

# CORALWATCH

## Cara menggunakan Tabel Kesehatan Karang

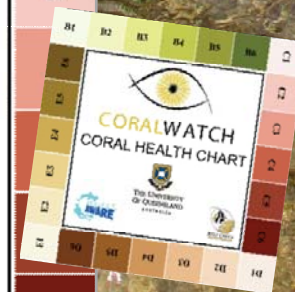
How to use the  
Coral Health Chart



THE UNIVERSITY  
OF QUEENSLAND  
AUSTRALIA



B1	B2	B3	B4	B5	B6	C1
E6						C2
E5						
E4						
E3						
E2						
E1						
D6	D5	D4	D3	D2	D1	



May 2012

# Gambaran umum

## Warna-warna Terumbu Karang

- Colours on the reef

## Tabel Kesehatan Karang

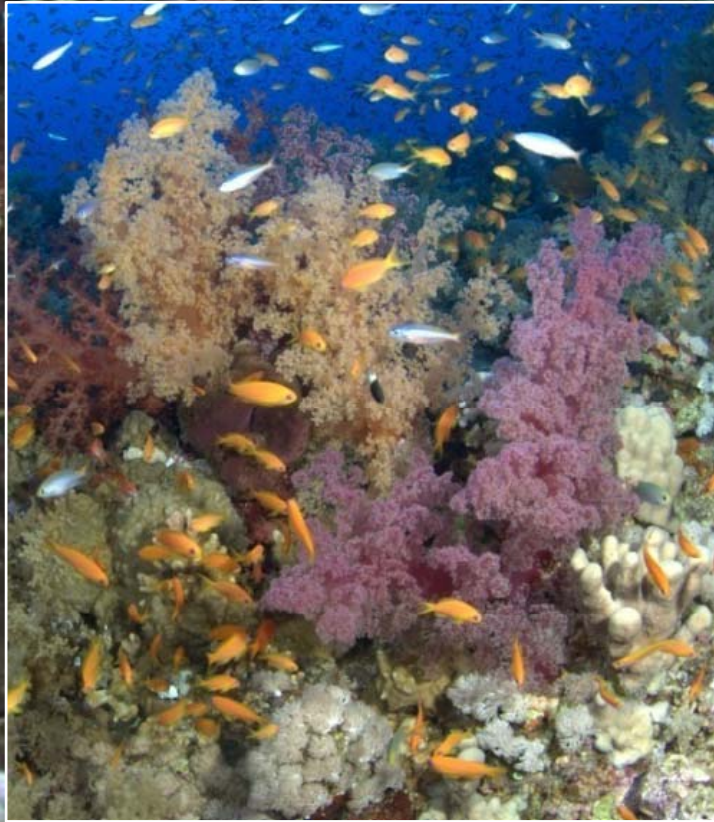
- Coral Health Chart

## Memantau Karang

- Reef monitoring



# Warna-warna Terumbu Karang

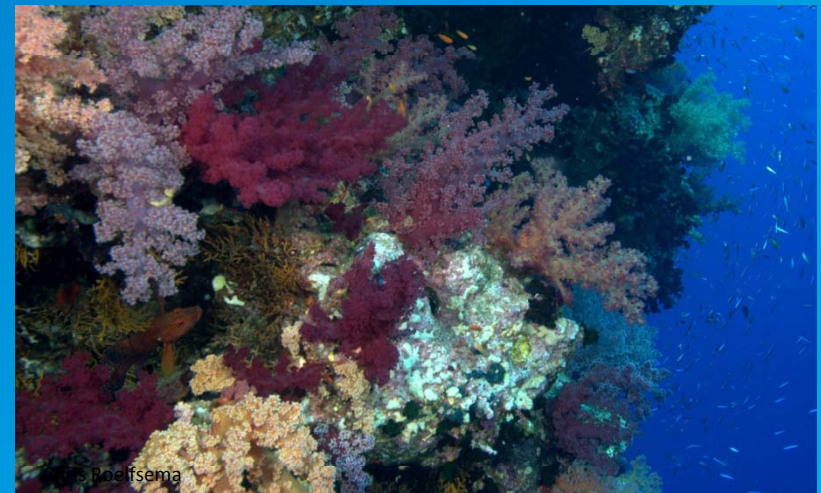
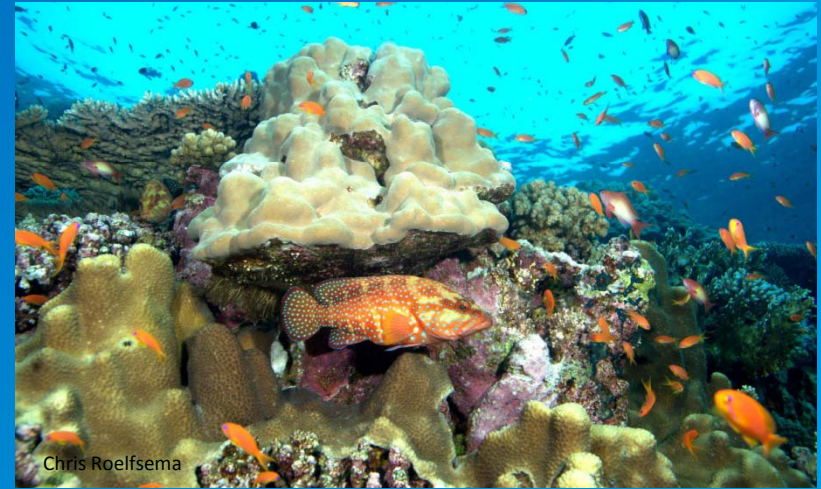
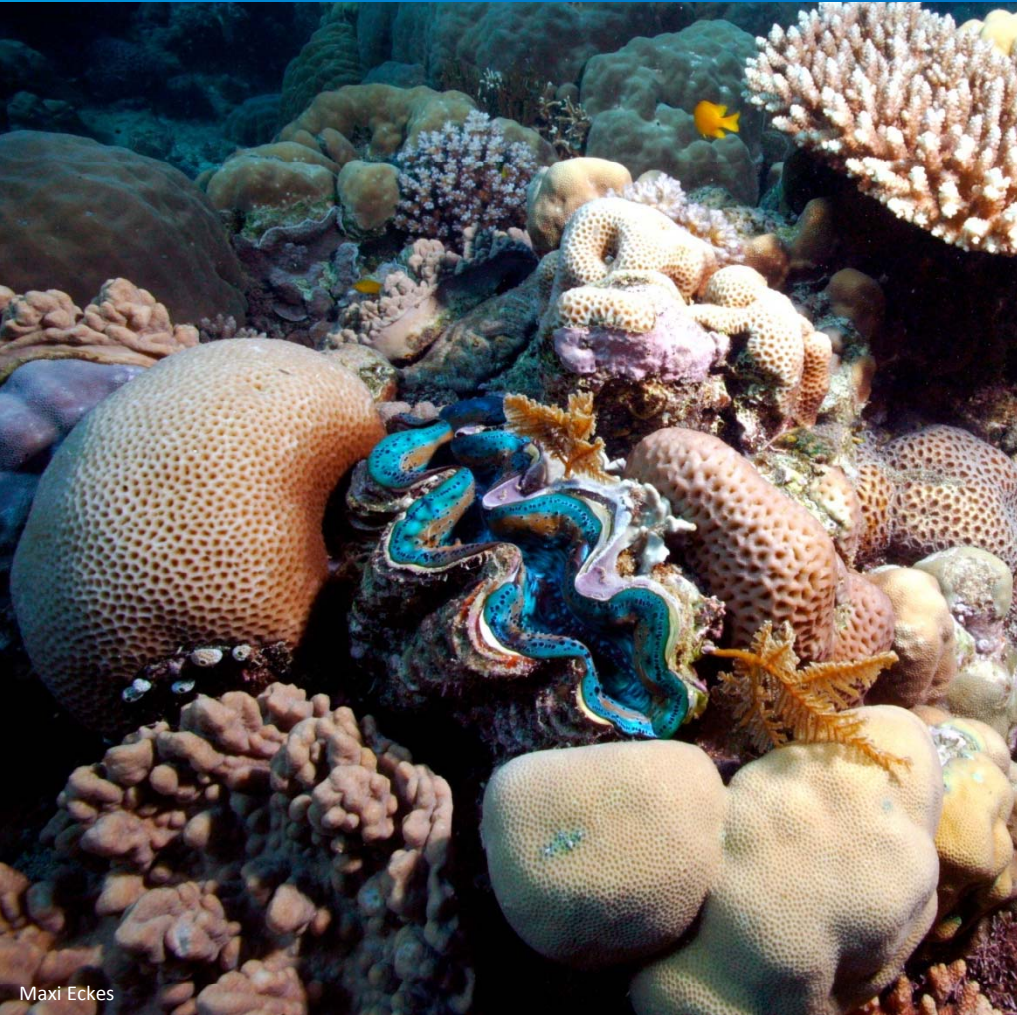


