and line patterns. Their shell also has a jagged edge and overlapping, rough scales. They have 4 small scales between their eyes which is useful to tell them apart from Green Turtles.

Hatchlings are very small and brown, with jagged edges on their shells as well.



Did you know?

- Females lay between 70 – 220 eggs in each nest!
- Female seaturtles return to their birthplace to lay their eggs, often they cross oceans to get there.

Hawksbill Turtles are classified as Critically Endangered (CR) on the IUCN Red List.

Why are they threatened?

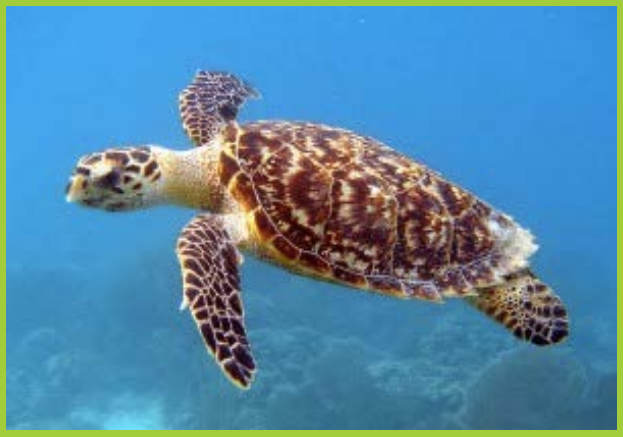
- These turtles are illegally hunted to eat and for their attractive shell, used for jewelry and other crafts.
- Egg are eaten by people, pigs, cats and dogs.
- Being strangled and drowning in fishing nets.
- Pollution such as plastic bags which they can confuse with food.
- Loss of nesting beaches.

What do they do for us?

- They keep coral reefs healthy. As they are one of the only species who can eat tough sponges, they control their population.
- This allows corals to grow and the whole ecosystem to survive, including fish and crustaceans that humans like to look at and eat.
- They create tourism opportunities as people like to see Hawksbill Turtles in their natural environment.

What can we do for them?

- ✓ Use fishing gear that does not catch seaturtles by accident.
- ✓ Leave nesting turtles alone, do not remove their eggs and stop harvesting of adults for their shells and meat.
- ✓ Avoid using plastic wherever possible and put all rubbish in the bin so it doesn't end up in the ocean.



Source: Farm4Static via Flickr

Want to know more?

- Read **the *Pacific Sea Turtle Education kit*** by SPREP
- Visit: www.iucnredlist.org

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Threatened Species Factsheet No. 19

LEATHERBACK TURTLE

What are they called?

Scientific:
Dermochelys coriacea

Common English:
Leatherback, coffin-back, trunk turtle.

French: Tortue luth

Bislama:

Vernacular: There are many different names on each island.

A little about them:

They are deep-diving marine reptiles that live in the sea but return to nest on land. Leatherbacks travel the furthest of any seaturtle, migrating across entire oceans. They are the largest seaturtle reaching shell lengths of 1.5-2.5 m and weigh 300-500kg.

Their diet is mainly jellyfish. They reach maturity at 15-25 years old and females then lay eggs every 2-4 years.

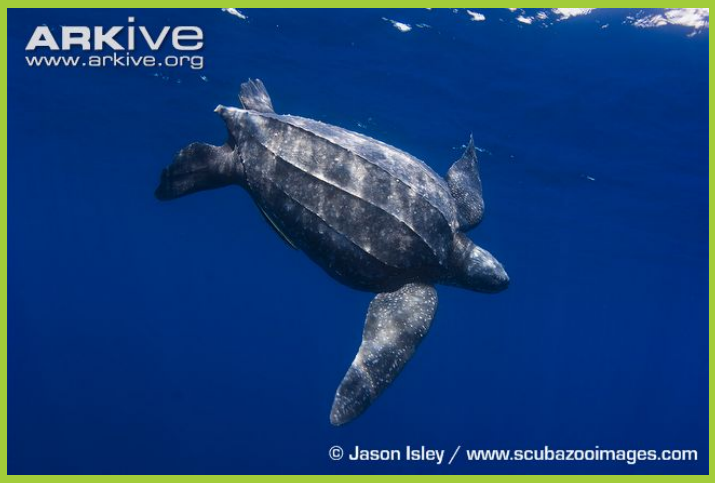
Leatherback turtles nest on Ambrym, Epi, Malekula and used to nest on Efate.

