

Appendix 7b.11

Detailed Results of Spot-check Dive and REA Coral Surveys at Shek Kwu chau

Introduction

1.1 This section presents the findings of the subtidal baseline survey conducted on the coastline of Shek Kwu Chau as part of the marine ecological study for the IWMF project.

Methodology

Spot-check Reconnaissance Dives

2.1 Spot-check dives covered the coastline of along the eastern to western part of Shek Kwu Chau and 13 sites were selected during the survey (**Figure 7b.3**).

2.2 In this way, areas with corals were located and suitable locations to carry out the REA surveys were determined.

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2.3 A 100 m horizontal transect was set following the contour of the seabed at area according to the corals communities that found in the Spot-Check Site (**Figure 7b.7**).

Detailed Results of Spot-check Dive and REA Coral Surveys

3.1 The spot-check dives were carried out on 7th, 8th, 14th to 15th February 2009 and the weather conditions were summarized in **Table 1**.

Table 1 Weather Condition for the Spot-Check Dives on 7, 8, 9 and 10 February 2009

Date	Condition	Average Underwater Visibility
7 February 2009	- Wind Speed: east 4 to 5 - Sunny intervals during the day	0.5 - 1 m
8 February 2009	- Wind Speed: northeast 4 to 5 - Sunny intervals during the day	0.5 - 1 m
14 February 2009	- Wind Speed: northeast 5 to 6 - Sunny period	0.5 – 1 m
15 February 2009	- Wind Speed: east to northeast force 3 to 4 - Sunny period	0.5 – 1 m

3.2 Spot-check dives were carried out during the 4-days surveys (**Figure 7b.3**) and covered the four areas. The GPS location, maximum depth, bottom substrate and bottom visibility each surveyed areas were summarized in **Table 2**.

Table 2 GPS Location, Route Distance, Minimum Depth, Maximum Depth, Bottom Substrate and Bottom Visibility of Spot-Check Dive at Site SP1 to SP13

Site	Location (GPS) (Starting Point)	Min. Depth (m)	Max. Depth (m)	Route Distance (m)	Bottom Substrate	Visibility (m)
SP1	E 113°58'57.8"	2.5	7	140	Bedrock/ Boulder	0.5
	N 22°11'45.1"					
SP2	E 113°58'57.2"	2.5	8	250	Bedrock/ Boulder	0.5
	N 22°11'38.3"					
SP3	E 113°59'02.2"	3	8	140	Bedrock/ Boulder	0.5
	N 22°11'33.3"					

SP4	E 113°59'10.2"	3.5	8	126	Bedrock/ Boulder	1
	N 22°11'29.1"					
SP5	E 113°59'14.8"	2.5	10	143	Bedrock/ Boulder	1
	N 22°11'29.1"					
SP6	E 113°59'18.8"	2.5	10	140	Bedrock/ Boulder	0.5- 1
	N 22°11'23.2"					
SP7	E 113°59'22.2"	3.5	12	148	Bedrock/ Boulder	0.5 - 1
	N 22°11'19.2"					
SP8	E 113°59'28.8"	2.5	14	165	Bedrock/ Boulder	0.5 - 1
	N 22°11'20.8"					
SP9	E 113°59'27.8"	5	11	495	Muddy/ Boulder	0.5
	N 22°11'15.1"					
SP10	E 113°59'22.3"	5	11	430	Muddy/ Scattered Boulder	0.5 - 1
	N 22°11'18.2"					
SP11	E 113°59'17.5"	6	11	385	Muddy/ Scattered Boulder	0.5 - 1
	N 22°11'22.1"					
SP12	E 113°59'15.4"	4.5	11	435	Muddy/ Scattered Boulder	0.5
	N 22°11'24.5"					
SP13	E 113°59'13.9"	5	11	210	Muddy/ Scattered Boulder	0.5
	N 22°11'26.2"					

Site SP1, Site SP2, Site SP3, Site SP4, Site SP5, Site SP6, Site SP7 and Site SP8

3.3 The substrate of these eight sites is mainly composed of two parts: natural bedrocks and big boulders. Areas along along the shallow part (less than 3 m) are all sloping natural bedrocks while big boulders appeared at the deeper part along the survey area. Some scattered small size rock could also be found next to the boulders. Maximum depth among these 8 sites ranged from 7 m (SP1) to 14 m (SP8). The visibility among these eight sites is quite low (0.5 m to 1 m) and this may due to the influence of the Pearl River fresh water. Substrates deeper than the maximum depth are all muddy and with visibility less than 0.5 m.

3.4 Common rock oyster *Saccostrea cucullata* was found on the surfaces of the big boulders and bedrocks. Common green mussel *Perna viridis* were found at shallow water in the clefts between boulders. Both species are commonly found in Hong Kong waters. Common tunicate: *Styela plicata* Seaurchins: *Diadema setosum* and *Anthocidaris crassispina*, and tubeworm: *Sabellastarte japonica* were also found at this site. Common tube anemone: *Cerianthus filiformis* was also found at the muddy bottom of this area. Algae: *Corallina* sp. was commonly found on the rock surface of this area.

3.5 A total of eight species of hard coral (*Psammocora superficialis*, *Oulastrea crispata*, *Goniopora stutchburyi*, *Turbinaria peltata*, *Coscinaraea* n sp., *Tubastrea* sp., *Tubastrea diaphana*, *Dendrophyllia* sp.) and six species of octocoral (*Dendronephthya* sp., *Menella* sp., *Echinomuricea* sp., *Echinogorgia* sp. A, *Echinogorgia* sp. B, *Paraplexaura* sp.) were recorded along these 8 sites (Table 3). These 8 sites were dominated by hard corals especially *Oulastrea crispata* and *Psammocora superficialis* (recorded in all eight sites). All the corals were found on the surfaces of bedrock or boulders. All hard corals found at this area are common coral species in Hong Kong waters except the uncommon hard coral *Coscinaraea* n sp. (site SP8) which is only recorded from a few locations in the northeastern, eastern, southeastern and western waters of Hong Kong. These eight sites showed relatively low coral coverage (less than 1%) and all the corals are in fair condition. Their size ranged from 2 cm (*Oulastrea crispata*) to 30 cm (*Psammocora superficialis*) in diameter and 5 cm (*Echinomuricea* sp.) to 30 cm (*Menella* sp.) in height.

Site SP9, Site SP10, Site SP11, Site SP12 and Site SP13

3.6 The substrate of these five sites is mainly composed of muddy substrate and scattered boulders. Scattered boulders were mainly located at the shallow part of these five sites. The maximum depth among these sites was around 11 m. The visibility is relatively low along the muddy bottom (less than 0.5 m at most of the sites).

3.7 Common green mussel *Perna viridis* were found at these five sites. Seurchins: *Diadema setosum*, tubeworm: *Sabellastarte japonica*, sponges and sea cucumbers were also found at these sites. Common tube anemone: *Cerianthus filiformis* was also found at the muddy bottom of this area. All these animals are commonly found in Hong Kong water

3.8 One species of hard coral (*Tubastrea* sp.) and seven species of octocoral (*Dendronephthya* sp., *Menella* sp., *Echinomuricea* sp., *Euplexaura* sp. *Echinogorgia* sp. A, *Echinogorgia* sp. B, *Paraplexaura* sp.) were recorded along these five sites (**Table 3**). These 5 sites were dominated by octocorals especially *Echinomuricea* sp. and *Echinogorgia* sp. A (recorded in all five sites). All the corals were found on the surfaces of the scatter boulders. All hard coral and cotocorals found at these sites were common coral species in Hong Kong water. These areas showed relatively low coverage (less than 1%) and all the corals were in fair condition. Their size ranged from 2 cm to 10 cm (*Tubastrea* sp.) in diameter and 5 cm (*Echinomuricea* sp.) to 30 cm (*Menella* sp.) in height.

Table 3 Coral species Found during the Spot-Check Survey

Site	1	2	3	4	5	6	7	8	9	10	11	12	13	Size (cm)	Rarity in Hong Kong
Hard Corals*															
<i>Psammocora superficialis</i>	x	x	x	x	x	x	x	x						15 - 30	Abundant
<i>Oulastrea crispata</i>	x	x	x	x	x	x	x	x						2 - 10	Common
<i>Goniopora stutchburyi</i>								x						8 - 20	Common
<i>Turbinaria peltata</i>								x						10 - 15	Common
<i>Coscinaraea n sp.</i>								x						11 - 18	Uncommon
<i>Tubastrea</i> sp.						x	x	x	x	x	x	x	x	2 - 10	Common
<i>Tubastrea diaphana</i>						x								5 - 10	Common
<i>Dendrophyllia</i> sp.						x								10 - 15	Common
Soft Corals/Gorgonian**															
<i>Dendronephthya</i> sp.						x	x	x	x	x	x	x	x	10 - 15	Common
<i>Menella</i> sp.				x	x		x	x	x		x			10 - 30	Common
<i>Euplexaura</i> sp.									x	x	x	x	x	15 - 25	Common
<i>Echinomuricea</i> sp.				x	x	x	x		x	x	x	x	x	5 - 25	Common
<i>Echinogorgia</i> sp. A					x	x		x	x	x	x	x	x	8 - 25	Common
<i>Echinogorgia</i> sp. B						x						x		5 - 15	Common
<i>Paraplexaura</i> sp.					x								x	10 - 20	Common
Number of Species	2	2	2	4	6	9	6	9	6	5	6	6	6		

*Coral colony measured in maximum diameter

**Coral colony measured in maximum height

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3.9 The surveys were performed on 21st, 22nd, 29th November, 5th, 6th December 2009. The weather was mainly sunny and the sea was windy and the visibility was fair (approximately 1 m). Sixteen 100 m transects were laid parallel to the coastline which covered the coral area at the 13 spot-check areas (**Figure 7b.7**).

Table 4 Weather Condition for the REA Survey on 21st - 22nd, 29th November and 5th - 6th December 2009

Date	Condition	Average Underwater Visibility
21 November 2009	- Wind Speed: East force 5, occasionally force 6 - Sunny period	0.5 m - 1 m
22 November 2009	- Wind Speed: East force 5-6 - Sunny period	0.5 m - 1 m
29 November 2009	- Wind Speed: Northeast force 4-5 - Cloudy with sunny period	0.5 m - 1 m
5 December 2009	- Wind Speed: Northeast force 3-4 - Sunny intervals	1 m
6 December 2009	- Wind Speed: Northeast force 4-5 - Sunny intervals	0.5 m-1 m

Table 5 GPS of Transect Starting and Ending, Maximum Depth, Bottom Substrate and Bottom Visibility of the REA Transects

Transect	Location (GPS) (Starting Point)	Location (GPS) (End Point)	Corresponding Spot-check site	Max. Depth (m)	Bottom Substrate	Visibility (m)
1	E 113°58'57.1"	E 113°58'57.0"	SP1	6	Bedrock /Boulders	0.5 - 1
	N 22°11'41.0"	N 22°11'38.4"				
2	E 113°58'59.4"	E 113°58'01.6"	SP2	6	Bedrock /Boulders	0.5 - 1
	N 22°11'36.4"	N 22°11'34.1"				
3	E 113°59'05.8"	E 113°59'07.4"	SP3	6	Bedrock /Boulders	1
	N 22°11'33.0"	N 22°11'30.7"				
4	E 113°59'11.3"	E 113°59'14.3"	SP4	7	Bedrock /Boulders	1
	N 22°11'29.0"	N 22°11'29.2"				
5	E 113°59'14.9"	E 113°59'15.9"	SP5	8	Bedrock /Boulders	0.5 - 1
	N 22°11'28.6"	N 22°11'26.1"				
6	E 113°59'16.4"	E 113°59'18.7"	SP6	7	Bedrock /Boulders	1
	N 22°11'25.4"	N 22°11'23.1"				
7	E 113°59'18.9"	E 113°59'21.8"	SP6	7.5	Bedrock /Boulders	1
	N 22°11'22.6"	N 22°11'19.4"				
8	E 113°59'22.6"	E 113°59'27.6"	SP7	6.5	Bedrock /Boulders	1
	N 22°11'18.5"	N 22°11'19.6"				
9	E 113°59'29.6"	E 113°59'33.1"	SP8	8	Bedrock /Boulders	0.5 - 1
	N 22°11'21.2"	N 22°11'22.6"				
10	E 113°59'26.2"	E 113°59'21.6"	SP9	11	Boulder/Muddy	0.5
	N 22°11'17.8"	N 22°11'17.8"				
11	E 113°59'21.0"	E 113°59'18.8"	SP10	11	Boulder/Muddy	0.5
	N 22°11'18.8"	N 22°11'21.1"				
12	E 113°59'17.0"	E 113°59'15.0"	SP11/SP12	11	Boulder/Muddy	0.5
	N 22°11'23.3"	N 22°11'25.6"				
13	E 113°59'14.9"	E 113°59'12.7"	SP13	11	Boulder/Muddy	0.5
	N 22°11'26.1"	N 22°11'28.3"				
14	E 113°59'08.0"	E 113°59'11.0"	SP3	6.5	Bedrock /Boulders	0.5 - 1
	N 22°11'30.4"	N 22°11'29.1"				
15	E 113°59'02.0"	E 113°59'05.4"	SP3	6	Bedrock /Boulders	0.5 - 1
	N 22°11'33.8"	N 22°11'33.5"				
16	E 113°58'57.2"	E 113°58'58.9"	SP2	6	Bedrock /Boulders	0.5 - 1
	N 22°11'38.0"	N 22°11'36.9"				

Transect 1

3.10 A 100 m transect was laid down along the bedrock and boulder surfaces which covered part the coral area at spot check SP1 (**Figure 7b.7**). The start point and end point laid on bedrock and boulder surfaces at around 6 m deep.