Colours on the reef



Warna-warna terumbu karang

# Terumbu karang sangat beraneka warna



Corals reefs are very colourful



Warna-warna terumbu karang

# Terumbu karang yang mengalami stres warnanya pudar atau memutih



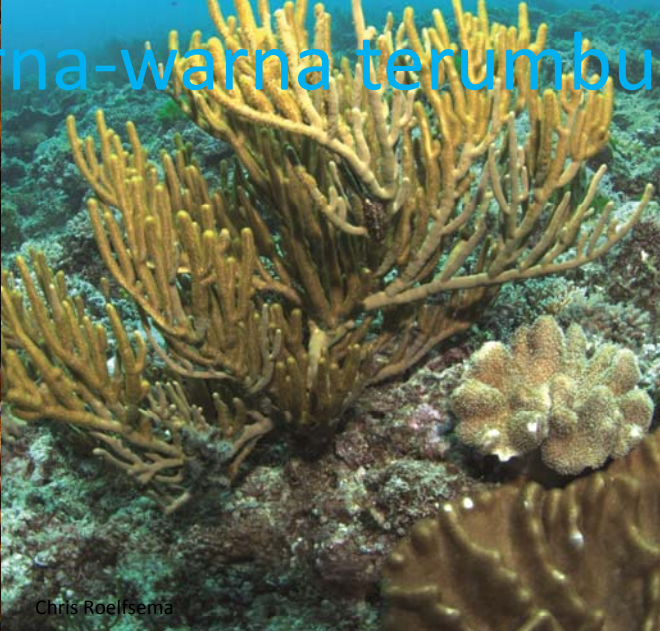
Ray Berkemans



# Warna-warna terumbu karang



Craig Reid



Chris Roelfsema



Dave Logan

## Karang yang sehat

## Healthy corals



Chris Roelfsema



WCS Indonesia Marine Program



# Warna-warna terumbu karang



CoralWatch



Ove Hoegh Guldberg



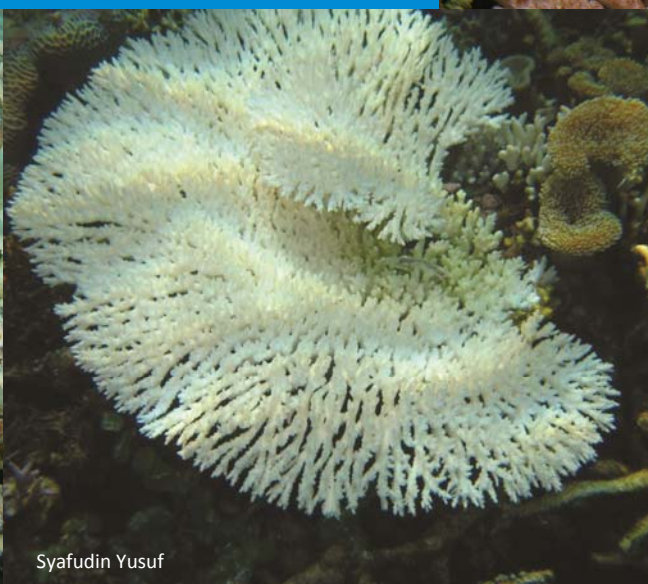
WCS Indonesia

## Karang yang memutih

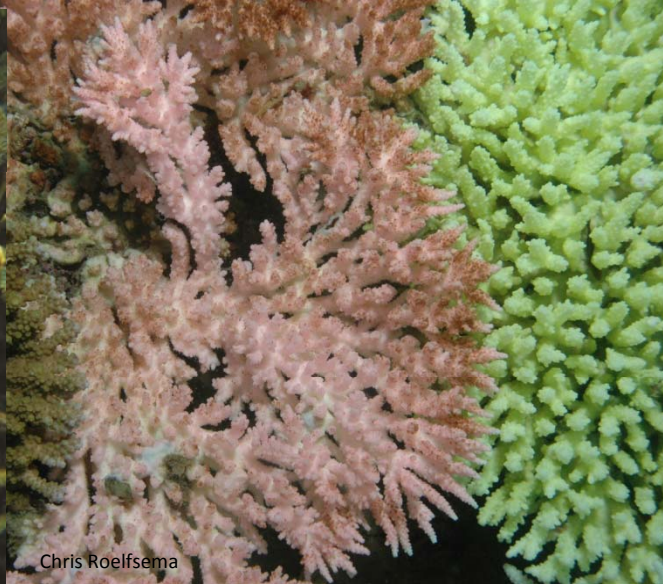