What do they look like?

They are huge creatures with a blue-black body with white spots. They are the only living soft-shell seaturtle, with it's shell divided into 7 narrow sections from head to tail, made of oily skin.

The front flippers are longer than their back flippers. They do not have scales on their head.

We don't see leatherbacks as often as other seaturtles because they spend most of their time in the deep ocean.



Did you know?

- Leatherbacks are the only sea turtle that have a soft shell.
- They lay between 30-160 eggs in each nest.
- The largest recorded individual weighed 916kg!

Leatherback Turtles are classified as Vulnerable (VU) on the IUCN Red List.

Why are they threatened?

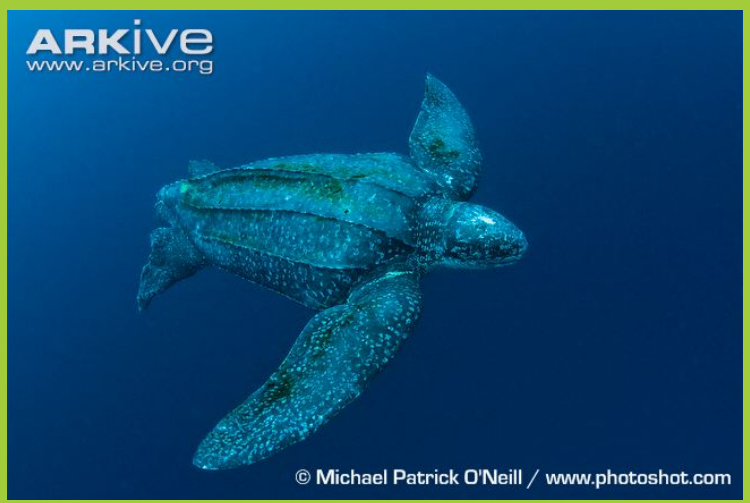
- They become caught in fishing nets and drown.
- Die from accidently eating plastic bags polluting the seas (these look like jellyfish to seaturtles).
- Consumption of eggs by humans and introduced predators
- Loss of nesting beaches

What do they do for us?

- They play an important ecological role as top predators of jellyfish, maintaining balance in the ocean's food-web. This improves fish stocks as jellyfish prey on fish and invertebrate eggs and larvae.
- Leatherback turtles are unique. They create tourism opportunities as people like to see them when they come ashore to lay eggs.

What can we do for them?

- ✓ Avoid using plastic wherever possible and put all rubbish in the bin so it doesn't end up in the ocean.
- ✓ Use fishing gear that does not catch seaturtles by accident.
- ✓ Leave nesting turtles alone and do not remove their eggs.



Want to know more?

- Read **the *Pacific Sea Turtle Education kit*** by SPREP
- Visit: www.iucnredlist.org

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Threatened Species Factsheet No. 20

LOGGERHEAD TURTLE

What are they called?

Scientific:
Caretta caretta
Common English:
Loggerhead Turtle
French: Tortue caouanne
Bislama: Totel
Vernacular:

A little about them:

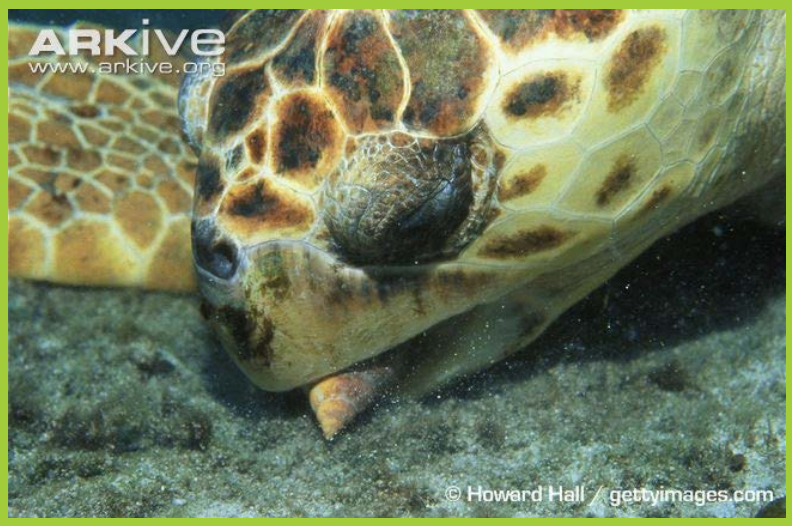
These large seaturtles are marine reptiles. Loggerheads can reach lengths over 1m and weigh up to 180kg. They use their large powerful jaws to eat hard-shelled invertebrates in coral reefs including crabs, snails, clams, sea urchins and jellyfish.

The shell of seaturtles, especially Loggerheads, are a home for many small marine species that eat algae such as barnacles and crabs.

Loggerhead Turtles grow slowly and are about 35 years old before they can lay eggs. Females travel lay every 2-3 years.

What do they look like?

Loggerhead seaturtles have very big heads supported by a thick neck. The shell is reddish-brown to brown and light yellow underneath. They have 4 small scales between their eyes which is useful to tell them apart from Green Turtles. Hatchlings (baby turtles) are dark all over and have 3 ridges running down their backs.



Did you know?

- Loggerhead Turtles lay 80-190 eggs in each nest.
- Only 1 out of 1000 hatchlings will survive to breeding age.
- Some people have said they've seen Loggerheads in Vanuatu but scientists haven't confirmed this.

Loggerhead Turtles are classified as Vulnerable on the IUCN Red List.

Why are they threatened?

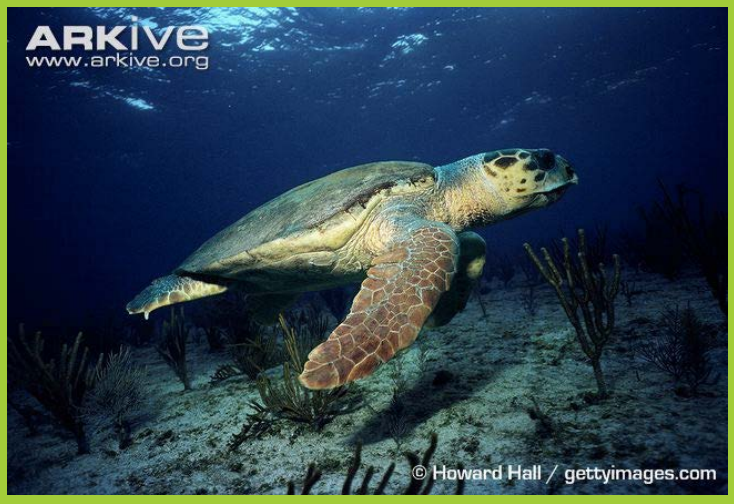
- They are accidently caught in fishing nets as bycatch.
- Adults and eggs are illegally eaten.
- Their habitat is threatened by coastal developments and pollution increasing sediment on the reef and destroying nesting beaches.
- Seaturtle hatchlings are confused by artificial lights and cannot find their way to the ocean.

What do they do for us?

- As Loggerhead turtles crunch up hard-shelled prey, they recycle nutrients on the ocean floor.
- Seaturtles lay eggs on sandy beaches. These beach environments benefit from left over eggshells and unhatched eggs nourishing native plants and animals.
- Help increase range of small marine species such as barnacles which live on their backs.
- Create tourism opportunities as people like to see turtles in their natural environment.

What can we do for them?

- ✓ Leave nesting turtles alone and do not remove their eggs.
- ✓ Use fishing gear that does not catch seaturtles by accident.
- ✓ Keep bright lights away from nesting sites of all seaturtles.
- ✓ Avoid using plastic wherever possible and put all rubbish in the bin so it doesn't end up in the ocean.



Want to know more?

- Read **the *Pacific Sea Turtle Education kit*** by SPREP
- Visit: www.iucnredlist.org

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Threatened Species Factsheet No. 21

ANATOM SKINK

What are they called?