3.11 This site is located at the western part of Shek Kwu Chau in which the transect is mainly composed of bedrock and boulders. The REA transect was laid at the bottom with bedrock and boulder (**Table 6**). The average visibility was around 1 m during the survey time. The site supported limited marine life and is dominated by some common marine animal such as rock oyster, seurchin, tunicate and green mussel.

Table 6 REA Ecological and Substratum attributes of Transect 1

Ecological attributes	Rank
Hard coral	0.5
Octocoral (soft corals and gorgonians)	0
Black Corals	0
Dead standing corals	0
Substratum Attributes	
Bedrock/continuous pavement	3
Boulder Blocks (diam.>50cm)	2
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0
Soft Substrata	0
Sand	1
Mud/Silt	0

* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

3.12 The site supported sparse and patchy cover (<1%) of corals. Twenty-eight hard coral colonies in two species (**Table 7**) were recorded along the REA transect and *Oulastrea crispata* was the dominant species. All the recorded coral colonies grow on the bedrock and boulders surfaces with fair health condition. They were of small size (about 2 cm to 27 cm in diameter) and in low coverage. Only 5 colonies (*Oulastrea crispata*) of the recorded coral were attached to movable rocks (less than 50 cm in diameter). All coral colonies recorded along the transect are common coral species in Hong Kong waters.

Table 7 Size, Health Condition and Translocation Feasibility of Coral Colonies found at Transect 1

Coral Number	Coral Species	Size (cm)	Health Condition	Distance along the REA Transect (m)	Translocation Feasibility
1	<i>Psammocora superficialis</i>	20	Fair	15.2	No
2	<i>Oulastrea crispata</i>	3	Fair	18	No
3	<i>Oulastrea crispata</i>	3	Fair	18.2	No
4	<i>Oulastrea crispata</i>	2	Fair	18.2	No
5	<i>Oulastrea crispata</i>	2	Fair	18.3	No
6	<i>Oulastrea crispata</i>	5	Fair	25	No
7	<i>Psammocora superficialis</i>	15	Fair	36.5	No
8	<i>Oulastrea crispata</i>	10	Fair	38.4	No
9	<i>Oulastrea crispata</i>	4	Fair	38.4	No
10	<i>Psammocora superficialis</i>	25	Fair	45.3	No
11	<i>Psammocora</i>	15	Fair	45.3	No

	<i>superficialis</i>				
12	<i>Oulastrea crispata</i>	2	Fair	49	No
13	<i>Oulastrea crispata</i>	4	Fair	49	No
14	<i>Oulastrea crispata</i>	3	Fair	49.1	No
15	<i>Oulastrea crispata</i>	3	Fair	49.2	Yes
16	<i>Oulastrea crispata</i>	2	Fair	49.3	Yes
17	<i>Psammocora superficialis</i>	25	Fair	61.6	No
18	<i>Psammocora superficialis</i>	21	Fair	66.8	No
19	<i>Psammocora superficialis</i>	15	Fair	66.8	No
20	<i>Psammocora superficialis</i>	27	Fair	66.9	No
21	<i>Oulastrea crispata</i>	10	Fair	78.6	No
22	<i>Oulastrea crispata</i>	7	Fair	78.8	Yes
23	<i>Psammocora superficialis</i>	24	Fair	83.4	No
24	<i>Psammocora superficialis</i>	18	Fair	83.9	No
25	<i>Oulastrea crispata</i>	4	Fair	89	No
26	<i>Oulastrea crispata</i>	4	Fair	89.1	No
27	<i>Oulastrea crispata</i>	7	Fair	91.2	Yes
28	<i>Oulastrea crispata</i>	5	Fair	91.2	Yes

Transect 2

3.13 A 100 m transect was laid down along the bedrock and boulder surfaces which covered part the coral area at spot check SP2 (**Figure 7b.7**). The start point and end point laid on bedrock and boulder surfaces at around 6 m deep.

3.14 Same as Transect 1, this site is located at the western part of Shek Kwu Chau in which the transect is mainly composed of bedrock and boulders. The REA transect was laid at the bottom with bedrock and boulder (**Table 8**). The average visibility was around 1 m during the survey time. The site supported limited marine life and is dominated by some common marine animal such as rock oyster, seurchin, tunicate and green mussel.

Table 8 REA Ecological and Substratum attributes of Transect 2

Ecological attributes	Rank
Hard coral	0.5
Octocoral (soft corals and gorgonians)	0
Black Corals	0
Dead standing corals	0
Substratum Attributes	
Bedrock/continuous pavement	3
Boulder Blocks (diam.>50cm)	3
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0
Soft Substrata	0
Sand	0
Mud/Silt	0

* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

3.15 The site supported sparse and patchy cover (<1%) of hard coral. Twenty-two hard coral colonies in two species (**Table 9**) were recorded along the REA transect and *Oulastrea crispata* was the dominant species. All the recorded coral colonies grow on the bedrock and boulders surfaces with fair health condition. They were of small size (about 2 cm to 30 cm in diameter) and in low coverage. Only 3 colonies (*Oulastrea crispata*) of the recorded coral were attached to movable rocks (less than 50 cm in diameter). All coral colonies recorded along the transect are common coral species in Hong Kong waters.

Table 9 Size, Health Condition and Translocation Feasibility of Coral Colonies found at Transect 2

Coral Number	Coral Species	Size (cm)	Health Condition	Distance along the REA Transect (m)	Translocation Feasibility
1	<i>Oulastrea crispata</i>	7	Fair	6.5	No
2	<i>Oulastrea crispata</i>	10	Fair	6.8	No
3	<i>Oulastrea crispata</i>	5	Fair	6.8	No
4	<i>Psammocora superficialis</i>	30	Fair	11.4	No
5	<i>Oulastrea crispata</i>	5	Fair	32.4	No
6	<i>Oulastrea crispata</i>	2	Fair	32.5	No
7	<i>Oulastrea crispata</i>	2	Fair	41.7	No
8	<i>Oulastrea crispata</i>	3	Fair	41.9	No
9	<i>Oulastrea crispata</i>	3	Fair	41.9	No
10	<i>Oulastrea crispata</i>	2	Fair	55.5	No
11	<i>Psammocora superficialis</i>	19	Fair	59.1	No
12	<i>Psammocora superficialis</i>	27	Fair	68.4	No
13	<i>Psammocora superficialis</i>	25	Fair	69.1	No
14	<i>Oulastrea crispata</i>	2	Fair	69.2	No
15	<i>Oulastrea crispata</i>	8	Fair	77.1	Yes
16	<i>Oulastrea crispata</i>	4	Fair	77.2	Yes
17	<i>Oulastrea crispata</i>	6	Fair	77.2	Yes
18	<i>Psammocora superficialis</i>	18	Fair	85	No
19	<i>Oulastrea crispata</i>	9	Fair	85.8	No
20	<i>Oulastrea crispata</i>	10	Fair	86	No
21	<i>Oulastrea crispata</i>	5	Fair	89.1	No
22	<i>Psammocora superficialis</i>	6	Fair	90	No

Transect 3

3.16 A 100 m transect was laid down along the bedrock and boulder surfaces which covered part the coral area at spot check SP3 (**Figure 7b.7**). The start point and end point laid on bedrock and boulder surfaces at around 6 m deep.

3.17 This site is located at the southwestern part of Shek Kwu Chau in which the transect is mainly composed of bedrock and boulders. The REA transect was laid at the bottom with bedrock and boulder (**Table 10**). The average visibility was around 1 m during the survey time. The site supported limited marine life and is dominated by some common marine animal such as rock oyster, seurchin, tunicate and green mussel.

Table 10 REA Ecological and Substratum attributes of Transect 3

Ecological attributes	Rank
Hard coral	0.5

Octocoral (soft corals and gorgonians)	0
Black Corals	0
Dead standing corals	0
Substratum Attributes	
Bedrock/continuous pavement	3
Boulder Blocks (diam.>50cm)	2
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0
Soft Substrata	0
Sand	1
Mud/Silt	0

* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

3.18 The site supported sparse and patchy cover (<1%) of hard corals. Thirty-eight hard coral colonies in two species (**Table 11**) were recorded along the REA transect and *Oulastrea crispata* was the dominant species. All the recorded coral colonies grow on the bedrock and boulders surfaces with fair health condition. They were of small size (about 2 cm to 29 cm in diameter) and in low coverage. Only 9 colonies (*Oulastrea crispata*) of the recorded coral were attached to movable rocks (less than 50 cm in diameter). All coral colonies recorded along the transect are common coral species in Hong Kong waters.

Table 11 Size, Health Condition and Translocation Feasibility of Coral Colonies found at Transect 3

Coral Number	Coral Species	Size (cm)	Health Condition	Distance along the REA Transect (m)	Translocation Feasibility
1	<i>Psammocora superficialis</i>	17	Fair	1.5	No
2	<i>Oulastrea crispata</i>	2	Fair	12.9	No
3	<i>Oulastrea crispata</i>	2	Fair	13.6	No
4	<i>Oulastrea crispata</i>	2	Fair	13.6	No
5	<i>Oulastrea crispata</i>	2	Fair	13.7	No
6	<i>Oulastrea crispata</i>	2	Fair	13.8	No
7	<i>Oulastrea crispata</i>	2	Fair	13.8	No
8	<i>Oulastrea crispata</i>	3	Fair	19.1	No
9	<i>Oulastrea crispata</i>	4	Fair	19.2	No
10	<i>Oulastrea crispata</i>	3	Fair	28.1	Yes
11	<i>Oulastrea crispata</i>	2	Fair	28.1	Yes
12	<i>Oulastrea crispata</i>	2	Fair	28.2	Yes
13	<i>Psammocora superficialis</i>	28	Fair	33.2	No
14	<i>Psammocora superficialis</i>	16	Fair	46.1	No
15	<i>Oulastrea crispata</i>	10	Fair	47.3	No
16	<i>Oulastrea crispata</i>	7	Fair	51.8	No
17	<i>Psammocora superficialis</i>	28	Fair	63	No
18	<i>Psammocora superficialis</i>	16	Fair	63.1	No
19	<i>Oulastrea crispata</i>	2	Fair	66.1	No
20	<i>Oulastrea crispata</i>	2	Fair	66.1	No
21	<i>Oulastrea crispata</i>	3	Fair	66.9	Yes
22	<i>Psammocora superficialis</i>	29	Fair	70	No

23	<i>Psammocora superficialis</i>	15	Fair	75.7	No
24	<i>Oulastrea crispata</i>	2	Fair	75.7	No
25	<i>Oulastrea crispata</i>	3	Fair	79	No
26	<i>Oulastrea crispata</i>	2	Fair	79.1	No
27	<i>Oulastrea crispata</i>	4	Fair	79.1	No
28	<i>Oulastrea crispata</i>	10	Fair	79.6	Yes
29	<i>Oulastrea crispata</i>	5	Fair	79.6	Yes
30	<i>Oulastrea crispata</i>	3	Fair	79.6	Yes
31	<i>Psammocora superficialis</i>	15	Fair	81	No
32	<i>Oulastrea crispata</i>	3	Fair	91	No
33	<i>Oulastrea crispata</i>	3	Fair	91.6	No
34	<i>Oulastrea crispata</i>	2	Fair	91.7	No
35	<i>Oulastrea crispata</i>	2	Fair	91.7	No
36	<i>Oulastrea crispata</i>	4	Fair	95.2	Yes
37	<i>Oulastrea crispata</i>	6	Fair	95.2	Yes
38	<i>Oulastrea crispata</i>	3	Fair	97.8	No

Transect 4

3.19 A 100 m transect was laid down along the bedrock and boulder surfaces which covered part the coral area at spot check SP4 (**Figure 7b.7**). The start point and end point laid on bedrock and boulder surfaces at around 7 m deep.

