



SPREP
 Secretariat of the Pacific Regional
 Environment Programme

BIODIVERSITY

Frequently Asked Questions



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What is Biodiversity? *Biodiversity is the term used to describe the variety of life on earth (it is the short form of “Biological Diversity”). All living things are collectively called biodiversity. Every living thing has an important and significant role to play in an ecosystem – and in the lives of people.*

What is an Ecosystem? An ecosystem is the combination of a group of plants and animals together with their physical environment. Each part of an ecosystem is in some way interlinked with the others. For example, a forest is an ecosystem: the birds, earthworms, trees and other plants and animals in a forest interact with each other for food, shelter and reproduction, and rely on rainfall and the health of the soil (the physical environment) for their well-being.

What is an Ecosystem Service? Nature provides valuable services to humans. In fact, life would be impossible were it not for the many ecosystem services we take for granted. Some examples of the services provided by ecosystems are:

- Wetland ecosystems (sea grasses, mangroves, marshlands) filter out toxins, clean the water and control floods
- Estuaries act as marine-life nurseries
- Forest ecosystems supply fresh water, provide oxygen, control erosion and remove carbon from the atmosphere
- Many plants and animals are used to derive medicines and pharmaceuticals

- Bright coral reefs and healthy lagoons attract tourists and provide food
- Healthy soil is an essential service for farmers who rely on fertile soil for agriculture

Is there a difference between “biodiversity conservation” and “nature conservation”? No. They mean the same thing – that is, to protect and look after our natural environment and all the plants and animals living in them.

Why is it important to protect biodiversity? The biodiversity of the Pacific islands is unique, with many plant and animal species found nowhere else in the world. This biodiversity is valuable to people’s livelihoods, their economies and their well-being, and has become an integral part of island cultures and traditions. Many species of plants and animals are disappearing because of human activities and some are at risk because of the impacts of climate change and natural disasters. Investing in efforts to conserve these valuable resources will help ensure the long-term survival and well-being of our Pacific island environment and our people.



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What are the Threats to our Biodiversity?

Some of the key threats include

- Habitat Destruction – usually for agriculture, housing and other development, such as tourism. New tourism developments are often in environmentally pristine areas, which can be quickly damaged first by construction and later by human presence.
- Invasive Species – introduced weeds and pests which cause harm to other plants or animals, and to humans.
- Over-exploitation and Over-consumption - removing large numbers of fish, coral, plants or animal populations from an area without planning for rehabilitation and replacement. This can be for financial gain, but it may also happen in small communities during special events or when there is an influx of visitors.
- Waste and Pollution – the solid and liquid waste created by humans is often lethal to nature. Oil, chemicals, human waste and household rubbish (tins cans, baby diapers, plastic bags and bottles, batteries, etc) make their way into the soil, waterways and the ocean poisoning, smothering and choking our native plants and animals. Batteries leach out chemicals that pollute the area for a long period of time. Other solid waste takes up space or may be mistaken by animals for food and eaten.
- Agriculture – although agriculture is essential for human survival, the excessive use of pesticides and fertilizers threatens surrounding waterways and is harmful to bees, birds, and useful plants.
- Natural Disasters – cyclones, floods and droughts result in destruction of habitats and loss of plant and animal populations.
- Climate Change – global warming creates risks of more frequent and more intense cyclones and drought periods, threatening the survival of many Pacific plants and animals.
- Population Growth – the underlying driver of most of the above threats. Increased numbers of people in an area result in over-exploitation, increased waste and pollution, more invasive species, and habitat destruction.

What are we doing to protect our Island Biodiversity? The SPREP Strategic Plan 2011-2015 identifies Biodiversity and Ecosystem Management as one of its four priorities for action. The organisation's Biodiversity and Ecosystem Management team works with Member countries and territories to provide technical and advisory support for biodiversity and ecosystem management. Some regional mechanisms being used include:

- Action Strategy for Nature Conservation
- Guidelines for Invasive Species Management in the Pacific
- Whales and Dolphins Action Plan
- Regional Shark Action Plan
- National Biodiversity Strategies and Action Plans (NBSAPs)

The NBSAPs identify national needs and priorities in biodiversity conservation and articulate country commitments to international and regional agreements in biodiversity conservation. They are an important tool for including biodiversity conservation needs in planning for economic development.

What Can I do to Protect Biodiversity? Everyone can help ensure protection of the natural environment by using good sense and becoming conscious of our actions. If we think our actions may harm nature, we should consider readjusting our behavior.

Try this 12-point self-assessment on how well you are helping our unique natural environment!

1. I practice good waste management
2. I say NO to plastic bags and take my own bag for shopping
3. I buy a variety of local foods and choose "organic" where it is possible
4. I only buy local fish that meets the fisheries (size and species) regulations
5. I do not throw rubbish on the ground or in the sea
6. I use rechargeable batteries
7. My household products contain no phosphates or other chemicals harmful to the environment
8. I have a rainwater tank and keep it clean
9. I don't move plants or animals between islands (unless I check with the local quarantine or agricultural service first)
10. I help to plant trees and look after them as they grow
11. I pay attention to new developments in my area and participate in public meetings on these issues
12. I support my local environment group (by attending meetings/donations)

How well did you do?

You can learn more about specific biodiversity issues by going to www.sprep.org



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