Scientific:
Emoia aneityumensis
Other Common English: Anatom Emo Skink, Medway's Emo Skink
French:
Bislama: Anatom Skink
Vernacular:

A little bit about them:

Skinks are lizard reptiles. The Anatom Skink lives in undisturbed forest away from humans. It lives in trees, from rainforest to dry coastal forests on Aneityum island in southern Vanuatu (and it is not found on neighbouring islands).

Females lay about 4-5 eggs at a time and it is thought the females descend to the ground to lay them in the forest floor litter near the base of a tree.

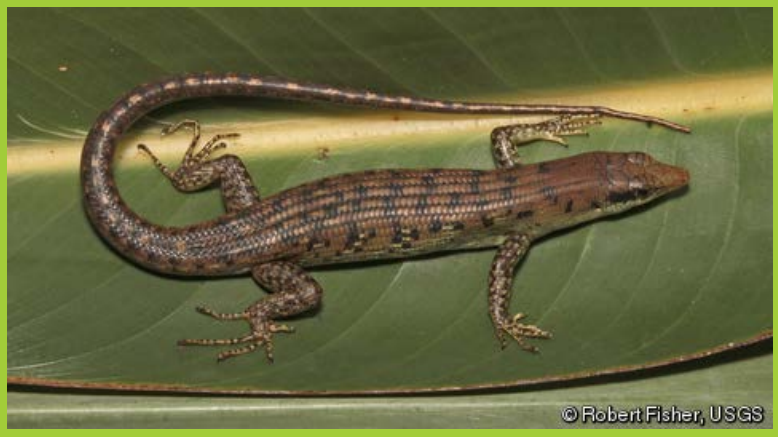
Skinks eat small invertebrates (mostly insects) although the diet of this species is largely unknown.

It is very difficult to find.

What do they look like?

This lizard is around 7-10cm long, including a long tail. It is light brown with some orange-brown, dark-green and some grey colouring and small dark spots down it's sides. Underneath it is creamy white. It's whole body is covered in smooth moderate-sized scales.

Similar *Emoia* skinks , such as the *Emoia samoensis* in Samoa, can be found on multiple islands of Vanuatu and the Pacific. It is often very difficult to tell the difference by eye alone. The only difference when looking at the picture below compared to the Anatom skink is the number of small scales on it's sides and fingers.



Source: IUCNredlist.org entry for Samoan Skink

Did you know?

- This species is only found on Aneityum island!

The Anatom Skink is classified as Endangered on the IUCN Red List.

Why are they threatened?

- Their major threat is habitat loss by logging and agricultural expansion.
- They only live on one small island so they are at risk of being wiped out by one natural disaster such as a severe cyclone.
- They are also at risk of the pet trade industry even though it is illegal to take these lizards out of their natural environment.

What they do for us?

- Skinks are important in food chains. They eat and control populations of insects that can be pests or carry diseases.
- They are food for bigger animals.
- They help disperse seeds.
- Lizards are biological indicators for health of ecosystems as they are sensitive to changes in their environment.
- There are only 19 species of lizards in Vanuatu, and only 4 are endemic.

What can we do for them?

- ✓ Manage logging in sustainable forests only.
- ✓ Establishing protected areas that include the habitat of the Anatom skink in Aneityum.

Want to know more?

- Visit: www.iucnredlist.org
- Visit: The Reptile Database online http://www.reptile-database.org/
- Read Reptiles and Amphibians of the Pacific Islands by G.R. Zug.

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Threatened Species Factsheet No. 22

MONTGOMERY PALM

What are they called?

Scientific:
Veitchia arecina montgomeryana
Other English:
Montgomery Palm
French:
Bislama:
Vernacular:

A little bit about them:

This tree is in the palm family. The Montgomery Palm was once thought to be a separate species but now botanists think that it belongs to the *Veitchia arecina* species.