3.20 This site is located at the southwestern part of Shek Kwu Chau in which the transect is mainly composed of bedrock and boulders. The REA transect was laid at the bottom with bedrock and boulder (**Table 12**). The average visibility was around 1 m during the survey time. The site supported limited marine life and is dominated by some common marine animal such as rock oyster, seurchin, tunicate and green mussel.

Table 12 REA Ecological and Substratum attributes of Transect 4

Ecological attributes	Rank
Hard coral	0.5
Octocoral (soft corals and gorgonians)	0
Black Corals	0
Dead standing corals	0
Substratum Attributes	
Bedrock/continuous pavement	3
Boulder Blocks (diam.>50cm)	2
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0
Soft Substrata	0
Sand	0
Mud/Silt	0

* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

3.21 The site supported sparse and patchy cover (<1%) of corals. Fifty-two hard coral and octocoral colonies in four species (**Table 13**) were recorded along the REA transect and *Oulastrea crispata* was the dominant species. All the recorded coral colonies grow on the bedrock and boulders surfaces with fair health condition. They were of small size (hard coral: 2 cm to 30 cm in diameter; octocoral: 3 cm to 25 cm in height) and in low coverage. Only 11 colonies (*Oulastrea crispata*: 2 colonies, *Echinomuricea* sp.: 6 colonies, *Menella* sp.: 3 colonies) of the recorded coral were attached to movable rocks (less than 50 cm in

diameter). All coral colonies recorded along the transect are common coral species in Hong Kong waters.

Table 13 Size, Health Condition and Translocation Feasibility of Coral Colonies found at Transect 4

Coral Number	Coral Species	Size (cm)	Health Condition	Distance along the REA Transect (m)	Translocation Feasibility
1	<i>Echinomuricea</i> sp.	15	Fair	2.5	Yes
2	<i>Oulastrea crispata</i>	4	Fair	5.1	No
3	<i>Psammocora superficialis</i>	16	Fair	7.8	No
4	<i>Psammocora superficialis</i>	25	Fair	8.1	No
5	<i>Oulastrea crispata</i>	2	Fair	9.1	No
6	<i>Oulastrea crispata</i>	2	Fair	9.1	No
7	<i>Oulastrea crispata</i>	3	Fair	9.3	Yes
8	<i>Psammocora superficialis</i>	17	Fair	9.9	No
9	<i>Oulastrea crispata</i>	3	Fair	11.5	No
10	<i>Menella</i> sp.	25	Fair	16.1	Yes
11	<i>Oulastrea crispata</i>	2	Fair	19.5	No
12	<i>Echinomuricea</i> sp.	10	Fair	23	Yes
13	<i>Oulastrea crispata</i>	2	Fair	33.1	No
14	<i>Oulastrea crispata</i>	5	Fair	33.1	No
15	<i>Oulastrea crispata</i>	3	Fair	33.2	No
16	<i>Oulastrea crispata</i>	10	Fair	33.2	No
17	<i>Psammocora superficialis</i>	19	Fair	39	No
18	<i>Psammocora superficialis</i>	29	Fair	45.1	No
19	<i>Oulastrea crispata</i>	2	Fair	49.1	No
20	<i>Oulastrea crispata</i>	3	Fair	50	No
21	<i>Psammocora superficialis</i>	19	Fair	56.2	No
22	<i>Oulastrea crispata</i>	2	Fair	57	No
23	<i>Echinomuricea</i> sp.	13	Fair	57.3	Yes
24	<i>Echinomuricea</i> sp.	15	Fair	57.4	Yes
25	<i>Menella</i> sp.	19	Fair	57.8	Yes
26	<i>Menella</i> sp.	20	Fair	57.9	Yes
27	<i>Oulastrea crispata</i>	2	Fair	66	No
28	<i>Oulastrea crispata</i>	2	Fair	66.1	No
29	<i>Oulastrea crispata</i>	3	Fair	66.1	No
30	<i>Oulastrea crispata</i>	6	Fair	66.2	Yes
31	<i>Psammocora superficialis</i>	21	Fair	68.7	No
32	<i>Oulastrea crispata</i>	2	Fair	69.6	No
33	<i>Oulastrea crispata</i>	2	Fair	69.6	No
34	<i>Oulastrea crispata</i>	2	Fair	69.7	No
35	<i>Oulastrea crispata</i>	5	Fair	69.8	No
36	<i>Echinomuricea</i> sp.	9	Fair	75	Yes

37	<i>Oulastrea crispata</i>	10	Fair	78.1	No
38	<i>Oulastrea crispata</i>	3	Fair	78.1	No
39	<i>Echinomuricea</i> sp.	3	Fair	82.5	Yes
40	<i>Oulastrea crispata</i>	2	Fair	84.1	No
41	<i>Oulastrea crispata</i>	4	Fair	84.1	No
42	<i>Oulastrea crispata</i>	2	Fair	84.2	No
43	<i>Oulastrea crispata</i>	2	Fair	84.2	No
44	<i>Oulastrea crispata</i>	2	Fair	84.2	No
45	<i>Oulastrea crispata</i>	3	Fair	84.3	No
46	<i>Oulastrea crispata</i>	3	Fair	84.4	No
47	<i>Psammocora superficialis</i>	30	Fair	87.3	No
48	<i>Psammocora superficialis</i>	15	Fair	89.1	No
49	<i>Psammocora superficialis</i>	18	Fair	89.4	No
50	<i>Oulastrea crispata</i>	2	Fair	95.2	No
51	<i>Oulastrea crispata</i>	4	Fair	96	No
52	<i>Oulastrea crispata</i>	3	Fair	96.3	No

Transect 5

3.22 A 100 m transect was laid down along the bedrock and boulder surfaces which covered part the coral area at spot check SP5 (**Figure 7b.7**). The start point and end point laid on bedrock and boulder surfaces at around 8 m deep.

3.23 This site is located at the western part of Shek Kwu Chau in which the transect is mainly composed of bedrock and boulders. The REA transect was laid at the bottom with bedrock and boulder (**Table 14**). The average visibility was around 1 m during the survey time. The site supported limited marine life and is dominated by some common marine animal such as rock oyster, seurchin, tunicate and green mussel.

Table 14 REA Ecological and Substratum attributes of Transect 5

Ecological attributes	Rank
Hard coral	0.5
Octocoral (soft corals and gorgonians)	0.5
Black Corals	0
Dead standing corals	0
Substratum Attributes	
Bedrock/continuous pavement	2
Boulder Blocks (diam.>50cm)	3
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0
Soft Substrata	0
Sand	0
Mud/Silt	0

* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

3.24 The site supported sparse and patchy cover (<1%) of corals. Seventy-one hard coral and octocoral colonies in six species (**Table 15**) were recorded along the REA transect and *Oulastrea crispata* was the dominant species. All the recorded coral colonies grow on the bedrock and boulders surfaces. They were of small size (hard coral: 2 cm to 30 cm in diameter; octocoral: 6 cm to 28 cm) and in low coverage. Only 18 colonies (*Oulastrea*

crispata: 7 colonies, *Menella* sp.: 3 colonies, *Echinomuricea* sp.: 6 colonies, *Paraplexaura* sp.: 1 colonies, *Echinogorgia* sp. A: 1 colony) of the recorded corals were attached to movable rocks (less than 50 cm in diameter) or can be transplantable. All coral colonies recorded along the transect are common coral species in Hong Kong waters.

Table 15 Size, Health Condition and Translocation Feasibility of Coral Colonies found at Transect 5

Coral Number	Coral Species	Size (cm)*	Health Condition	Distance along the REA Transect (m)	Translocation Feasibility
1	<i>Oulastrea crispata</i>	5	Fair	2	No
2	<i>Oulastrea crispata</i>	5	Fair	2.1	No
3	<i>Psammocora superficialis</i>	19	Fair	4.1	No
4	<i>Oulastrea crispata</i>	5	Fair	5.1	No
5	<i>Oulastrea crispata</i>	5	Fair	5.2	No
6	<i>Oulastrea crispata</i>	2	Fair	5.2	No
7	<i>Oulastrea crispata</i>	3	Fair	5.2	No
8	<i>Psammocora superficialis</i>	15	Fair	7.6	No
9	<i>Oulastrea crispata</i>	9	Fair	7.9	No
10	<i>Menella</i> sp.	28	Fair	9.1	Yes
11	<i>Oulastrea crispata</i>	2	Fair	11.5	No
12	<i>Echinomuricea</i> sp.	17	Fair	12.4	Yes
13	<i>Oulastrea crispata</i>	3	Fair	13.4	Yes
14	<i>Echinomuricea</i> sp.	15	Fair	18.4	Yes
15	<i>Oulastrea crispata</i>	10	Fair	19	No
16	<i>Oulastrea crispata</i>	2	Fair	19.1	No
17	<i>Oulastrea crispata</i>	2	Fair	19.1	No
18	<i>Oulastrea crispata</i>	2	Fair	19.2	No
19	<i>Oulastrea crispata</i>	3	Fair	19.2	No
20	<i>Menella</i> sp.	15	Fair	23.9	Yes
21	<i>Oulastrea crispata</i>	2	Fair	33.2	No
22	<i>Oulastrea crispata</i>	3	Fair	33.2	No
23	<i>Psammocora superficialis</i>	20	Fair	37	No
24	<i>Oulastrea crispata</i>	3	Fair	38.5	No
25	<i>Psammocora superficialis</i>	20	Fair	38.6	No
26	<i>Psammocora superficialis</i>	15	Fair	38.8	No
27	<i>Oulastrea crispata</i>	2	Fair	39.1	No
28	<i>Oulastrea crispata</i>	2	Fair	39.1	No
29	<i>Oulastrea crispata</i>	2	Fair	44.2	Yes
30	<i>Oulastrea crispata</i>	4	Fair	44.2	Yes
31	<i>Psammocora superficialis</i>	15	Fair	49	No
32	<i>Psammocora superficialis</i>	20	Fair	49.2	No
33	<i>Psammocora superficialis</i>	15	Fair	49.4	No
34	<i>Oulastrea crispata</i>	2	Fair	57.1	No
35	<i>Oulastrea crispata</i>	2	Fair	57.1	No
36	<i>Oulastrea crispata</i>	2	Fair	57.2	No
37	<i>Oulastrea crispata</i>	2	Fair	57.3	No

38	<i>Psammocora superficialis</i>	10	Fair	63.2	No
39	<i>Oulastrea crispata</i>	2	Fair	66.5	No
40	<i>Oulastrea crispata</i>	2	Fair	66.5	No
41	<i>Oulastrea crispata</i>	2	Fair	67.1	Yes
42	<i>Oulastrea crispata</i>	2	Fair	67.1	Yes
43	<i>Oulastrea crispata</i>	3	Fair	67.2	Yes
44	<i>Menella</i> sp.	25	Fair	67.2	Yes
45	<i>Oulastrea crispata</i>	3	Fair	69.1	No
46	<i>Oulastrea crispata</i>	3	Fair	69.2	No
47	<i>Oulastrea crispata</i>	4	Fair	73.4	No
48	<i>Oulastrea crispata</i>	3	Fair	73.4	No
49	<i>Echinomuricea</i> sp.	6	Fair	79	Yes
50	<i>Echinomuricea</i> sp.	10	Fair	79.1	Yes
51	<i>Echinomuricea</i> sp.	15	Fair	79.5	Yes
52	<i>Oulastrea crispata</i>	2	Fair	80.5	No
53	<i>Paraplexaura</i> sp.	15	Fair	82.7	No
54	<i>Oulastrea crispata</i>	2	Fair	82.8	No
55	<i>Oulastrea crispata</i>	6	Fair	82.8	No
56	<i>Psammocora superficialis</i>	15	Fair	83	No
57	<i>Psammocora superficialis</i>	16	Fair	83.4	No
58	<i>Oulastrea crispata</i>	2	Fair	83.5	No
59	<i>Echinogorgia</i> sp. A	12	Fair	85.9	Yes
60	<i>Psammocora superficialis</i>	15	Fair	85.9	No
61	<i>Oulastrea crispata</i>	2	Fair	86.7	No
62	<i>Oulastrea crispata</i>	3	Fair	86.7	No
63	<i>Oulastrea crispata</i>	3	Fair	86.8	No
64	<i>Echinomuricea</i> sp.	14	Fair	94.3	Yes
65	<i>Oulastrea crispata</i>	2	Fair	95.1	No
66	<i>Oulastrea crispata</i>	2	Fair	95.1	No
67	<i>Psammocora superficialis</i>	30	Fair	95.6	No
68	<i>Oulastrea crispata</i>	2	Fair	96.3	No
69	<i>Oulastrea crispata</i>	5	Fair	96.3	Yes
70	<i>Psammocora superficialis</i>	15	Fair	96.6	No
71	<i>Paraplexaura</i> sp.	20	Fair	96.7	Yes

*Hard coral recorded in maximum diameter, octocoral recorded in maximum height

Transect 6

3.25 A 100 m transect was laid down along the bedrock and boulder surfaces which covered part the coral area at spot check SP6 (**Figure 7b.7**). The start point and end point laid on bedrock and boulder surfaces at around 7 m deep.