## Bleached corals



CORALWATCH  
Chris Roelfsema



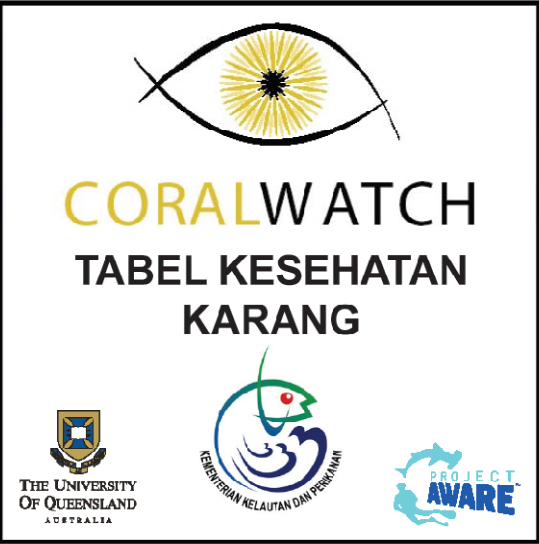
Syafudin Yusuf



Chris Roelfsema



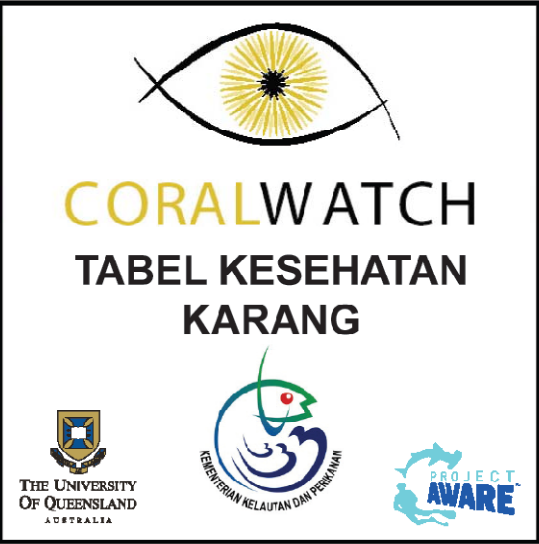
# Tabel Kesehatan Karang

B1	B2	B3	B4	B5	B6	C1
E6						C2
E5						C3
E4						C4
E3						C5
E2						C6
E1						D6





# Tabel Kesehatan Karang

B1	B2	B3	B4	B5	B6	C1
E6						C2
E5						C3
E4						C4
E3						C5
E2						C6
E1						D6

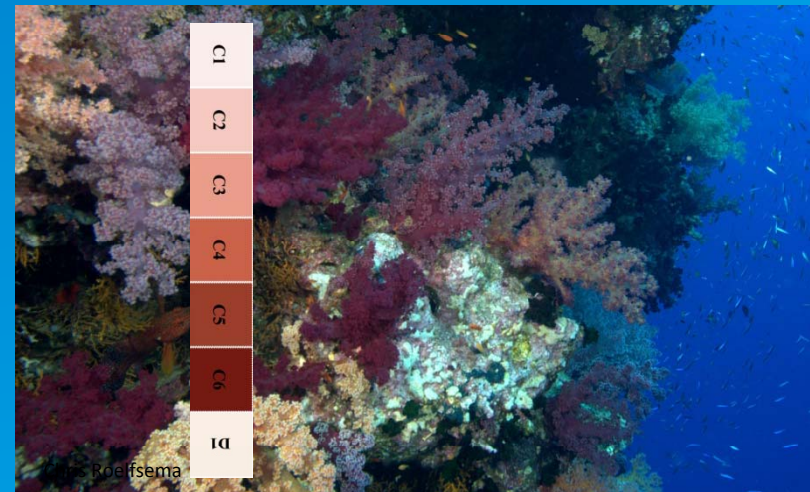
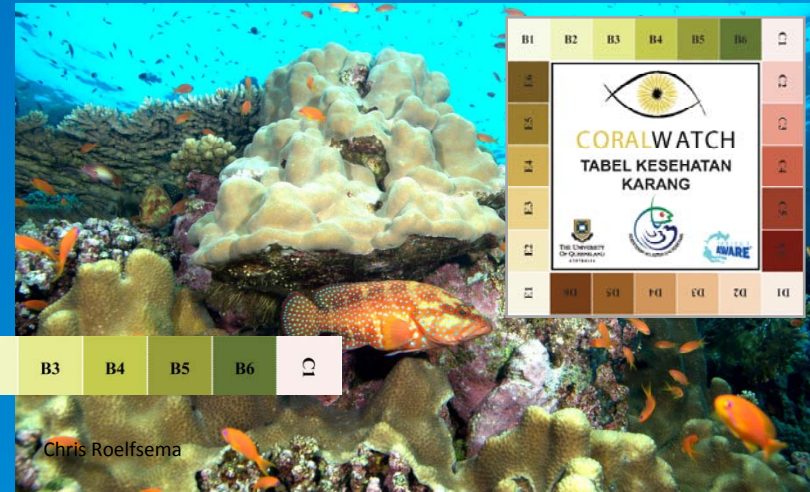
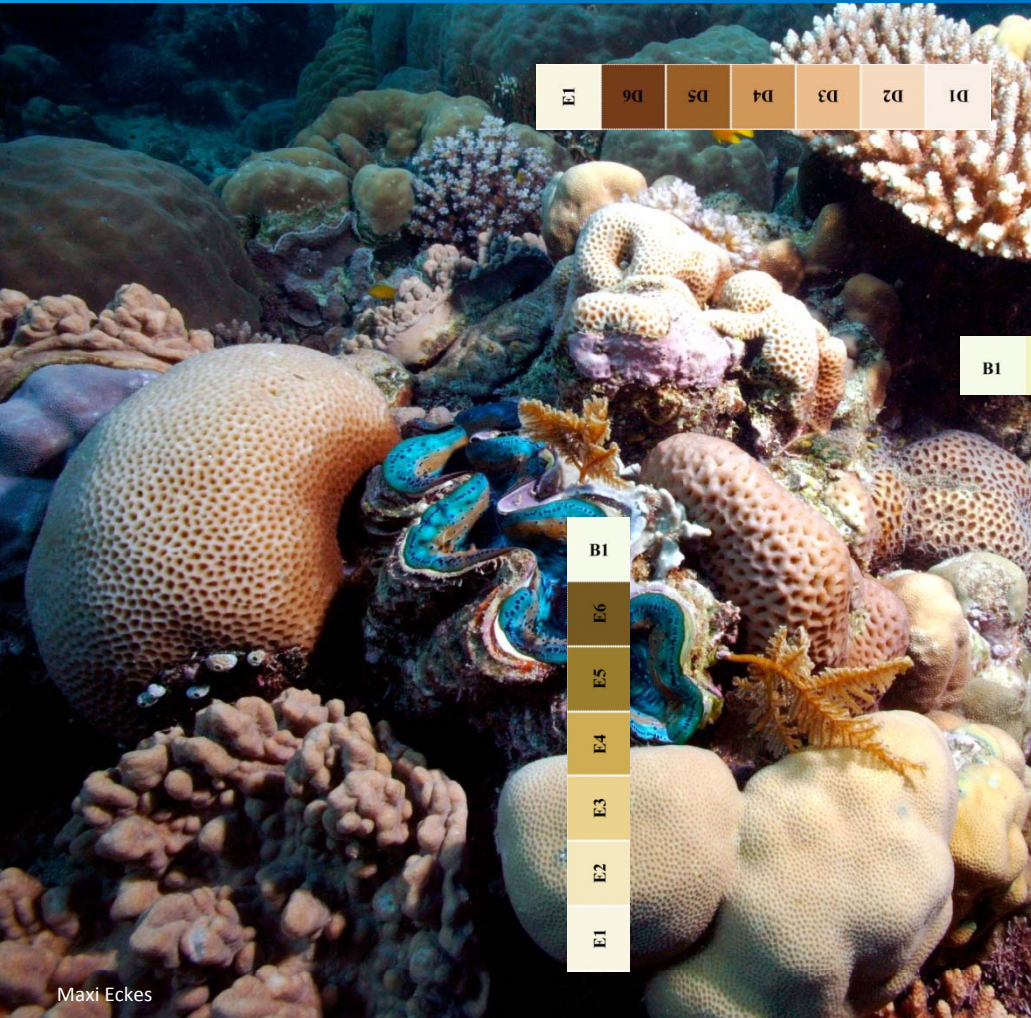
Tabel ini diciptakan oleh para ilmuwan untuk mengukur kesehatan terumbu karang