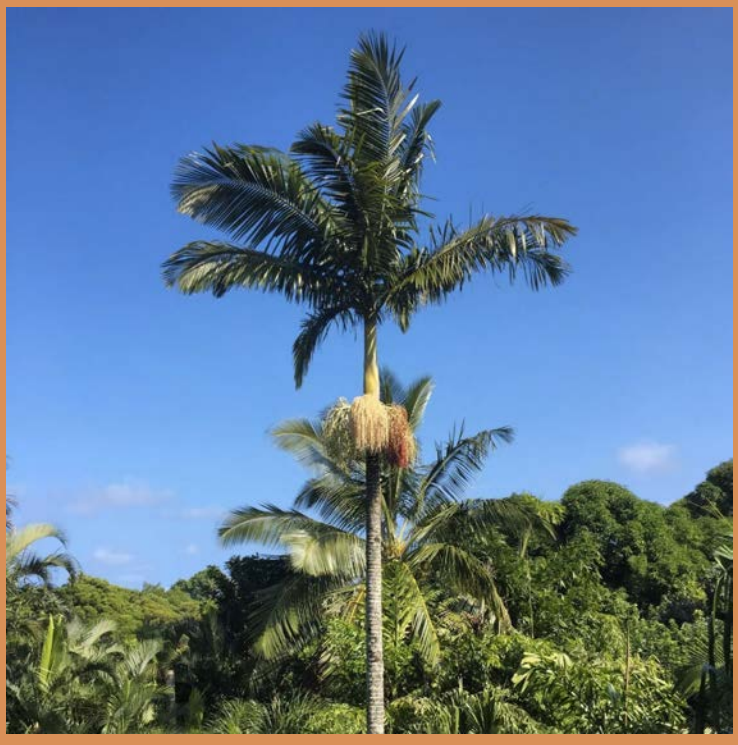
Montgomery palms grow as tall canopy trees at low altitudes often in shallow soil, on coral substratum

or close to rivers and streams. They are also found in lowland rainforests up to 350m in elevation.

What do they look like?

A tall palm that reaches 30m in height with expanded base covered in small roots. The trunk is grey with a narrow green crownshaft (sheath) often over 1m long between trunk and leaves.

It has around 10 leaves with 60 leaflets per side. Flowers are white and bullet shaped (male) or rounded (female) up to 1cm. Fruit are red and oblong shaped.



Source: The Merwin Conservancy

Did you know?

- This palm is native to Vanuatu and thought to only be found on Efate.

- This palm is classified as Endangered (EN) by the IUCN but this might change now that it is a separate species.
- **Why are they threatened?**
- Land clearing for agriculture, forestry and settlement is a major threat to the small population.
- Historically, the palm heart has been used by European restaurants in Vanuatu.

Source: Patti J. Anderson

What do they do for us?

- Provide habitat and shelter for forest and coastal species of birds and animals.
- On a shoreline, they can help reduce erosion, as their roots help stabilise the sandy soil.

What can we do for them?

- ✓ Establish Community Conservation Areas that protect Montgomery Palm's natural habitat and register the CCA with the Department of Environmental Protection and Conservation (DEPC).
- ✓ Raise awareness of the threats to and benefits of this species in local communities.

Want to know more?

- Visit: www.iucnredlist.org
- Contact Vanuatu's Department of Forests

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Threatened Species Factsheet No. 23

BANGULU PALM

What are they called?

Scientific: *Carpoxylon macrospermum*
English: Bangulu Palm
French: Palmier Gulu
Bislama:
Vernacular: Nohoej (Aneityum)

A little bit about them:

Bangulu are in the palm family and are endemic to Tanna, Futuna and Aneityum, but have been introduced to many other islands of Vanuatu. These palms grow in lowland forested areas but cultivated trees have adapted to more open conditions. They prefer volcanic and coastal soils.

What do they look like?

Carboxylon palms can exceed 25m in height with a swollen trunk at the base. A crownshaft (sheath) separates the trunk from the leaves. There are about 12 leaves, each 3-4m in length and arch over with pointy leaflets.

Source: Ramon L. & Sam C., 2015. *Remarkable plants of Vanuatu*.

Flowers are white and hang in a bunch from base of crownshaft. It has distinctive large red fruit around 6cm long and oval shaped with a hard inner shell.

Did you know?