3.26 This site is located at the southwestern part of Shek Kwu Chau in which the transect is mainly composed of bedrock and boulders. The REA transect was laid at the bottom with bedrock and boulder (**Table 16**). The average visibility was around 1 m during the survey time. The site supported limited marine life and is dominated by some common marine animal such as rock oyster, seurchin, tunicate and green mussel.

Table 16 REA Ecological and Substratum attributes of Transect 6

Ecological attributes	Rank
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Hard coral	0.5
Octocoral (soft corals and gorgonians)	0.5
Black Corals	0
Dead standing corals	0
Substratum Attributes	
Bedrock/continuous pavement	2
Boulder Blocks (diam.>50cm)	3
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0
Soft Substrata	0
Sand	1
Mud/Silt	0

* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

3.27 The site supported sparse and patchy cover (<1%) of corals. Fifty-three hard coral and octocoral colonies in nine species (**Table 17**) were recorded along the REA transect and *Oulastrea crispata* was the dominant species. All the recorded coral colonies grow on the bedrock and boulders surfaces with fair health condition. They were of small size (hard corals: 2 cm to 21 cm in diameter; octocorals: 8 cm to 20 cm in height) and in low coverage. Only 18 coral colonies (*Oulastrea crispata*: 2 colonies, *Tubastrea* sp.: 5 colonies, *Tubastrea diaphana*: 1 colony, *Echinomuricea* sp.: 4 colonies, *Dendronephthya* sp.: 3 colonies, *Echinogorgia* sp. A: 2 colonies, *Echinogorgia* sp. B: 1 colony) of the recorded coral were attached to movable rocks (less than 50 cm in diameter) or being transplantable. All coral colonies recorded along the transect are common coral species in Hong Kong waters.

Table 17 Size, Health Condition and Translocation Feasibility of Coral Colonies found at Transect 6

Coral Number	Coral Species	Size (cm)*	Health Condition	Distance along the REA Transect (m)	Translocation Feasibility
1	<i>Psammocora superficialis</i>	15	Fair	3.6	No
2	<i>Oulastrea crispata</i>	2	Fair	5.8	No
3	<i>Oulastrea crispata</i>	7	Fair	5.8	No
4	<i>Oulastrea crispata</i>	5	Fair	5.9	No
5	<i>Psammocora superficialis</i>	21	Fair	9.3	No
6	<i>Oulastrea crispata</i>	2	Fair	10	No
7	<i>Tubastrea diaphana</i>	4	Fair	10	Yes
8	<i>Oulastrea crispata</i>	5	Fair	10.1	No
9	<i>Oulastrea crispata</i>	5	Fair	10.1	No
10	<i>Oulastrea crispata</i>	3	Fair	10.2	No
11	<i>Oulastrea crispata</i>	4	Fair	10.2	No
12	<i>Echinomuricea</i> sp.	20	Fair	18.2	Yes
13	<i>Tubastrea</i> sp.	5	Fair	19.5	Yes
14	<i>Oulastrea crispata</i>	2	Fair	30.5	No
15	<i>Dendrophyllia</i> sp.	10	Fair	37.4	No
16	<i>Psammocora superficialis</i>	15	Fair	39.1	No
17	<i>Tubastrea</i> sp.	4	Fair	39.6	Yes
18	<i>Dendronephthya</i> sp.	15	Fair	44.3	Yes
19	<i>Echinogorgia</i> sp. A	20	Fair	44.5	Yes
20	<i>Oulastrea crispata</i>	2	Fair	46.1	Yes

21	<i>Tubastrea</i> sp.	4	Fair	49.3	Yes
22	<i>Oulastrea crispata</i>	3	Fair	57.2	No
23	<i>Oulastrea crispata</i>	3	Fair	57.2	No
24	<i>Echinogorgia</i> sp. B	15	Fair	68.1	Yes
25	<i>Psammocora superficialis</i>	20	Fair	68.9	No
26	<i>Psammocora superficialis</i>	15	Fair	70.3	No
27	<i>Oulastrea crispata</i>	2	Fair	70.6	Yes
28	<i>Oulastrea crispata</i>	2	Fair	72.4	No
29	<i>Oulastrea crispata</i>	2	Fair	72.4	No
30	<i>Dendronephthya</i> sp.	14	Fair	74.5	Yes
31	<i>Oulastrea crispata</i>	2	Fair	75.1	No
32	<i>Oulastrea crispata</i>	2	Fair	75.1	No
33	<i>Echinogorgia</i> sp. A	14	Fair	77	Yes
34	<i>Oulastrea crispata</i>	4	Fair	77.1	No
35	<i>Psammocora superficialis</i>	16	Fair	77.9	No
36	<i>Oulastrea crispata</i>	4	Fair	77.9	No
37	<i>Echinomuricea</i> sp.	17	Fair	78	Yes
38	<i>Oulastrea crispata</i>	2	Fair	78.4	No
39	<i>Oulastrea crispata</i>	2	Fair	78.4	No
40	<i>Echinomuricea</i> sp.	8	Fair	79	Yes
41	<i>Echinomuricea</i> sp.	9	Fair	79.1	Yes
42	<i>Oulastrea crispata</i>	10	Fair	79.5	No
43	<i>Psammocora superficialis</i>	15	Fair	79.7	No
44	<i>Tubastrea</i> sp.	7	Fair	83	Yes
45	<i>Tubastrea</i> sp.	7	Fair	83.1	Yes
46	<i>Dendronephthya</i> sp.	18	Fair	84.5	Yes
47	<i>Oulastrea crispata</i>	4	Fair	86.1	No
48	<i>Oulastrea crispata</i>	4	Fair	86.1	No
49	<i>Oulastrea crispata</i>	3	Fair	86.2	No
50	<i>Psammocora superficialis</i>	15	Fair	89.1	No
51	<i>Psammocora superficialis</i>	15	Fair	89.4	No
52	<i>Oulastrea crispata</i>	4	Fair	93	No
53	<i>Oulastrea crispata</i>	3	Fair	93.1	No

*Hard coral recorded in maximum diameter, octocoral recorded in maximum height

Transect 7

3.28 A 100 m transect was laid down along the bedrock and boulder surfaces which covered part the coral area at spot check SP6 (**Figure 7b.7**). The start point and end point laid on bedrock and boulder surfaces at around 7.5 m deep.

3.29 This site is located at the southern part of Shek Kwu Chau in which the transect is mainly composed of bedrock and boulders. The REA transect was laid at the bottom with bedrock and boulder (**Table 18**). The average visibility was around 1 m during the survey time. The site supported limited marine life and is dominated by some common marine animal such as rock oyster, seurchin, tunicate and green mussel.

Table 18 REA Ecological and Substratum attributes of Transect 7

Ecological attributes	Rank
Hard coral	0.5

Octocoral (soft corals and gorgonians)	0.5
Black Corals	0
Dead standing corals	0
Substratum Attributes	
Bedrock/continuous pavement	2
Boulder Blocks (diam.>50cm)	3
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0
Soft Substrata	0
Sand	1
Mud/Silt	0

* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

3.30 The site supported sparse and patchy cover (<1%) of corals. Fifty-nine hard coral and octocoral colonies in nine species (**Table 19**) were recorded along the REA transect and *Oulastrea crispata* was the dominant species. All the recorded coral colonies grow on the bedrock and boulders surfaces with fair health condition. They were of small size (hard corals: 2 cm to 19 cm in diameter; octocorals: 3 cm to 20 cm in height) and in low coverage. Only 19 colonies (*Oulastrea crispata*: 1 colony, *Tubastrea* sp.: 5 colonies, *Tubastrea diaphana*: 3 colonies, *Echinomuricea* sp.: 5 colonies, *Dendrophyllia* sp.: 1 colony, *Dendronephthya* sp.: 1 colony, *Echinogorgia* sp. A: 2 colony, *Echinogorgia* sp. B: 1 colony) of the recorded coral were attached to movable rocks (less than 50 cm in diameter) or being transplantable. All coral colonies recorded along the transect are common coral species in Hong Kong waters.

Table 19 Size, Health Condition and Translocation Feasibility of Coral Colonies found at Transect 7

Coral Number	Coral Species	Size (cm)*	Health Condition	Distance along the REA Transect (m)	Translocation Feasibility
1	<i>Oulastrea crispata</i>	3	Fair	2.1	No
2	<i>Oulastrea crispata</i>	5	Fair	2.1	No
3	<i>Oulastrea crispata</i>	4	Fair	2.2	No
4	<i>Oulastrea crispata</i>	10	Fair	2.2	No
5	<i>Psammocora superficialis</i>	15	Fair	4.5	No
6	<i>Oulastrea crispata</i>	4	Fair	5.1	No
7	<i>Oulastrea crispata</i>	4	Fair	5.1	No
8	<i>Dendrophyllia</i> sp.	17	Fair	6.7	Yes
9	<i>Oulastrea crispata</i>	2	Fair	6.9	No
10	<i>Oulastrea crispata</i>	3	Fair	6.9	No
11	<i>Echinomuricea</i> sp.	18	Fair	10.5	Yes
12	<i>Echinomuricea</i> sp.	5	Fair	10.6	Yes
13	<i>Oulastrea crispata</i>	3	Fair	17.1	No
14	<i>Oulastrea crispata</i>	3	Fair	17.1	No
15	<i>Oulastrea crispata</i>	3	Fair	17.2	No
16	<i>Psammocora superficialis</i>	19	Fair	17.9	No
17	<i>Oulastrea crispata</i>	3	Fair	19.2	No
18	<i>Oulastrea crispata</i>	4	Fair	19.3	No
19	<i>Oulastrea crispata</i>	3	Fair	19.3	Yes
20	<i>Tubastrea</i> sp.	5	Fair	27.9	Yes
21	<i>Oulastrea crispata</i>	3	Fair	29.1	No

22	<i>Echinogorgia</i> sp. B	10	Fair	29.3	Yes
23	<i>Tubastrea</i> sp.	6	Fair	29.8	Yes
24	<i>Oulastrea crispata</i>	2	Fair	35.7	No
25	<i>Dendronephthya</i> sp.	15	Fair	37.9	Yes
26	<i>Psammocora superficialis</i>	15	Fair	45.2	No
27	<i>Psammocora superficialis</i>	18	Fair	45.7	No
28	<i>Tubastrea</i> sp.	5	Fair	49.1	Yes
29	<i>Echinogorgia</i> sp.A	14	Fair	49.6	Yes
30	<i>Tubastrea diaphana</i>	4	Fair	50.5	No
31	<i>Oulastrea crispata</i>	2	Fair	52.6	No
32	<i>Echinogorgia</i> sp. A	20	Fair	57.3	Yes
33	<i>Oulastrea crispata</i>	2	Fair	59.1	No
34	<i>Oulastrea crispata</i>	2	Fair	59.1	No
35	<i>Oulastrea crispata</i>	3	Fair	59.2	No
36	<i>Oulastrea crispata</i>	2	Fair	59.2	No
37	<i>Oulastrea crispata</i>	4	Fair	59.2	No
38	<i>Oulastrea crispata</i>	2	Fair	59.3	No
39	<i>Tubastrea diaphana</i>	9	Fair	63.5	Yes
40	<i>Psammocora superficialis</i>	16	Fair	66.8	No
41	<i>Echinomuricea</i> sp.	12	Fair	69.1	No
42	<i>Psammocora superficialis</i>	15	Fair	75.1	No
43	<i>Oulastrea crispata</i>	2	Fair	75.2	No
44	<i>Tubastrea</i> sp.	3	Fair	75.2	Yes
45	<i>Dendrophyllia</i> sp.	10	Fair	77.8	No
46	<i>Dendrophyllia</i> sp.	11	Fair	77.9	No
47	<i>Oulastrea crispata</i>	2	Fair	80.1	No
48	<i>Oulastrea crispata</i>	3	Fair	80.1	No
49	<i>Oulastrea crispata</i>	2	Fair	80.2	No
50	<i>Psammocora superficialis</i>	15	Fair	81.6	No
51	<i>Psammocora superficialis</i>	15	Fair	81.9	No
52	<i>Tubastrea</i> sp.	4	Fair	83.7	Yes
53	<i>Tubastrea diaphana</i>	5	Fair	86.6	Yes
54	<i>Tubastrea diaphana</i>	5	Fair	86.7	Yes
55	<i>Echinomuricea</i> sp.	16	Fair	89	Yes
56	<i>Echinomuricea</i> sp.	20	Fair	89.1	Yes
57	<i>Echinomuricea</i> sp.	3	Fair	89.2	Yes
58	<i>Oulastrea crispata</i>	3	Fair	89.7	No
59	<i>Oulastrea crispata</i>	3	Fair	89.7	No

*Hard coral recorded in maximum diameter, octocoral recorded in maximum height

Transect 8

3.31 A 100 m transect was laid down along the bedrock and boulder surfaces which covered part the coral area at spot check SP7 (**Figure 3**). The start point and end point laid on bedrock and boulder surfaces at around 6.5 m deep.