The Coral Health Chart was developed by scientists to measure coral health



# Tabel Kesehatan Karang

## Warna-warna terumbu yang umum dijumpai



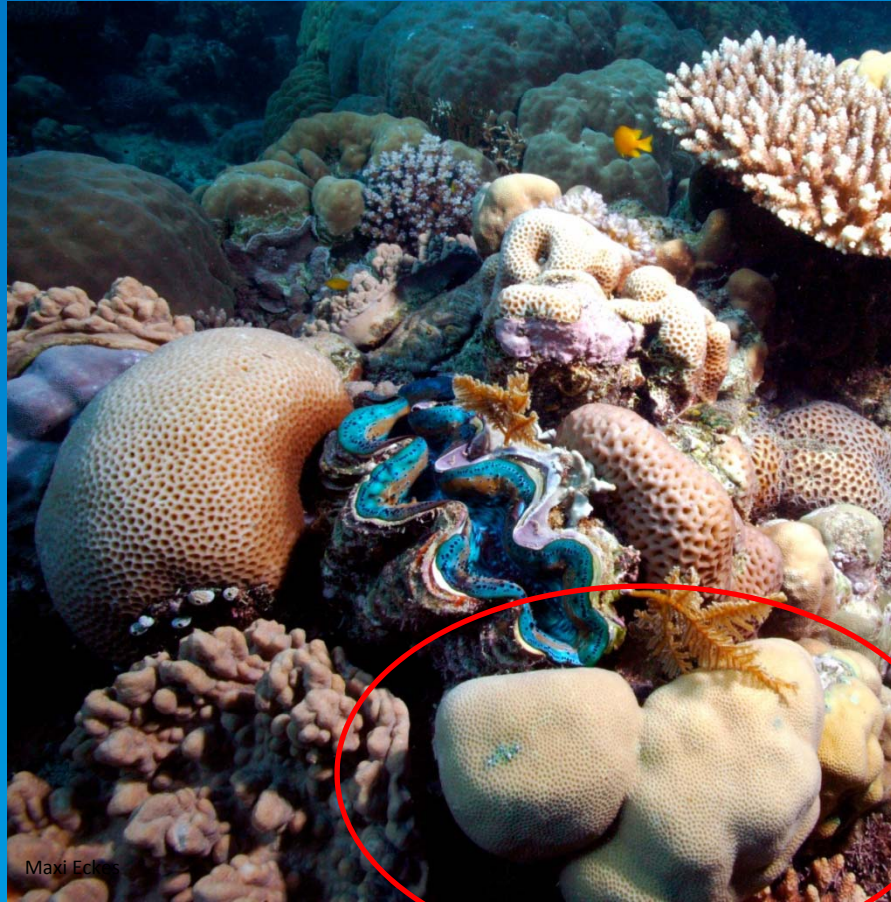
Coral Health Chart: Most common colours on the reef



# Tabel Kesehatan Karang

## Cara memulai

Pilih sebuah koloni karang  
Catat warna yang paling tua dan paling muda untuk setiap koloni



Maxi Eckes

Coral Health Chart - Getting started: Select a coral colony  
For each colony, record the darkest and lightest colour