- This is the only tree in the *Carpoxylon* group and is found nowhere else in the world.
- The species was once thought to be extinct and an expedition in 1987 found only 40 individuals in the wild.

This tree is classified as Critically Endangered (CR) on the IUCN Red List.

Why are they threatened?

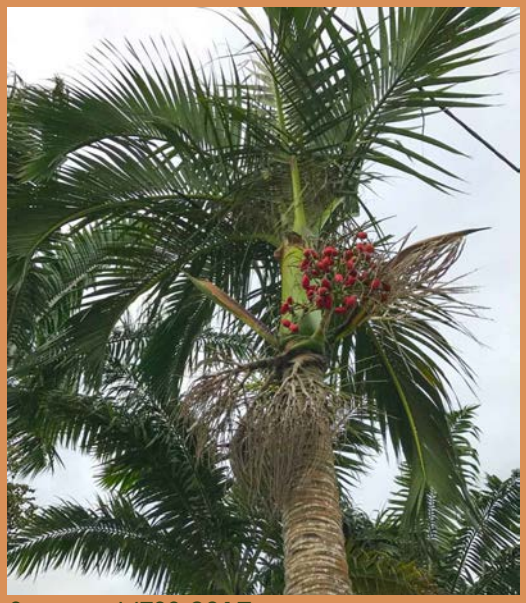
- The small remaining population is at risk from land clearing for development and agriculture.
- Additional stresses such as natural disasters or rapid environmental change may cause major damage to the wild population as there are so few individuals left.

What do they do for us?

- Flying foxes and coconut crabs eat Bangulu palm fruit.
- They are ornamental palms and planted in gardens. For example there is a row planted outside parliament house in Port Vila.
- As with other palms, the trunks can be used for housing materials, and their leaves for thatch roofing and brooms.

What can we do for them?

- ✓ Plant more palms from seedlings distributed by Department of Forests.
- ✓ Establish Community Conservation Areas that nationally protect *Carpoxylon's* natural habitat
- ✓ Use non-threatened palm's timber and leaves for building materials etc.



Source: VESS 2017

Want to know more?

- ❖ Visit: www.iucnredlist.org
- ❖ Contact Vanuatu's Department of Forests.
- ❖ Ramon L. & Sam C., 2015

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Threatened Species Factsheet No. 24

Voutmélé Palm

What are they called?

Scientific:
Cyphosperma voutmelense/ voutmelensis
Other English:
Voutmele palm
French:
Voutmélé palm
Bislama:
Vernacular:

A little bit about them:

Voutmélé palms small palms endemic to the Cumberland Peninsula on Santo.

This species has relatively small individuals and grows in small colonies.

It commonly grows between 900m - 1200m elevation and in volcanic soils.

What do they look like?

This short palm has a narrow stem and reaches a maximum of 6m in height.

The leaves measure between 1 and 1.5m long each. Fruits are about 1cm long, olive like and green, turned to red when mature. It has small white groups of flowers. These are smaller and have shorter flower stems compared to similar *Cyphosperma* species in far north Vanuatu, New Caledonia and Fiji.

Flowers and fruits of *Cyphosperma voutmelensis*.
Source: Lowry, P. *Tropicos*

Did you know?

- This palm got its name from Voutmélé Peak on Santo, the place it was first seen.

This tree is classified as Endangered (EN) on the IUCN Red List.

Why are they threatened?

- There are less than 100 known individuals left in the wild.
- Due to it's limited distribution, the Voutmélé palm is threatened by further habitat loss.

What do they do for us?

- They provide habitat and shelter for rainforest species.
- The small fruit are used for their medicinal properties in northwestern Santo, particularly to treat fever.

What can we do for them?

- ✓ Plant more palms from seeds.
- ✓ Establish Community Conservation Areas that protect the Voutmélé palm's natural habitat on Santo's Cumberland Peninsula.
- ✓ Use alternative tree species that are not threatened for timber and medicine.
- ✓ Raise awareness of the threats to and benefits of this species in local communities.

Source: Lowry, P. *Tropicos*

Want to know more?