3.32 This site is located at the southern part of Shek Kwu Chau in which the transect is mainly composed of bedrock and boulders. The REA transect was laid at the bottom with bedrock and boulder (**Table 20**). The average visibility was around 1 m during the survey

time. The site supported limited marine life and is dominated by some common marine animal such as rock oyster, seurchin, tunicate and green mussel.

Table 20 REA Ecological and Substratum attributes of Transect 8

Ecological attributes	Rank
Hard coral	0.5
Octocoral (soft corals and gorgonians)	0.5
Black Corals	0
Dead standing corals	0
Substratum Attributes	
Bedrock/continuous pavement	2
Boulder Blocks (diam.>50cm)	3
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0
Soft Substrata	0
Sand	0
Mud/Silt	0

* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

3.33 The site supported sparse and patchy cover (<1%) of corals. Forty-four hard coral and octocoral colonies in six species (**Table 21**) were recorded along the REA transect and *Oulastrea crispata* was the dominant species. All the recorded coral colonies grow on the bedrock and boulders surfaces with fair health condition. They were of small size (hard corals: 2 cm to 20 cm in diameter; octocorals: 10 cm to 22 cm in height) and in low coverage. Only 13 colonies (*Oulastrea crispata*: 2 colonies, *Tubastrea* sp.: 4 colonies, *Menella* sp.: 2 colonies, *Echinomuricea* sp.: 3 colonies, *Dendronephthya* sp.: 2 colonies) of the recorded coral were attached to movable rocks (less than 50 cm in diameter) or being transplantable. All coral colonies recorded along the transect are common coral species in Hong Kong waters.

Table 21 Size, Health Condition and Translocation Feasibility of Coral Colonies found at Transect 8

Coral Number	Coral Species	Size (cm)*	Health Condition	Distance along the REA Transect (m)	Translocation Feasibility
1	<i>Oulastrea crispata</i>	5	Fair	3.3	No
2	<i>Oulastrea crispata</i>	3	Fair	3.3	No
3	<i>Psammocora superficialis</i>	15	Fair	3.8	No
4	<i>Oulastrea crispata</i>	10	Fair	4.1	No
5	<i>Oulastrea crispata</i>	3	Fair	4.2	No
6	<i>Oulastrea crispata</i>	2	Fair	4.2	No
7	<i>Oulastrea crispata</i>	3	Fair	4.3	No
8	<i>Oulastrea crispata</i>	4	Fair	4.3	No
9	<i>Psammocora superficialis</i>	15	Fair	7.1	No
10	<i>Oulastrea crispata</i>	3	Fair	8.2	No
11	<i>Oulastrea crispata</i>	4	Fair	8.2	No
12	<i>Oulastrea crispata</i>	3	Fair	8.2	No
13	<i>Tubastrea</i> sp.	10	Fair	9.1	Yes
14	<i>Oulastrea crispata</i>	3	Fair	9.4	No
15	<i>Oulastrea crispata</i>	4	Fair	9.4	No
16	<i>Tubastrea</i> sp.	5	Fair	15.4	Yes
17	<i>Oulastrea crispata</i>	3	Fair	15.9	No

18	<i>Oulastrea crispata</i>	2	Fair	15.9	No
19	<i>Dendronephthya</i> sp.	10	Fair	17.2	Yes
20	<i>Oulastrea crispata</i>	2	Fair	24.4	No
21	<i>Oulastrea crispata</i>	3	Fair	24.4	No
22	<i>Oulastrea crispata</i>	3	Fair	24.5	No
23	<i>Psammocora superficialis</i>	15	Fair	25	No
24	<i>Menella</i> sp.	20	Fair	29.1	Yes
25	<i>Oulastrea crispata</i>	3	Fair	36.3	No
26	<i>Oulastrea crispata</i>	3	Fair	36.3	No
27	<i>Psammocora superficialis</i>	15	Fair	39	No
28	<i>Psammocora superficialis</i>	20	Fair	39.4	No
29	<i>Psammocora superficialis</i>	16	Fair	39.6	No
30	<i>Echinomuricea</i> sp.	14	Fair	45	Yes
31	<i>Echinomuricea</i> sp.	10	Fair	45.1	Yes
32	<i>Echinomuricea</i> sp.	16	Fair	45.1	Yes
33	<i>Oulastrea crispata</i>	5	Fair	56.1	No
34	<i>Oulastrea crispata</i>	4	Fair	56.1	No
35	<i>Psammocora superficialis</i>	17	Fair	69.1	No
36	<i>Psammocora superficialis</i>	17	Fair	69.5	No
37	<i>Tubastrea</i> sp.	5	Fair	74.9	Yes
38	<i>Oulastrea crispata</i>	3	Fair	78.2	Yes
39	<i>Oulastrea crispata</i>	3	Fair	78.2	Yes
40	<i>Tubastrea</i> sp.	5	Fair	80.1	Yes
41	<i>Psammocora superficialis</i>	15	Fair	80.5	No
42	<i>Oulastrea crispata</i>	4	Fair	81.1	No
43	<i>Menella</i> sp.	22	Fair	81.5	Yes
44	<i>Dendronephthya</i> sp.	14	Fair	85.1	Yes

*Hard coral recorded in maximum diameter, octocoral recorded in maximum height

Transect 9

3.34 A 100 m transect was laid down along the bedrock and boulder surfaces which covered part the coral area at spot check SP8 (**Figure 7b.7**). The start point and end point laid on bedrock and boulder surfaces at around 8 m deep.

3.35 This site is located at the southeastern part of Shek Kwu Chau in which the transect is mainly composed of bedrock and boulders. The REA transect was laid at the bottom with bedrock and boulder (**Table 22**). The average visibility was around 1 m during the survey time. The site supported limited marine life and is dominated by some common marine animal such as rock oyster, seurchin, tunicate and green mussel.

Table 22 REA Ecological and Substratum attributes of Transect 9

Ecological attributes	Rank
Hard coral	0.5
Octocoral (soft corals and gorgonians)	0.5
Black Corals	0
Dead standing corals	0
Substratum Attributes	
Bedrock/continuous pavement	2

Boulder Blocks (diam.>50cm)	3
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0
Soft Substrata	0
Sand	0
Mud/Silt	0

* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

3.36 The site supported sparse and patchy cover (<1%) of corals. Seventy-seven hard coral and octocoral colonies in eleven species (**Table 23**) were recorded along the REA transect and *Oulastrea crispata* was the dominant species. All the recorded coral colonies grow on the bedrock and boulders surfaces with fair health condition. They were of small size (hard corals: 2 cm to 25 cm in diameter; octocoral corals: 8 cm to 25 cm in height) and in low coverage. Only twenty colonies (*Oulastrea crispata*: 2 colonies, *Tubastrea* sp.: 5 colonies, *Menella* sp.: 4 colonies, *Dendronephthya* sp.: 2 colonies, *Echinogorgia* sp. A: 5 colonies, *Turbanaria peltata*: 2 colonies) of the recorded coral were attached to movable rocks (less than 50 cm in diameter) or being transplatable. Most coral colonies recorded along the transect are common species in Hong Kong waters except one uncommon species *Coscinaraea* n sp. which is only recorded from a few locations in northeastern, eastern, southeastern and western waters of Hong Kong.

Table 23 Size, Health Condition and Translocation Feasibility of Coral Colonies found at Transect 9

Coral Number	Coral Species	Size (cm)*	Health Condition	Distance along the REA Transect (m)	Translocation Feasibility
1	<i>Goniopora stutchburyi</i>	10	Fair	3.1	No
2	<i>Goniopora stutchburyi</i>	20	Fair	3.3	No
3	<i>Goniopora stutchburyi</i>	15	Fair	3.5	No
4	<i>Oulastrea crispata</i>	3	Fair	5.6	No
5	<i>Oulastrea crispata</i>	4	Fair	5.6	No
6	<i>Oulastrea crispata</i>	2	Fair	5.6	No
7	<i>Oulastrea crispata</i>	2	Fair	5.8	No
8	<i>Oulastrea crispata</i>	2	Fair	5.9	No
9	<i>Turbanaria peltata</i>	4	Fair	15.6	No
10	<i>Psammocora superficialis</i>	16	Fair	17.1	No
11	<i>Psammocora superficialis</i>	15	Fair	17.2	No
12	<i>Oulastrea crispata</i>	3	Fair	17.3	No
13	<i>Oulastrea crispata</i>	3	Fair	17.3	No
14	<i>Oulastrea crispata</i>	3	Fair	17.4	No
15	<i>Oulastrea crispata</i>	2	Fair	17.9	Yes
16	<i>Goniopora stutchburyi</i>	8	Fair	20.1	No
17	<i>Goniopora stutchburyi</i>	10	Fair	20.3	No
18	<i>Goniopora stutchburyi</i>	15	Fair	20.4	No
19	<i>Menella</i> sp.	20	Fair	24	Yes
20	<i>Oulastrea crispata</i>	3	Fair	24.9	No
21	<i>Oulastrea crispata</i>	4	Fair	24.9	No
22	<i>Oulastrea crispata</i>	10	Fair	24.9	No
23	<i>Oulastrea crispata</i>	4	Fair	30	No
24	<i>Menella</i> sp.	15	Fair	35.1	Yes
25	<i>Dendronephthya</i> sp.	10	Fair	35.9	Yes
26	<i>Oulastrea crispata</i>	3	Fair	40.1	No

27	<i>Oulastrea crispata</i>	3	Fair	40.2	No
28	<i>Oulastrea crispata</i>	4	Fair	40.2	No
29	<i>Oulastrea crispata</i>	3	Fair	40.2	No
30	<i>Psammocora superficialis</i>	25	Fair	45.7	No
31	<i>Tubastrea</i> sp.	6	Fair	49.4	Yes
32	<i>Tubastrea</i> sp.	5	Fair	49.5	Yes
33	<i>Turbinaria peltata</i>	15	Fair	57.1	Yes
34	<i>Goniopora stutchburyi</i>	10	Fair	58.2	No
35	<i>Coscinaraea n</i> sp.	11	Fair	58.3	No
36	<i>Oulastrea crispata</i>	3	Fair	59.2	No
37	<i>Oulastrea crispata</i>	4	Fair	59.2	No
38	<i>Oulastrea crispata</i>	3	Fair	59.2	No
39	<i>Turbinaria peltata</i>	10	Fair	59.8	No
40	<i>Goniopora stutchburyi</i>	15	Fair	66.1	No
41	<i>Goniopora stutchburyi</i>	19	Fair	66.3	No
42	<i>Goniopora stutchburyi</i>	15	Fair	66.5	No
43	<i>Echinogorgia</i> sp. A	20	Fair	69	Yes
44	<i>Echinogorgia</i> sp. A	18	Fair	69.2	Yes
45	<i>Turbinaria peltata</i>	11	Fair	74.6	No
46	<i>Tubastrea</i> sp.	5	Fair	74.7	Yes
47	<i>Oulastrea crispata</i>	3	Fair	79.1	No
48	<i>Oulastrea crispata</i>	4	Fair	79.2	No
49	<i>Oulastrea crispata</i>	2	Fair	79.2	Yes
50	<i>Psammocora superficialis</i>	15	Fair	79.7	No
51	<i>Psammocora superficialis</i>	15	Fair	79.9	No
52	<i>Menella</i> sp.	25	Fair	80	Yes
53	<i>Oulastrea crispata</i>	2	Fair	80.4	No
54	<i>Oulastrea crispata</i>	5	Fair	80.4	No
55	<i>Oulastrea crispata</i>	3	Fair	80.5	No
56	<i>Coscinaraea n</i> sp.	18	Fair	80.9	No
57	<i>Oulastrea crispata</i>	5	Fair	80.9	No
58	<i>Psammocora superficialis</i>	15	Fair	83.2	No
59	<i>Psammocora superficialis</i>	15	Fair	83.4	No
60	<i>Goniopora stutchburyi</i>	10	Fair	85.6	No
61	<i>Goniopora stutchburyi</i>	19	Fair	85.8	No
62	<i>Oulastrea crispata</i>	3	Fair	85.1	No
63	<i>Oulastrea crispata</i>	2	Fair	85.4	No
64	<i>Psammocora superficialis</i>	15	Fair	86.7	No
65	<i>Menella</i> sp.	15	Fair	86.9	Yes
66	<i>Echinogorgia</i> sp. A	10	Fair	87.2	Yes
67	<i>Echinogorgia</i> sp. A	8	Fair	87.4	Yes
68	<i>Tubastrea</i> sp.	6	Fair	88.5	Yes
69	<i>Tubastrea</i> sp.	4	Fair	88.6	Yes
70	<i>Oulastrea crispata</i>	3	Fair	89.1	No
71	<i>Oulastrea crispata</i>	3	Fair	89.1	No
72	<i>Oulastrea crispata</i>	4	Fair	95	No
73	<i>Dendronephthya</i> sp.	10	Fair	95.1	Yes
74	<i>Echinogorgia</i> sp. A	15	Fair	97.1	Yes