# Tabel Kesehatan Karang

## Contoh 1: Memilih Warna Karang



Catat warna yang paling muda



Dan warna yang paling tua

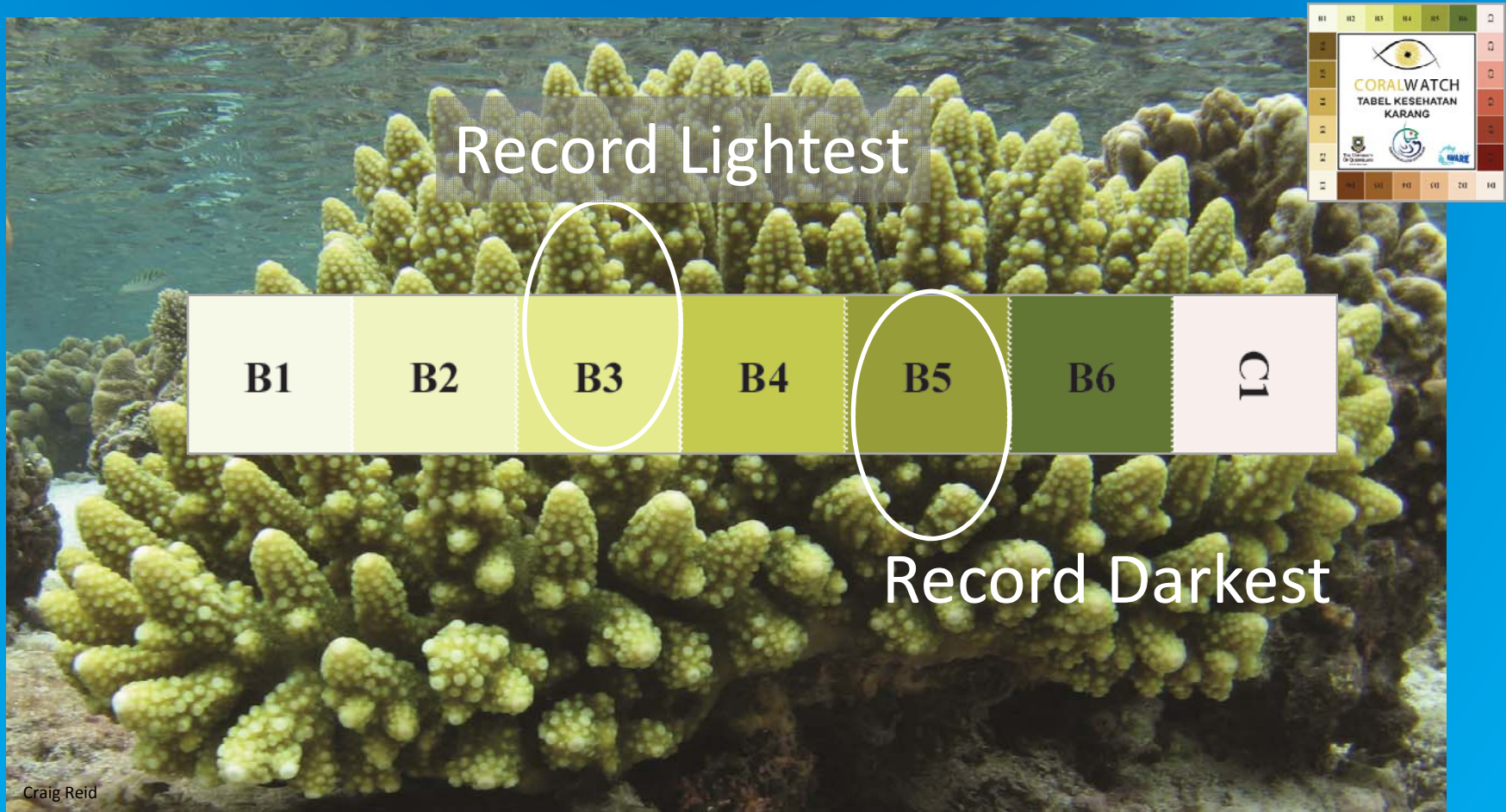
Craig Reid

Coral Health Chart - Choosing coral scores:  
record lightest and darkest



# Tabel Kesehatan Karang

## Contoh 2: Memilih Warna Karang



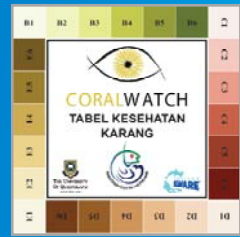
Coral Health Chart - Choosing coral scores:  
record lightest and darkest



# Tabel Kesehatan Karang

## Tipe Karang

Catat tipe karang dari setiap koloni



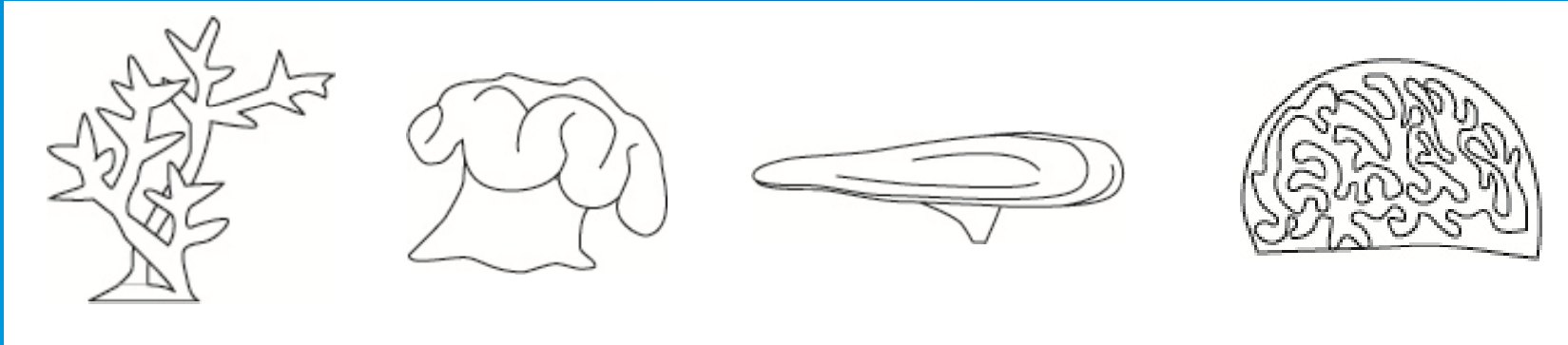
Wensung

Coral Health Chart: For each colony, record coral type



# Tabel Kesehatan Karang

## Tipe Karang



Bentuk karang bisa bermacam-macam

Coral Health Chart: Corals can have many shapes



## Tipe Karang: Bercabang

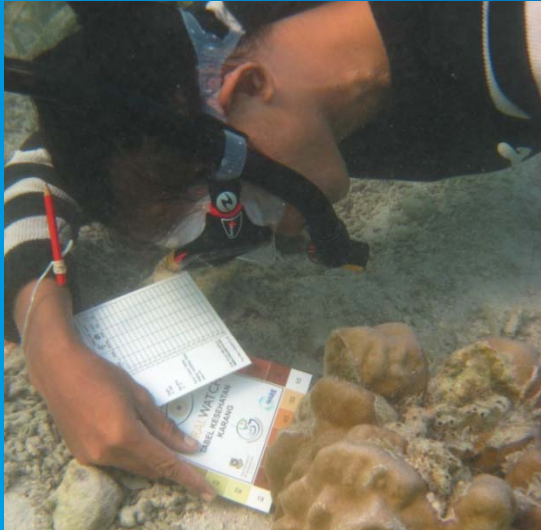
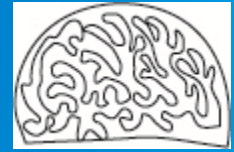