- Visit: www.iucnredlist.org
- Contact Vanuatu's Department of Forests.
- Book: *Remarkable plants of Vanuatu* by Ramon L. & Sam C., 2015

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Threatened Species Factsheet No. 25

MOLUCCAN IRONWOOD

What are they called?

Scientific: *Intsia bijuga*
Other English:
Borneo/Island Teak
French:
Faux teck
Bislama:
Natora
Vernacular:
Tora (Ambae & Pentacost), Kimau (Efate) among others

A little bit about them:

This large tree is in the Leguminosae or "bean" family. Natora is native to Vanuatu and many island countries ranging from eastern Africa to south-east Asia and western Polynesia. Natora prefers lowland coastal forests in well-drained limestone, swampy or mangrove areas. It can be found up to 450m elevation and is easily grown.

What do they look like?

It's trunk can grow to 1m wide, 7m to 25m tall and has spreading branches. The trunk is usually straight, but often seen leaning in coastal habitat, with peeling bark. Mature trees have wide buttress roots which can reach 4m wide.

The leaves are bright, shiny green and round. The flower is a single white (or pink) petal with long red stamens. The fruit is a brown/green seed pod up to 15cm long.

Source: Ramon L. 2015. *Remarkable plants of Vanuatu*.

Did you know?

- The hardwood timber is very dense and has insect repellent properties.
- This makes it one of the most valuable timbers in South-east Asia.

This species is classified as Vulnerable (VU) by the IUCN Red List.

Why are they threatened?

- Their major threat is logging for timber for use as building material, fuelwood, carving (including handicrafts sold to tourists) and local medicine.
- It has been over harvested in many places in the world
- Very few large populations remain.

What do they do for us?

- This species is a good soil stabiliser, and effective for erosion control.
- Natora provides shelter and nesting sites for birds.
- It is a good coastal protection species as it grows well in swampy coastal areas and tolerates wind and salt spray.

What can we do for them?

- ✓ Establish Community Conservation Areas that nationally protect Natora's natural habitat.
- ✓ Use non-threatened species for building materials where possible.
- ✓ Make sure plantations are managed sustainably. That is, for every mature tree cut down, many new seedlings are planted to replace it and to be used in the future.

Source: Ramon L. & Sam C., 2015. *Remarkable plants of Vanuatu*.

Want to know more?

- Visit: www.iucnredlist.org
- Contact Vanuatu's Department of Forests

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Threatened Species Factsheet No. 26

SANTO KAURI

What are they called?

Scientific:
Agathis silbae
French: Kaori
Bislama: Kaori
Vernacular:
Khoe (Valpei village), Hoe (Penour village)in West Santo

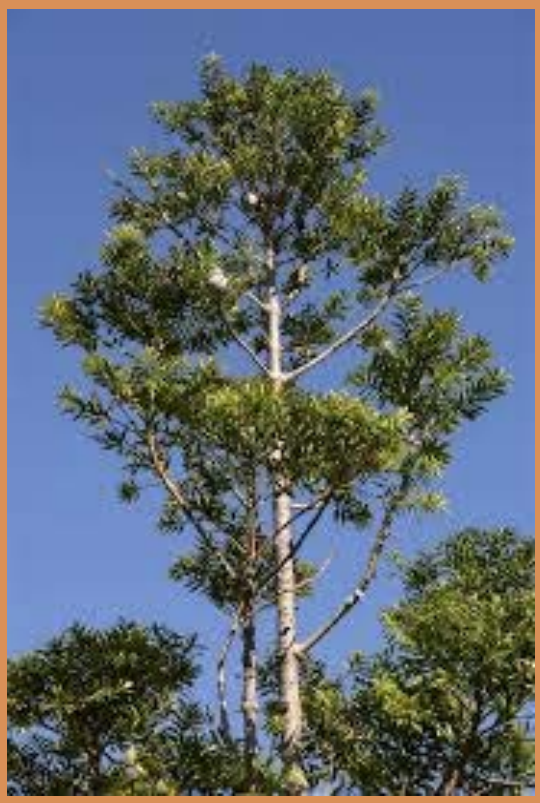
A little bit about them:

This species is part of the conifers group. These trees are found on Santo, along the western side of the central mountain range. Santo Kauri grow at 450-760m elevation and where the rainfall is >4500 mm/yr. It is known in only 4 locations on Santo's west coast.