75	<i>Oulastrea crispata</i>	4	Fair	98.5	No
76	<i>Psammocora superficialis</i>	15	Fair	98.7	No
77	<i>Turbinaria peltata</i>	15	Fair	99.3	Yes

*Hard coral recorded in maximum diameter, octocoral recorded in maximum height

Transect 10

3.37 A 100 m transect was laid down along the muddy bottom which covered part of the coral area at spot check SP9 (**Figure 7b.7**). The start point and end point laid on boulder surfaces and sandy bottom at around 11 m deep.

3.38 This site is located in southern part of Shek Kwu Chau in which the transect is mainly composed of muddy bottom with patches of big boulders. The REA transect was laid at the bottom with mud and scattered boulders (**Table 24**). The average visibility was about 0.5 m to 1 m. The site supported limited marine life and is dominated by some common marine animal such as seaurchin, sponges and green mussels.

Table 24 REA Ecological and Substratum attributes of Transect 10

Ecological attributes	Rank
Hard coral	0.5
Octocoral (soft corals and gorgonians)	0.5
Black Corals	0
Dead standing corals	0
Substratum Attributes	
Bedrock/continuous pavement	0
Boulder Blocks (diam.>50cm)	1
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0
Soft Substrata	0
Sand	0
Mud/Silt	4

* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

3.39 The site supported sparse and patchy cover (<1%) of corals. Thirty-six hard coral and octocoral colonies in six species (**Table 25**) were recorded along the REA transect. All the recorded coral colonies grow on the scattered boulders surfaces with fair health condition. They were of small size (hard corals: 4 cm to 5 cm in diameter; octocorals: 7 cm to 25 cm in height) and in low coverage. All thirty-six colonies (*Tubastrea* sp.: 7 colonies, *Menella* sp.: 7 colonies, *Echinomuricea* sp.: 5 colonies, *Dendronephthya* sp.: 5 colonies, *Euplexaura* sp.: 5 colonies, *Echinogorgia* sp. A: 7 colonies) of the recorded corals were being transplantable. All coral colonies recorded along the transect are common coral species in Hong Kong waters.

Table 25 Size, Health Condition and Translocation Feasibility of Coral Colonies found at Transect 10

Coral Number	Coral Species	Size (cm)*	Health Condition	Distance along the REA Transect (m)	Translocation Feasibility
1	<i>Echinogorgia</i> sp. A	10	Fair	3.5	Yes
2	<i>Echinogorgia</i> sp. A	15	Fair	3.6	Yes
3	<i>Echinomuricea</i> sp.	19	Fair	3.9	Yes
4	<i>Echinogorgia</i> sp. A	15	Fair	15.7	Yes
5	<i>Echinogorgia</i> sp. A	20	Fair	15.8	Yes
6	<i>Tubastrea</i> sp.	5	Fair	15.9	Yes

7	<i>Tubastrea</i> sp.	5	Fair	16.8	Yes
8	<i>Euplexaura</i> sp.	20	Fair	19.4	Yes
9	<i>Echinogorgia</i> sp. A	15	Fair	19.7	Yes
10	<i>Echinogorgia</i> sp. A	10	Fair	21.2	Yes
11	<i>Menella</i> sp.	20	Fair	22.6	Yes
12	<i>Menella</i> sp.	7	Fair	22.9	Yes
13	<i>Menella</i> sp.	19	Fair	23.5	Yes
14	<i>Euplexaura</i> sp.	20	Fair	40.1	Yes
15	<i>Dendronephthya</i> sp.	15	Fair	42.4	Yes
16	<i>Dendronephthya</i> sp.	10	Fair	42.5	Yes
17	<i>Dendronephthya</i> sp.	11	Fair	42.8	Yes
18	<i>Tubastrea</i> sp.	5	Fair	57.2	Yes
19	<i>Tubastrea</i> sp.	10	Fair	57.3	Yes
20	<i>Menella</i> sp.	15	Fair	62.7	Yes
21	<i>Menella</i> sp.	10	Fair	62.8	Yes
22	<i>Menella</i> sp.	25	Fair	63.1	Yes
23	<i>Euplexaura</i> sp.	15	Fair	77.2	Yes
24	<i>Echinomuricea</i> sp.	18	Fair	77.4	Yes
25	<i>Tubastrea</i> sp.	5	Fair	77.8	Yes
26	<i>Echinomuricea</i> sp.	19	Fair	78.2	Yes
27	<i>Echinomuricea</i> sp.	11	Fair	78.5	Yes
28	<i>Euplexaura</i> sp.	18	Fair	84.1	Yes
29	<i>Dendronephthya</i> sp.	10	Fair	84.5	Yes
30	<i>Dendronephthya</i> sp.	15	Fair	84.7	Yes
31	<i>Tubastrea</i> sp.	5	Fair	89.6	Yes
32	<i>Tubastrea</i> sp.	4	Fair	89.8	Yes
33	<i>Menella</i> sp.	25	Fair	89.9	Yes
34	<i>Echinomuricea</i> sp.	21	Fair	91.2	Yes
35	<i>Echinogorgia</i> sp. A	17	Fair	91.3	Yes
36	<i>Euplexaura</i> sp.	15	Fair	91.6	Yes

*Hard coral recorded in maximum diameter, octocoral recorded in maximum height

Transect 11

3.40 A 100 m transect was laid down along the muddy bottom which covered part of the coral area at spot check SP10 (**Figure 7b.7**). The start point and end point laid on boulder surfaces and sandy bottom at around 11 m deep.

3.41 This site is located in southern part of Shek Kwu Chau in which the transect is mainly composed of muddy bottom with patches of big boulders. The REA transect was laid at the bottom with mud and scattered boulders (**Table 26**). The average visibility was about 0.5 m to 1 m. The site supported limited marine life and is dominated by some common marine animal such as seaurchin, sponges and green mussels.

Table 26 REA Ecological and Substratum attributes of Transect 11

Ecological attributes	Rank
Hard coral	0.5
Octocoral (soft corals and gorgonians)	0.5
Black Corals	0
Dead standing corals	0
Substratum Attributes	
Bedrock/continuous pavement	0
Boulder Blocks (diam.>50cm)	1
Boulder Blocks (diam.<50cm)	1

Rubble	0
Other	0
Soft Substrata	0
Sand	0
Mud/Silt	4

* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

3.42 The site supported sparse and patchy cover (<1%) of corals. Forty hard coral and octocoral colonies in five species (**Table 27**) were recorded along the REA transect. All the recorded coral colonies grow on the scattered boulders surfaces with fair health condition. They were of small size (hard corals: 3 cm to 10 cm in diameter; octocoral corals: 5 cm to 25 cm in height) and in low coverage. All forty colonies (*Tubastrea* sp.: 13 colonies, *Echinomuricea* sp.: 10 colonies, *Dendronephthya* sp.: 7 colonies, *Euplexaura* sp.: 6 colonies, *Echinogorgia* sp. A: 4 colonies) of the recorded corals were transplatable. All coral colonies recorded along the transect are common coral species in Hong Kong waters.

Table 27 Size, Health Condition and Translocation Feasibility of Coral Colonies found at Transect 11

Coral Number	Coral Species	Size (cm)*	Health Condition	Distance along the REA Transect (m)	Translocation Feasibility
1	<i>Euplexaura</i> sp.	17	Fair	3.3	Yes
2	<i>Euplexaura</i> sp.	20	Fair	3.7	Yes
3	<i>Tubastrea</i> sp.	5	Fair	5.6	Yes
4	<i>Tubastrea</i> sp.	5	Fair	5.9	Yes
5	<i>Tubastrea</i> sp.	7	Fair	6.9	Yes
6	<i>Tubastrea</i> sp.	4	Fair	16.3	Yes
7	<i>Dendronephthya</i> sp.	15	Fair	22.6	Yes
8	<i>Dendronephthya</i> sp.	18	Fair	22.7	Yes
9	<i>Euplexaura</i> sp.	19	Fair	23.1	Yes
10	<i>Echinomuricea</i> sp.	25	Fair	23.3	Yes
11	<i>Euplexaura</i> sp.	25	Fair	24.1	Yes
12	<i>Tubastrea</i> sp.	5	Fair	24.5	Yes
13	<i>Tubastrea</i> sp.	5	Fair	24.8	Yes
14	<i>Tubastrea</i> sp.	4	Fair	24.8	Yes
15	<i>Dendronephthya</i> sp.	14	Fair	30.1	Yes
16	<i>Echinomuricea</i> sp.	6	Fair	30.2	Yes
17	<i>Echinomuricea</i> sp.	7	Fair	44.5	Yes
18	<i>Echinomuricea</i> sp.	11	Fair	44.6	Yes
19	<i>Echinogorgia</i> sp. A	19	Fair	44.9	Yes
20	<i>Echinogorgia</i> sp. A	14	Fair	45	Yes
21	<i>Echinogorgia</i> sp. A	20	Fair	45.2	Yes
22	<i>Tubastrea</i> sp.	4	Fair	46.3	Yes
23	<i>Tubastrea</i> sp.	3	Fair	46.4	Yes
24	<i>Dendronephthya</i> sp.	10	Fair	49.1	Yes
25	<i>Echinomuricea</i> sp.	20	Fair	57.7	Yes
26	<i>Echinomuricea</i> sp.	25	Fair	57.8	Yes
27	<i>Dendronephthya</i> sp.	13	Fair	57.9	Yes
28	<i>Dendronephthya</i> sp.	8	Fair	58	Yes
29	<i>Tubastrea</i> sp.	4	Fair	69.3	Yes
30	<i>Tubastrea</i> sp.	7	Fair	69.3	Yes
31	<i>Echinomuricea</i> sp.	6	Fair	69.4	Yes
32	<i>Echinomuricea</i> sp.	6	Fair	69.7	Yes

33	<i>Echinogorgia</i> sp. A	10	Fair	72.5	Yes
34	<i>Euplexaura</i> sp.	15	Fair	72.8	Yes
35	<i>Euplexaura</i> sp.	21	Fair	72.9	Yes
36	<i>Dendronephthya</i> sp.	10	Fair	74.5	Yes
37	<i>Tubastrea</i> sp.	10	Fair	78.1	Yes
38	<i>Tubastrea</i> sp.	5	Fair	78.3	Yes
39	<i>Echinomuricea</i> sp.	5	Fair	92.5	Yes
40	<i>Echinomuricea</i> sp.	9	Fair	92.7	Yes

*Hard coral recorded in maximum diameter, octocoral recorded in maximum height

Transect 12

3.43 A 100 m transect was laid down along the muddy bottom which covered part of the coral area at spot check SP11 and SP12 (**Figure 7b.7**). The start point and end point laid on boulder surfaces and sandy bottom at around 11 m deep.

3.44 This site is located in southern part of Shek Kwu Chau in which the transect is mainly composed of muddy bottom with patches of big boulders. The REA transect was laid at the bottom with mud and scattered boulders (**Table 28**). The average visibility was about 0.5 m to 1 m. The site supported limited marine life and is dominated by some common marine animal such as seurchin, sponges and green mussels.