Coral Health Chart  
Coral Type: Branching



# Tabel Kesehatan Karang

## Tipe Karang: Batu



Coral Health Chart  
Coral Type: Boulder

Photos: CoralWatch



# Tabel Kesehatan Karang

## Tipe Karang: Piring



WCS Marine Studies Program



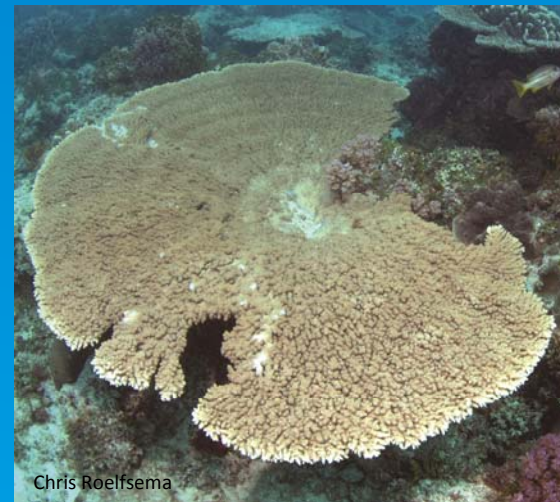
Ove Hoegh Guldberg



CoralWatch



CoralWatch



Chris Roelfsema



Chris Roelfsema

Coral Health Chart  
Coral type: Plate



# Tabel Kesehatan Karang

## Tipe Karang: Lunak



CoralWatch



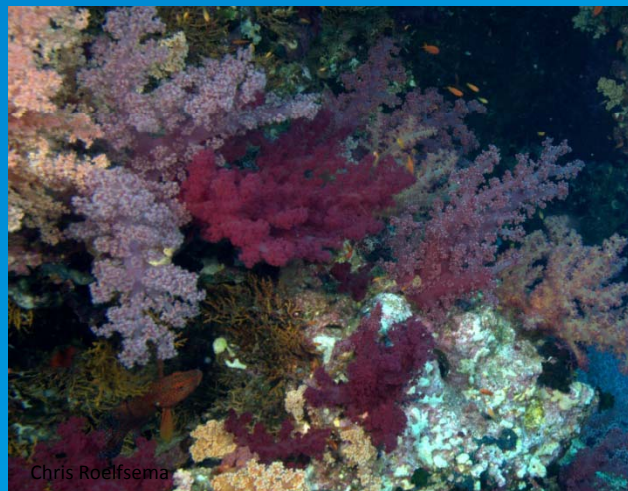
Chris Roelfsema



CoralWatch



Chris Roelfsema



Chris Roelfsema

Coral Health Chart  
Coral Type: Soft



# Tabel Kesehatan Karang

## Ulangi langkah-langkah ini pada koloni karang lain



Coral Health Chart:  
Repeat this process for multiple colonies



# Memantau Karang



Monitoring methods



Memantau karang

# Metoda pemantauan

Survei acak merupakan survei yang paling umum dilakukan



**Survey acak**  
Random survey



**Survei transek**  
Transect survey



**Mudah diidentifikasi**  
Easy to identify

Monitoring methods: Random surveys are the most common



# Memantau karang

## Survei acak

1. Buatlah garis yang menunjukkan secara jelas arah perjalanan anda
2. Mulai berjalan dan berhentilah setiap jarak tertentu, amati koloni karang yang terdekat



Monitoring methods - Random survey:

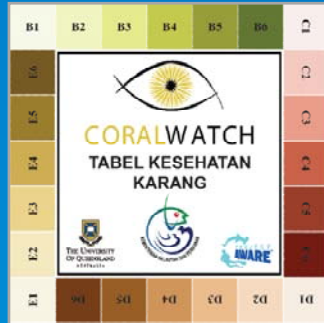
1. Draw an imaginary line in one direction
2. Every 2 fin-kicks or steps, measure the coral colony closest to you



# Memantau karang

## Alat yang dibutuhkan

Penting  
required



Nama lokasi karang dan negara:

NO. LOKASI:

Tanggal dan jam:

GPS:

Kondisi air:

Suhu laut:  °C / °F

Calor:

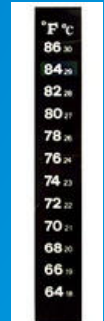
Arus / ombak / hujan:

Aktivitas anakan / burung / pejalan kaki / peralatan:

Konfirmasi data anda ke: [WWW.CORALWATCH.ORG](http://WWW.CORALWATCH.ORG)

Data anda sangat penting!

NO.	RODDE WARANA	TIPE KARANG	nama anyam anyam
1	putih	Hard	
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			



Jika ada  
optional



GPS

### Equipment list

- Coral Health Chart
- Mask and snorkel
- Fins with booties
- Data slate with pencil
- Thermometer
- GPS - if possible
- Underwater camera - optional



# Memantau karang

## Catat informasi survei

- Nama anda
- Tanggal dan jam
- GPS (jika ada)
- Kedalaman
- Suhu laut
- Cuaca
- Aktivitas

Nama terumbu karang dan negara:

Nama anda:

Tanggal dan jam:

GPS: (jika ada)

Kedalaman: m / feet

Suhu laut: °C / °F

Cuaca: terang / mendung / hujan

Aktivitas anda: berjalan / snorkeling / menyelam (lingkari yang anda pilih)

Simpan data anda ke [WWW.CORALWATCH.ORG](http://WWW.CORALWATCH.ORG)

Data anda sangat penting!