Note: This species is very similar to the Pacific Kauri (*Agathis macrophylla)* which prefers lower habitat elevation of 50-550m and is found on Aneityum, Erramango and in Fiji.

What do they look like?

This is a large tree, reaching up to 2m in trunk diameter, and typically 30-40m tall. They are usually the tallest trees in a forest, emerging above the canopy. The bark is smooth on young trees, and scaly when mature. It has leathery dark green leaves, very large, spherical seed cones and wide spreading root systems.



Source: Threatened conifers of the world. Image by Farjon & Gardner.

Did you know?

- This species is only found on Santo.
- Locals recognise two variations; "man kauri" with a large crown and reddish leaf, and "woman kauri" with shorter trunk and green leaf.

This tree is classified as Near Threatened (NT) on the IUCN Red List.

Why are they threatened?

- Santo Kauri timber was commercially logged during the late 1990's. There is currently no logging but if resumed, logging is a potential threat.
- Habitat destruction and fragmentation from cyclones and bushfires which may increase from climate change.

What do they do for us?

- *Agathis* functions as a keystone species due to its size and growth form as a canopy emergent tree.
- It has wide spreading root systems that help stabilize soils on ridges and slopes, preventing erosion.
- It is used in local /traditional medicine.
- The resin is used for lighting (fuelwood), canoe making and tattooing.

What can we do for them?

- ✓ Establish Community Conservation Areas that nationally protect Santo Kauri's natural habitat.
- ✓ Raise awareness of the threats to and benefits of this species in local communities.
- ✓ If harvested, make sure use is managed sustainably. That is, for every mature tree cut down, many new seedlings are planted to replace it and to be used in the future.

Want to know more?

- Visit: www.iucnredlist.org
- Contact Vanuatu's Department of Forests
- Book: *Remarkable plants of Vanuatu* by Ramon L. & Sam C., 2015

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Threatened Species Factsheet No. 27

PACIFIC KAURI

What are they called?

Scientific:
Agathis macrophylla
Other English:
French: Kaori
Bislama: Kaori
Vernacular: nejev (Aneiytum), nendu (Erromango)

A little bit about them:

This particular species is part of the conifers group. These trees are found on Aneityum, Tanna and Erromango in Vanuatu, as well we Fiji and the Solomon Islands.

The Pacific Kauri grows in elevations of 50-550m, usually in volcanic soils.

Note: This species is very similar to the Santo Kauri which is found only on Santo in Vanuatu. The Santo Kauri prefers higher elevations of 450-760m.

What do they look like?

This is a large tree, reaching 1-3m in trunk diameter, and typically 30-40m tall. Bark is smooth on young trees, and scaly or platy when mature. It has leathery dark green leaves, seed cones (globe shaped female cones) and wide spreading root systems.

Source: Tony Rodd Photography

Did you know?

- The only protected area specifically designated for *Agathis macrophylla* is the Erromango Kauri Reserve in Vanuatu.

This tree is classified as Endangered (EN) on the IUCN Red List .

Why are they threatened?

- Unsustainable logging in natural forests is ongoing in parts of the Pacific Kauri's range is the biggest threat.

Source: Chad Husby Photography

What do they do for us?

- *Agathis* functions as a keystone species due to its size and growth form as a canopy emergent tree.
- It has wide spreading root systems that help stabilize soils on ridges and slopes, preventing erosion.
- It is used in local /traditional medicine.
- The resin is used for lighting (fuelwood), canoe making and tattooing.

What can we do for them?

- ✓ Establish Community Conservation Areas that protect it's natural habitat, and register these CCAs with the DEPC.
- ✓ Raise awareness of the threats to and benefits of this species in local communities.
- ✓ If harvested, make sure it is managed sustainably. For example for every mature tree cut down, many new seedlings are planted to replace it and to be used in the future with appropriate planning.

Want to know more?

- Visit: www.iucnredlist.org
- Contact Vanuatu's Department of Forests
- Book: *Remarkable plants of Vanuatu* by Ramon L. & Sam C., 2015

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