Table 28 REA Ecological and Substratum attributes of Transect 12

Ecological attributes	Rank
Hard coral	0.5
Octocoral (soft corals and gorgonians)	0.5
Black Corals	0
Dead standing corals	0
Substratum Attributes	
Bedrock/continuous pavement	0
Boulder Blocks (diam.>50cm)	1
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0
Soft Substrata	4
Sand	0
Mud/Silt	4

* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

3.45 The site supported sparse and patchy cover (<1%) of corals. Seventy-three hard coral and octocoral colonies in seven species (**Table 29**) were recorded along the REA transect. All the recorded coral colonies grow on the scattered boulders surfaces with fair health condition. They were of small size (hard corals: 4 cm to 10 cm in diameter; octocoral corals: 5 cm to 30 cm in height) and in low coverage. All seventy-three colonies (*Tubastrea* sp.: 16 colonies, *Menella* sp.: 5 colonies, *Echinomuricea* sp.: 18 colonies, *Dendronephthya* sp.: 9 colonies, *Euplexaura* sp.: 8 colonies, *Echinogorgia* sp. A: 9 colonies, *Echinogorgia* sp. B: 8 colonies) of the recorded corals were transplantable. All coral colonies recorded along the transect are common corral species in Hong Kong waters.

Table 29 Size, Health Condition and Translocation Feasibility of Coral Colonies found at Transect 12

Coral Number	Coral Species	Size (cm)*	Health Condition	Distance along the REA Transect (m)	Translocation Feasibility
1	<i>Menella</i> sp.	15	Fair	1.2	Yes

2	<i>Menella</i> sp.	30	Fair	1.3	Yes
3	<i>Menella</i> sp.	18	Fair	1.3	Yes
4	<i>Tubastrea</i> sp.	5	Fair	2.5	Yes
5	<i>Dendronephthya</i> sp.	11	Fair	2.6	Yes
6	<i>Tubastrea</i> sp.	8	Fair	2.9	Yes
7	<i>Tubastrea</i> sp.	5	Fair	3	Yes
8	<i>Tubastrea</i> sp.	5	Fair	3.1	Yes
9	<i>Dendronephthya</i> sp.	15	Fair	4.5	Yes
10	<i>Dendronephthya</i> sp.	13	Fair	4.5	Yes
11	<i>Euplexaura</i> sp.	19	Fair	6.7	Yes
12	<i>Euplexaura</i> sp.	20	Fair	6.8	Yes
13	<i>Tubastrea</i> sp.	10	Fair	11.5	Yes
14	<i>Echinomuricea</i> sp.	10	Fair	12.4	Yes
15	<i>Echinomuricea</i> sp.	14	Fair	12.5	Yes
16	<i>Echinomuricea</i> sp.	13	Fair	12.6	Yes
17	<i>Echinomuricea</i> sp.	20	Fair	12.7	Yes
18	<i>Echinomuricea</i> sp.	14	Fair	12.9	Yes
19	<i>Echinomuricea</i> sp.	8	Fair	15.1	Yes
20	<i>Echinomuricea</i> sp.	15	Fair	15.3	Yes
21	<i>Echinogorgia</i> sp. A	15	Fair	15.8	Yes
22	<i>Echinogorgia</i> sp. A	10	Fair	15.9	Yes
23	<i>Echinogorgia</i> sp. A	12	Fair	16.3	Yes
24	<i>Tubastrea</i> sp.	6	Fair	25.6	Yes
25	<i>Dendronephthya</i> sp.	10	Fair	25.9	Yes
26	<i>Echinomuricea</i> sp.	18	Fair	32.4	Yes
27	<i>Echinomuricea</i> sp.	10	Fair	32.5	Yes
28	<i>Tubastrea</i> sp.	4	Fair	33.5	Yes
29	<i>Echinomuricea</i> sp.	21	Fair	40.1	Yes
30	<i>Echinogorgia</i> sp. B	10	Fair	49.7	Yes
31	<i>Echinogorgia</i> sp. A	8	Fair	49.9	Yes
32	<i>Echinomuricea</i> sp.	17	Fair	57.2	Yes
33	<i>Tubastrea</i> sp.	7	Fair	57.3	Yes
34	<i>Dendronephthya</i> sp.	10	Fair	57.7	Yes
35	<i>Euplexaura</i> sp.	17	Fair	57.8	Yes
36	<i>Echinogorgia</i> sp. B	10	Fair	65.2	Yes
37	<i>Tubastrea</i> sp.	5	Fair	66.1	Yes
38	<i>Euplexaura</i> sp.	20	Fair	66.5	Yes
39	<i>Euplexaura</i> sp.	15	Fair	66.7	Yes
40	<i>Echinogorgia</i> sp. B	11	Fair	66.9	Yes
41	<i>Echinomuricea</i> sp.	13	Fair	67.1	Yes
42	<i>Echinomuricea</i> sp.	20	Fair	67.2	Yes
43	<i>Echinogorgia</i> sp. A	10	Fair	67.8	Yes
44	<i>Echinogorgia</i> sp. B	10	Fair	67.9	Yes
45	<i>Echinogorgia</i> sp. A	8	Fair	71.6	Yes
46	<i>Echinogorgia</i> sp. A	10	Fair	71.7	Yes
47	<i>Tubastrea</i> sp.	5	Fair	73	Yes
48	<i>Echinogorgia</i> sp. B	14	Fair	73.5	Yes
49	<i>Echinogorgia</i> sp. B	15	Fair	73.6	Yes
50	<i>Echinogorgia</i> sp. B	10	Fair	79	Yes

51	<i>Menella</i> sp.	20	Fair	79.2	Yes
52	<i>Echinogorgia</i> sp. B	10	Fair	79.3	Yes
53	<i>Menella</i> sp.	25	Fair	79.4	Yes
54	<i>Echinomuricea</i> sp.	5	Fair	79.5	Yes
55	<i>Tubastrea</i> sp.	5	Fair	79.9	Yes
56	<i>Dendronephthya</i> sp.	16	Fair	79.9	Yes
57	<i>Tubastrea</i> sp.	4	Fair	81	Yes
58	<i>Tubastrea</i> sp.	4	Fair	81.2	Yes
59	<i>Dendronephthya</i> sp.	10	Fair	85	Yes
60	<i>Echinomuricea</i> sp.	25	Fair	85.3	Yes
61	<i>Euplexaura</i> sp.	25	Fair	85.6	Yes
62	<i>Euplexaura</i> sp.	15	Fair	87.2	Yes
63	<i>Echinomuricea</i> sp.	18	Fair	87.4	Yes
64	<i>Echinomuricea</i> sp.	9	Fair	87.5	Yes
65	<i>Euplexaura</i> sp.	17	Fair	88.3	Yes
66	<i>Tubastrea</i> sp.	5	Fair	88.5	Yes
67	<i>Tubastrea</i> sp.	5	Fair	88.6	Yes
68	<i>Dendronephthya</i> sp.	11	Fair	89	Yes
69	<i>Echinogorgia</i> sp. A	21	Fair	89.4	Yes
70	<i>Echinomuricea</i> sp.	15	Fair	89.5	Yes
71	<i>Echinogorgia</i> sp. A	10	Fair	89.7	Yes
72	<i>Tubastrea</i> sp.	9	Fair	91.5	Yes
73	<i>Dendronephthya</i> sp.	15	Fair	96.7	Yes

*Hard coral recorded in maximum diameter, octocoral recorded in maximum height

Transect 13

3.46 A 100 m transect was laid down along the muddy bottom which covered part of the coral area at spot check SP13 (**Figure 7b.7**). The start point and end point laid on boulder surfaces and sandy bottom at around 11 m deep.

3.47 This site is located in southwestern part of Shek Kwu Chau in which the transect is mainly composed of muddy bottom with patches of big boulders. The REA transect was laid at the bottom with mud and scattered boulders (**Table 30**). The average visibility was about 0.5 m. The site supported limited marine life and is dominated by some common marine animal such as seaurchin, sponges and green mussels.

Table 30 REA Ecological and Substratum attributes of Transect 13

Ecological attributes	Rank
Hard coral	0.5
Octocoral (soft corals and gorgonians)	0.5
Black Corals	0
Dead standing corals	0
Substratum Attributes	
Bedrock/continuous pavement	0
Boulder Blocks (diam.>50cm)	1
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0
Soft Substrata	0
Sand	0
Mud/Silt	4

* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

3.48 The site supported a sparse and patchy cover (<1%) of corals. Forty-nine hard coral and octocoral colonies in six species (**Table 31**) were recorded along the REA transect. All the recorded coral colonies grow on the scattered boulders surfaces with fair health condition. They were of small size (hard corals: 3 cm to 10 cm in diameter; octocoral corals: 4 cm to 26 cm in height) and in low coverage. All 49 coral colonies (*Tubastrea* sp.: 10 colonies, *Echinomuricea* sp.: 12 colonies, *Dendronephthya* sp.: 10 colonies, *Euplexaura* sp.: 7 colonies, *Echinogorgia* sp. A: 7 colonies, *Paraplexaura* sp.: 3 colonies) of the recorded corals were transplantable. All coral colonies recorded along the transect are common coral species in Hong Kong waters.

Table 31 Size, Health Condition and Translocation Feasibility of Coral Colonies found at Transect 13

Coral Number	Coral Species	Size (cm)*	Health Condition	Distance along the REA Transect (m)	Translocation Feasibility
1	<i>Dendronephthya</i> sp.	15	Fair	0.6	Yes
2	<i>Tubastrea</i> sp.	10	Fair	0.9	Yes
3	<i>Echinomuricea</i> sp.	4	Fair	1.5	Yes
4	<i>Dendronephthya</i> sp.	17	Fair	1.7	Yes
5	<i>Echinomuricea</i> sp.	14	Fair	1.9	Yes
6	<i>Dendronephthya</i> sp.	5	Fair	2	Yes
7	<i>Dendronephthya</i> sp.	10	Fair	2.2	Yes
8	<i>Dendronephthya</i> sp.	8	Fair	2.2	Yes
9	<i>Echinomuricea</i> sp.	17	Fair	5.7	Yes
10	<i>Echinomuricea</i> sp.	24	Fair	5.8	Yes
11	<i>Echinomuricea</i> sp.	10	Fair	5.8	Yes
12	<i>Echinomuricea</i> sp.	8	Fair	5.9	Yes
13	<i>Tubastrea</i> sp.	4	Fair	17.2	Yes
14	<i>Tubastrea</i> sp.	5	Fair	17.3	Yes
15	<i>Tubastrea</i> sp.	3	Fair	17.3	Yes
16	<i>Tubastrea</i> sp.	7	Fair	17.5	Yes
17	<i>Tubastrea</i> sp.	6	Fair	17.6	Yes
18	<i>Paraplexaura</i> sp.	17	Fair	21.5	Yes
19	<i>Echinogorgia</i> sp. A	21	Fair	24.3	Yes
20	<i>Echinogorgia</i> sp. A	8	Fair	24.4	Yes
21	<i>Echinogorgia</i> sp. A	12	Fair	24.5	Yes
22	<i>Echinogorgia</i> sp. A	10	Fair	24.6	Yes
23	<i>Echinomuricea</i> sp.	20	Fair	29.1	Yes
24	<i>Echinomuricea</i> sp.	6	Fair	29.5	Yes
25	<i>Tubastrea</i> sp.	8	Fair	36.3	Yes
26	<i>Tubastrea</i> sp.	4	Fair	36.9	Yes
27	<i>Paraplexaura</i> sp.	15	Fair	39.4	Yes
28	<i>Euplexaura</i> sp.	10	Fair	39.8	Yes
29	<i>Euplexaura</i> sp.	19	Fair	39.9	Yes
30	<i>Euplexaura</i> sp.	15	Fair	40.4	Yes
31	<i>Dendronephthya</i> sp.	10	Fair	57.1	Yes
32	<i>Dendronephthya</i> sp.	9	Fair	66.3	Yes
33	<i>Tubastrea</i> sp.	7	Fair	66.5	Yes
34	<i>Dendronephthya</i> sp.	10	Fair	66.9	Yes
35	<i>Echinomuricea</i> sp.	18	Fair	67	Yes
36	<i>Echinogorgia</i> sp. A	11	Fair	67.6	Yes

37	<i>Echinogorgia</i> sp. A	15	Fair	67.8	Yes
38	<i>Echinogorgia</i> sp. A	20	Fair	67.9	Yes
39	<i>Euplexaura</i> sp.	19	Fair	70.2	Yes
40	<i>Euplexaura</i> sp.	20	Fair	70.4	Yes
41	<i>Tubastrea</i> sp.	6	Fair	71.3	Yes
42	<i>Dendronephthya</i> sp.	11	Fair	72.5	Yes
43	<i>Echinomuricea</i> sp.	9	Fair	73.4	Yes
44	<i>Echinomuricea</i> sp.	11	Fair	73.6	Yes
45	<i>Dendronephthya</i> sp.	12	Fair	77.1	Yes
46	<i>Euplexaura</i> sp.	17	Fair	77.8	Yes
47	<i>Euplexaura</i> sp.	26	Fair	81.5	Yes
48	<i>Paraplexaura</i> sp.	11	Fair	85	Yes
49	<i>Echinomuricea</i> sp.	18	Fair	89.7	Yes

*Hard coral recorded in maximum diameter, octocoral recorded in maximum height

Transect 14

3.48 A 100 m transect was laid down along the bedrock and boulder surfaces which covered part the coral area at spot check SP3 (**Figure 7b.7**). The start point and end point laid on bedrock and boulder surfaces at around 6.5 m deep.