No. Karang	KODE WARNA		TIPE KARANG (centang yang anda pilih)			
	paling muda	paling tua	Bercabang (BR)	Batu (BO)	Piring (PL)	Lumak (SO)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

LEMBAR DATA

CORALWATCH

Nama kelompok: \_\_\_\_\_ Nama anda: \_\_\_\_\_

Email: \_\_\_\_\_

Bidang/Melajar: unit penyediaan / Insuran / lingkungan / sebuah atau universitas / swasta

Negara: \_\_\_\_\_ Nama terumbu karang: \_\_\_\_\_

GPS / Koordinat Posisi, jika ada: \_\_\_\_\_ Kedalaman: \_\_\_\_\_ m/ft

Tanggal survei: \_\_\_\_\_ Jam pengumpulan data: (maks. 14:00 atau jam 2 siang)

Suhu laut: \_\_\_\_\_ °C Cuaca terang / mendung / hujan Aktivitas anda: berjalan / snorkeling / menyelam

\*Mohon diperhatikan: bila ada pertanyaan yang tidak dijawab (kosong) data tidak akan diterima di laman kami.

No. terumbu karang	Kode warna		Tipe karang		Keterangan
	Orang tua	Orang muda	Bercabang	Soer-Lumak	
1	L	D	BR	PL	So
2	L	D	BR	PL	So
3	L	D	BR	PL	So
4	L	D	BR	PL	So
5	L	D	BR	PL	So
6	L	D	BR	PL	So
7	L	D	BR	PL	So
8	L	D	BR	PL	So
9	L	D	BR	PL	So
10	L	D	BR	PL	So
11	L	D	BR	PL	So
12	L	D	BR	PL	So
13	L	D	BR	PL	So
14	L	D	BR	PL	So
15	L	D	BR	PL	So
16	L	D	BR	PL	So
17	L	D	BR	PL	So
18	L	D	BR	PL	So
19	L	D	BR	PL	So
20	L	D	BR	PL	So

Reef C. Marshall, J. Logan, D. Koenig, D. (2011) Terumbu Karang dan Perikanan Ikan Permuda: Simulasi dan Pengembangan Kelestarian CoralWatch, Brisbane.

Reef C. Marshall, J. Logan, D. Koenig, D. (2008) Coral Watch and Climate Change: the push for adaptation and awareness. CoralWatch, Brisbane.

Reefwatch, U.S., Marshall, K.J., Haines, A. and George Odion, D. (2004) Coral Watch 2003-403-448

Masukkan data anda secara langsung ke laman CoralWatch [www.coralwatch.org](http://www.coralwatch.org)

Reefwatch adalah organisasi nirlaba dan berfokus pada penelitian dan konservasi terumbu karang.

1. Reefwatch adalah organisasi nirlaba.  
2. Reefwatch adalah organisasi nirlaba.  
3. Reefwatch adalah organisasi nirlaba.

Terdapat bukti bahwa terumbu karang adalah ekosistem yang sangat produktif dan menghasilkan hasil yang signifikan bagi kehidupan manusia.

Reef walking

Snorkelling or diving

Record survey details: name, date, time, GPS (if possible), water temperature, depth, activity and conditions.



