

# Coral Reef Distribution

Subject matter: Identify the distribution of coral reefs globally and in Australia.

**The distribution of coral reefs is determined by a combination of factors. These include the geology and geography of the region, ocean temperature, ocean chemistry, and surface currents. Corals adapt their physical structure to suit the environmental conditions in which they are found. Individual coral species can be found growing amongst mangrove roots and inshore areas, through to the edge of the continental shelf.**

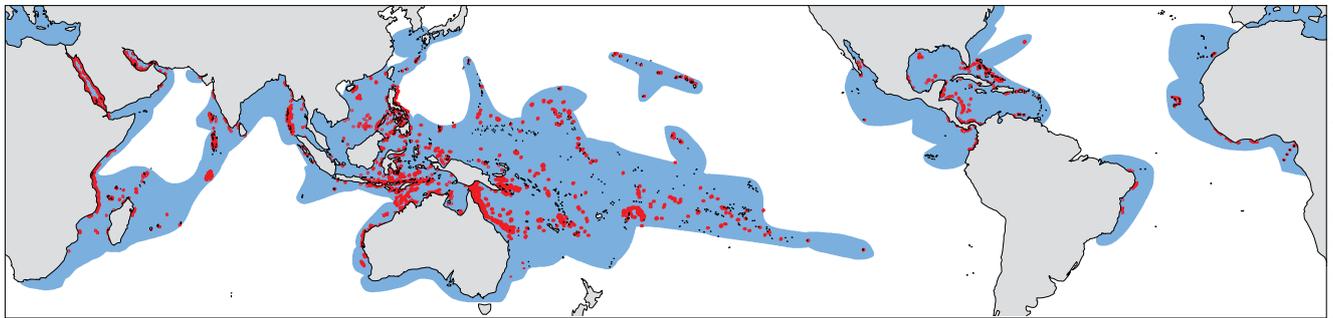
*Recommended reading: Coral Reefs and Climate Change - Patterns of distribution (p.84-85)*

*View video: Coral Reefs and Climate Change DVD series - Coral reefs intro*

## Coral distribution - Classroom

Look at the map showing where corals are found around the world.

- List 4 factors that influence where reef-building corals grow and describe how they are important for coral growth.
- On the Great Barrier Reef, the diversity of coral species declines as you travel from north to south - explain why.



Reproduced with permission from Charlie Veron

*The global distribution of coral reefs (red) and reef-building corals (blue). The Coral Triangle contains the greatest genetic diversity, with numbers of species decreasing as you move away from this region.*

## Biodiversity within regions - Classroom

Research biodiversity in different regions using the internet. Create a lists of each regions. You can work in groups and as an example, research the following areas:

- Moreton Bay
- Great Barrier Reef
- Caribbean

Use the list below as a start, find similar facts for your region and plot the final results - using Excel - in a graph. Compare the end results with other students.

### Diversity in the Coral Triangle

- Covers an area of 6.8 million square kilometres
- Includes 18,500 islands
- Contains four of the world's 25 'biodiversity hotspots'
- Contains more than 100,000 square kilometres of coral reefs
- Contains 605 species of hard corals, 76% of known coral species
- 45 mangrove species
- 13 seagrass species
- 2228 species of reef fish
- Highest diversity of reef invertebrates in the world



Map of the Coral Triangle

Department of Environment, Water, Heritage and Arts, 2009