3.49 This site is located at the southwestern part of Shek Kwu Chau in which the transect is mainly composed of bedrock and boulders. The REA transect was laid at the bottom with bedrock and boulder (**Table 32**). The average visibility was around 1 m during the survey time. The site supported limited marine life and is dominated by some common marine animal such as rock oyster, seurchin, tunicate and green mussel.

Table 32 REA Ecological and Substratum attributes of Transect 14

Ecological attributes	Rank
Hard coral	0.5
Octocoral (soft corals and gorgonians)	0
Black Corals	0
Dead standing corals	0
Substratum Attributes	
Bedrock/continuous pavement	4
Boulder Blocks (diam.>50cm)	1
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0
Soft Substrata	0
Sand	0
Mud/Silt	0

* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

3.50 The site supported sparse and patchy cover (<1%) of corals. Thirty-eight hard coral colonies in two species (**Table 33**) were recorded along the REA transect and *Oulastrea crispata* was the dominant species. All the recorded coral colonies grow on the bedrock and boulders surfaces with fair health condition. They were of small size (about 2 cm to 27 cm in diameter) and in low coverage. Only 7 colonies (*Oulastrea crispata*) of the recorded coral were attached to movable rocks (less than 50 cm in diameter). All coral colonies recorded along the transect are common coral species in Hong Kong waters.

Table 33 Size, Health Condition and Translocation Feasibility of Coral Colonies found at Transect 14

Coral Number	Coral Species	Size (cm)*	Health Condition	Distance along the REA	Translocation Feasibility
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				Transect (m)	
1	<i>Oulastrea crispata</i>	2	Fair	2.5	No
2	<i>Oulastrea crispata</i>	2	Fair	2.5	No
3	<i>Oulastrea crispata</i>	4	Fair	2.6	No
4	<i>Oulastrea crispata</i>	3	Fair	2.7	No
5	<i>Oulastrea crispata</i>	3	Fair	2.7	No
6	<i>Oulastrea crispata</i>	2	Fair	2.8	No
7	<i>Oulastrea crispata</i>	2	Fair	2.9	No
8	<i>Psammocora superficialis</i>	21	Fair	5.6	No
9	<i>Psammocora superficialis</i>	15	Fair	5.9	No
10	<i>Oulastrea crispata</i>	2	Fair	11.3	No
11	<i>Oulastrea crispata</i>	4	Fair	11.4	No
12	<i>Oulastrea crispata</i>	4	Fair	11.4	No
13	<i>Psammocora superficialis</i>	21	Fair	19.2	No
14	<i>Psammocora superficialis</i>	16	Fair	19.6	No
15	<i>Psammocora superficialis</i>	15	Fair	21.5	No
16	<i>Oulastrea crispata</i>	2	Fair	27.5	Yes
17	<i>Psammocora superficialis</i>	26	Fair	29.1	No
18	<i>Oulastrea crispata</i>	5	Fair	36.6	No
19	<i>Oulastrea crispata</i>	5	Fair	36.6	No
20	<i>Oulastrea crispata</i>	6	Fair	36.7	No
21	<i>Psammocora superficialis</i>	17	Fair	41	No
22	<i>Oulastrea crispata</i>	3	Fair	45.1	Yes
23	<i>Oulastrea crispata</i>	4	Fair	45.2	Yes
24	<i>Psammocora superficialis</i>	21	Fair	57.1	No
25	<i>Psammocora superficialis</i>	15	Fair	57.9	No
26	<i>Oulastrea crispata</i>	4	Fair	68.1	No
27	<i>Oulastrea crispata</i>	4	Fair	68.2	No
28	<i>Oulastrea crispata</i>	4	Fair	68.5	No
29	<i>Oulastrea crispata</i>	7	Fair	68.5	No
30	<i>Oulastrea crispata</i>	10	Fair	68.5	No
31	<i>Oulastrea crispata</i>	4	Fair	68.6	No
32	<i>Oulastrea crispata</i>	4	Fair	68.7	Yes
33	<i>Oulastrea crispata</i>	3	Fair	68.8	Yes
34	<i>Psammocora superficialis</i>	19	Fair	79.1	No
35	<i>Psammocora superficialis</i>	27	Fair	81.2	No
36	<i>Psammocora superficialis</i>	15	Fair	86	No
37	<i>Oulastrea crispata</i>	4	Fair	89.1	Yes
38	<i>Oulastrea crispata</i>	2	Fair	92.5	Yes

Transect 15

3.51 A 100 m transect was laid down along the bedrock and boulder surfaces which covered part the coral area at spot check SP3 (**Figure 7b.7**). The start point and end point laid on bedrock and boulder surfaces at around 6 m deep.

3.52 This site is located at the western part of Shek Kwu Chau in which the transect is mainly composed of bedrock and boulders. The REA transect was laid at the bottom with bedrock and boulder (**Table 34**). The average visibility was around 1 m during the survey time. The site supported limited marine life and is dominated by some common marine animal such as rock oyster, seurchin, tunicate and green mussel.

Table 34 REA Ecological and Substratum attributes of Transect 15

Ecological attributes	Rank
Hard coral	0.5
Octocoral (soft corals and gorgonians)	0
Black Corals	0
Dead standing corals	0
Substratum Attributes	
Bedrock/continuous pavement	4
Boulder Blocks (diam.>50cm)	1
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0
Soft Substrata	0
Sand	0
Mud/Silt	0

* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

3.53 The site supported sparse and patchy cover (<1%) of corals. Twenty-nine hard coral colonies in two species (**Table 35**) were recorded along the REA transect and *Oulastrea crispata* was the dominant species. All the recorded coral colonies grow on the bedrock and boulders surfaces with fair health condition. They were of small size (about 2 cm to 20 cm in diameter) and four of the recorded corals (*Oulastrea crispata*) were attached to movable rocks (less than 50 cm in diameter). All coral colonies recorded along the transect are common coral species in Hong Kong waters.

Table 35 Size, Health Condition and Translocation Feasibility of Coral Colonies found at Transect 15

Coral Number	Coral Species	Size (cm)*	Health Condition	Distance along the REA Transect (m)	Translocation Feasibility
1	<i>Oulastrea crispata</i>	2	Fair	0.3	No
2	<i>Oulastrea crispata</i>	2	Fair	0.3	No
3	<i>Psammocora superficialis</i>	15	Fair	5.6	No
4	<i>Oulastrea crispata</i>	4	Fair	7.5	No
5	<i>Oulastrea crispata</i>	4	Fair	7.6	No
6	<i>Psammocora superficialis</i>	19	Fair	18.5	No
7	<i>Psammocora superficialis</i>	16	Fair	23.4	No
8	<i>Oulastrea crispata</i>	5	Fair	34.5	Yes
9	<i>Oulastrea crispata</i>	7	Fair	34.5	Yes
10	<i>Oulastrea crispata</i>	4	Fair	41.1	No
11	<i>Oulastrea crispata</i>	5	Fair	41.1	No
12	<i>Oulastrea crispata</i>	2	Fair	41.2	No

13	<i>Oulastrea crispata</i>	2	Fair	41.3	No
14	<i>Psammocora superficialis</i>	15	Fair	49.1	No
15	<i>Psammocora superficialis</i>	19	Fair	49.8	No
16	<i>Psammocora superficialis</i>	20	Fair	59.2	No
17	<i>Psammocora superficialis</i>	15	Fair	60.4	No
18	<i>Psammocora superficialis</i>	16	Fair	67.6	No
19	<i>Oulastrea crispata</i>	2	Fair	71.2	No
20	<i>Oulastrea crispata</i>	3	Fair	71.2	No
21	<i>Oulastrea crispata</i>	3	Fair	71.3	No
22	<i>Psammocora superficialis</i>	18	Fair	75.6	No
23	<i>Oulastrea crispata</i>	2	Fair	89.1	No
24	<i>Oulastrea crispata</i>	2	Fair	89.2	No
25	<i>Oulastrea crispata</i>	2	Fair	89.2	No
26	<i>Oulastrea crispata</i>	3	Fair	92.1	Yes
27	<i>Oulastrea crispata</i>	3	Fair	92.2	Yes
28	<i>Oulastrea crispata</i>	6	Fair	93	No
29	<i>Oulastrea crispata</i>	4	Fair	93.1	No

Transect 16

3.54 A 100 m transect was laid down along the bedrock and boulder surfaces which covered part the coral area at spot check SP2 (**Figure 7b.7**). The start point and end point laid on bedrock and boulder surfaces at around 6 m deep.

3.55 This site is located at the western part of Shek Kwu Chau in which the transect is mainly composed of bedrock and boulders. The REA transect was laid at the bottom with bedrock and boulder (**Table 36**). The average visibility was around 1 m during the survey time. The site supported limited marine life and is dominated by some common marine animal such as rock oyster, seurchin, tunicate and green mussel.

Table 36 REA Ecological and Substratum attributes of Transect 16

Ecological attributes	Rank
Hard coral	0.5
Octocoral (soft corals and gorgonians)	0
Black Corals	0
Dead standing corals	0
Substratum Attributes	
Bedrock/continuous pavement	4
Boulder Blocks (diam.>50cm)	1
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0
Soft Substrata	0
Sand	0
Mud/Silt	0

* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

3.56 The site supported sparse and patchy cover (<1%) of corals. Twenty-four hard coral in two species (**Table 37**) were recorded along the REA transect and *Oulastrea crispata* was the dominant species. All the recorded coral colonies grow on the bedrock and boulders surfaces with fair health condition. They were of small size (about 2 cm to 21 cm

in diameter) and in low coverage. Only 6 colonies (*Oulastrea crispata*) of the recorded corals were attached to movable rocks (less than 50 cm in diameter). All coral colonies recorded along the transect are common coral species in Hong Kong waters.

Table 37 Size, Health Condition and Translocation Feasibility of Coral Colonies found at Transect 16

Coral Number	Coral Species	Size (cm)*	Health Condition	Distance along the REA Transect (m)	Translocation Feasibility
1	<i>Psammocora superficialis</i>	15	Fair	2.5	No
2	<i>Oulastrea crispata</i>	3	Fair	3.5	No
3	<i>Oulastrea crispata</i>	2	Fair	3.5	No
4	<i>Oulastrea crispata</i>	2	Fair	3.6	No
5	<i>Oulastrea crispata</i>	4	Fair	3.7	No
6	<i>Oulastrea crispata</i>	3	Fair	3.7	No
7	<i>Oulastrea crispata</i>	5	Fair	10.4	Yes
8	<i>Psammocora superficialis</i>	17	Fair	15.6	No
9	<i>Oulastrea crispata</i>	3	Fair	25.4	No
10	<i>Oulastrea crispata</i>	3	Fair	33.4	No
11	<i>Oulastrea crispata</i>	3	Fair	33.5	No
12	<i>Oulastrea crispata</i>	8	Fair	42.1	Yes
13	<i>Oulastrea crispata</i>	2	Fair	42.1	Yes
14	<i>Psammocora superficialis</i>	15	Fair	49.6	No
15	<i>Psammocora superficialis</i>	21	Fair	61.2	No
16	<i>Oulastrea crispata</i>	2	Fair	66.6	No
17	<i>Oulastrea crispata</i>	2	Fair	66.7	No
18	<i>Oulastrea crispata</i>	3	Fair	66.7	No
19	<i>Oulastrea crispata</i>	2	Fair	66.8	No
20	<i>Psammocora superficialis</i>	18	Fair	74.3	No
21	<i>Oulastrea crispata</i>	5	Fair	79.1	Yes
22	<i>Oulastrea crispata</i>	3	Fair	79.1	Yes
23	<i>Oulastrea crispata</i>	4	Fair	79.2	Yes
24	<i>Psammocora superficialis</i>	18	Fair	86	No