# Memantau karang - tips

Kumpulkan data dari 20 koloni karang yang berbeda





## Memantau karang - tips

Jangan mengamati pucuk-pucuk karang yang sedang tumbuh



Craig Reid



Memantau karang - tips

# Jangan mengamati karang biru



Tips for monitoring: Do not monitor blue corals

# Memantau karang - tips

Sedapat mungkin hindari menyentuh karang, ia sangat mudah rusak

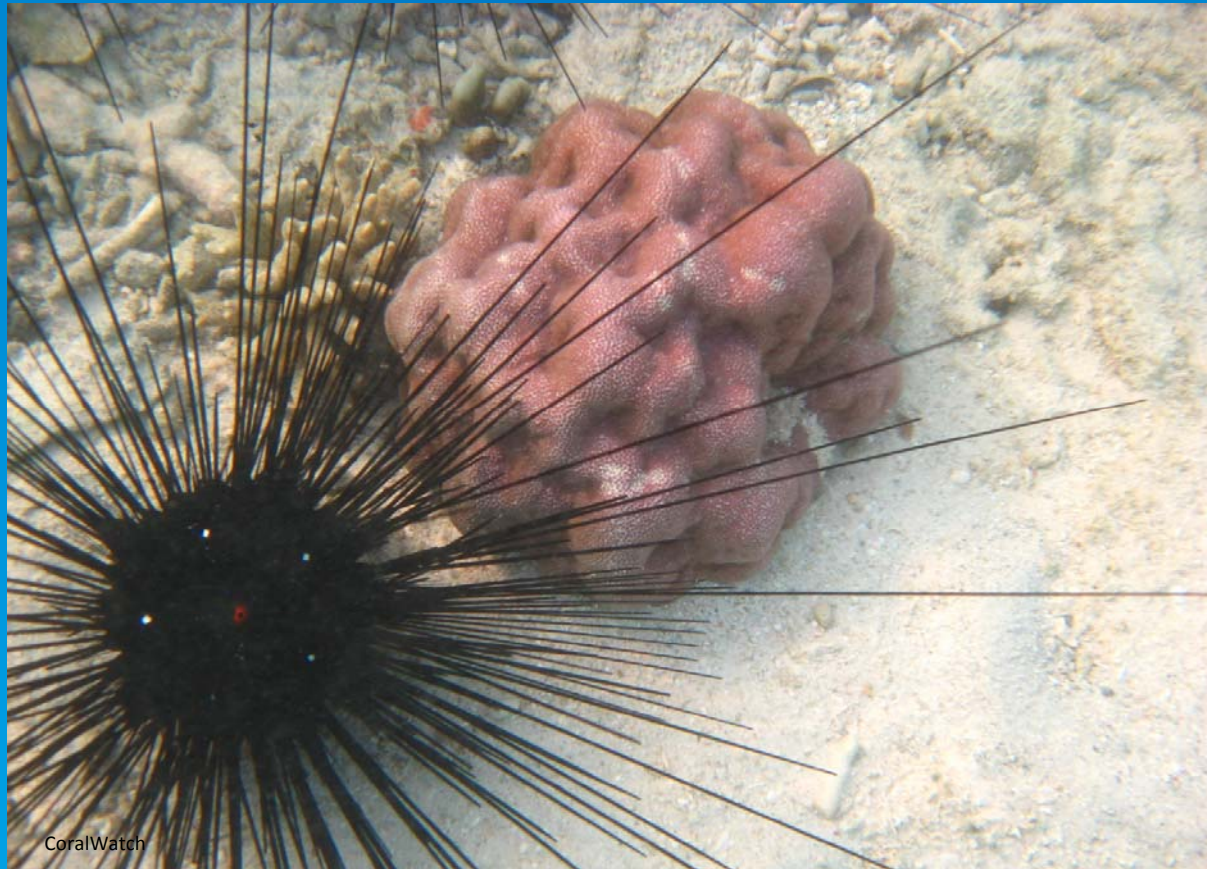


CoralWatch



## Memantau karang - tips

Hati-hati, jangan menyentuh kehidupan laut di sekitarnya



CoralWatch

Memantau karang - tips

# Bekerjasamalah dengan teman kerja anda

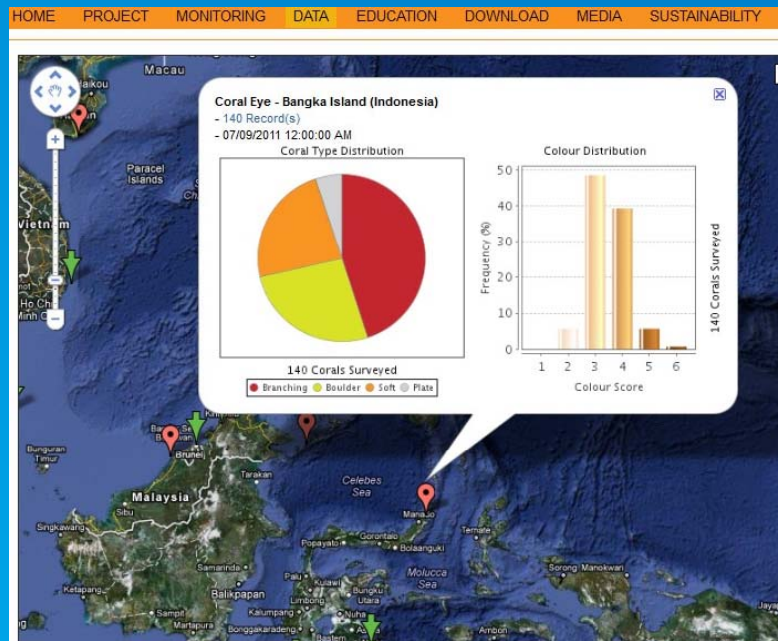


Tips for monitoring: Stay together as a buddy team



# Memantau karang - tips Memasukkan data

Masukkan data anda secara online dan lihat hasilnya di [www.coralwatch.org](http://www.coralwatch.org)



**DATA EDUCATION DOWNLOAD MEDIA SUSTAINABILITY LINKS CONTACT**

**Add New Survey**

**You must sign in to submit a survey.**

**Group Name:**  e.g. EarthCheck, ReefCheck, OceansWatch  
Enter your own name if you do not belong to a group.

**Participating As:**

**Country of Survey:**

**Reef Name:**

Degrees  Degrees/Minutes  Degrees/Minutes/Seconds

**Latitude:**  Without GPS Device

**Longitude:**   I used a GPS Device

If no GPS device used, click on "Without GPS Device" to use a map locator to estimate your survey location by double clicking on the map to zoom in one level at a time to find your location. Then close the map.

**Observation Date:**

**Time:**

**Light Condition:**

**Depth (metres):**  or (feet):

**Water Temperature (°C):**  or (°F):

**Activity:**

**Comments:**

Tips for monitoring: Enter your data online and view your results

# Terima kasih

Kunjungi website kami untuk mengunduh informasi lebih lanjut [www.coralwatch.org](http://www.coralwatch.org)

The screenshot shows the CoralWatch website homepage. At the top, there is a navigation menu with links: HOME, PROJECT, MONITORING, DATA, EDUCATION, DOWNLOAD, MEDIA, SUSTAINABILITY, LINKS, CONTACT. The main content area features a large central image of hands holding a CoralWatch kit over a coral reef. To the left, there are sections for 'REQUEST free Coral Health Chart', 'Order additional materials', 'Coral Reefs and Climate Change' with an 'Order book' button, and 'NEW! CoralWatch materials in Bahasa Indonesia - ORDER'. Below these are social media icons for Facebook and Twitter, and a 'Support / Collaborators' section with logos for The University of Queensland, AWARE, and ReefWatch. To the right of the central image, there is a 'Welcome to CoralWatch' heading and a paragraph describing the organization's mission. Further right, there is a 'CoralWatch NEWS ...' section with a list of recent news items, an 'Enter data' button, a 'Monitoring Sites' section, a 'Coral Health Chart PADI Distinctive Specialty' section, and a 'CoralWatch WorkShops' section. At the bottom right, there is a 'Coralwatch up-to-date' section with statistics: 1226 Members, 675 Reefs, 2523 Surveys, 49936 Corals Surveyed, and Highest Contributor: Ullia Dive Centre.

Thank you. See our website for more information or to download materials



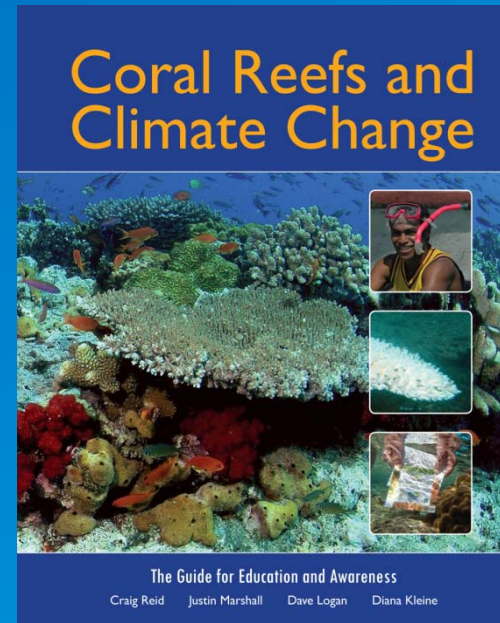
# Daftar pustaka

## References



### Bahasa Indonesia

Craig Reid, Justin Marshall, Dave Logan, Diana Kleine (2011) Terumbu Karang dan Perubahan Iklim: Panduan pendidikan dan pembangunan kesadartahuan. CoralWatch, The University of Queensland, Brisbane. ISBN: 978064556192 (pbk.)  
Buku Kegiatan (2012)



### English

Craig Reid, Justin Marshall, Dave Logan, Diana Kleine (2009) Coral Reefs and Climate Change: The guide for education and awareness. CoralWatch, The University of Queensland, Brisbane. ISBN: 9780646523606 (pbk.)

# Ucapan Terima Kasih

## Acknowledgements



An Australian Government Initiative



Australia  
Indonesia  
Institute



THE UNIVERSITY  
OF QUEENSLAND  
AUSTRALIA



Hassanudin  
University

The Nature  
Conservancy   
Protecting nature. Preserving life.™



REEF CHECK  
AUSTRALIA

