



Republic of the Philippines
Department of Environment and Natural Resources
Provincial Environment and Natural Resources Office

MIMAROPA Region

Bgy. Sta. Monica, Puerto Princesa City, Palawan

E-mail: penropalawan@denr.gov.ph

Telfax No. (048) 433-5638 / (048) 433-5638

DENR MIMAROPA RECORDS SECTION
RECEIVED
10 JUL 2022
IN IN-OUTGOING
DATE NO.

July 5, 2022

MEMORANDUM

FOR : The Regional Executive Director
DENR MIMAROPA
1515 L&S Bldg., Roxas Blvd.
Ermita, Manila

FROM : The Provincial Environment and
Natural Resources Officer

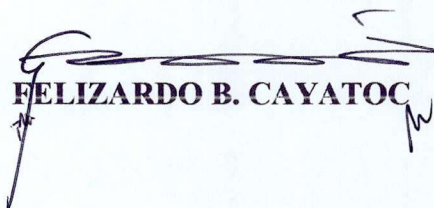
**SUBJECT : PROGRESS REPORT ON THE MONITORING OF SEAGRASS
FOR MALAMPAYA SOUND PROTECTED LANDSCAPE AND
SEASCAPE (MSPLS), TAYTAY-SAN VICENTE, PALAWAN**

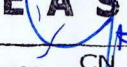
Forwarded is the memorandum dated June 24, 2022 of CENRO Taytay along with the progress report on the monitoring of seagrass for Malampaya Sound Protected Landscape and Seascape (MSPLS), Taytay-San Vicente, Palawan.

Please be informed that the PAMO-MSPLS personnel conducted the monitoring of seagrass on May 6, 12, and 26, 2022 at the established site located in Katsibayugan, Barangay Pancol, Taytay, Palawan. A total of four (4) seagrass species were monitored in the area, namely *Halodule pinifolia*, *Cymodocea rotundata*, *Enhalus acoroides*, and *Thalassodendron ciliatum*, in which *Cymodocea rotundata* species got the highest occurrence. However, the status of the seagrass in the area is still in poor condition.

For information and record.




FELIZARDO B. CAYATOC

DENR-PALAWAN
PENRO-RECORDS
RELEASED
By 
Date: 08 JUL 2022 CN: 42-1665



Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region

COMMUNITY ENVIRONMENT AND NATURAL RESOURCES OFFICE

By the National Highway, Poblacion, Taytay, Palawan 5312

Mobile: 0926-505-9335 TM 0912-171-3889 TNT

Email: cenrotaytay@denr.gov.ph

DENR CENRO
PALAWAN RECORDS
RECEIVED

June 24, 2022

MEMORANDUM

FOR : The Provincial Environment and Natural Resources Officer- Palawan
Sta. Monica, Puerto Princesa City

FROM : The Community Environment and Natural Resources Officer
This jurisdiction

SUBJECT : **PROGRESS REPORT ON THE MONITORING OF SEAGRASS
FOR MALAMPAYA SOUND PROTECTED LANDSCAPE AND
SEASCAPE (MSPLS), TAYTAY-SAN VICENTE, PALAWAN**

Respectfully forwarding is the memorandum dated June 16, 2022 of Protected Area Superintendent (PASu) Clarissa P. Pador being an accomplishment and **Means of Verification (MoV)** on the target Monitoring of Corals, Mangroves and Seagrass under 001 Management of Coastal and Marine Resources/Areas activity of Malampaya Sound Protected Landscape and Seascape (MSPLS). Taytay-San Vicente, Palawan. This activity will be included in the consolidated report.

The undersigned concurred with the recommendation of PAMO-MSPLS to increase the awareness through Communication, Education and Public Awareness (CEPA) campaign to the BLGUs and other partner agencies on the role of seagrass in marine ecosystem and their significant contribution to fisheries production and ecological functions.

For his information and record.

DENR CENRO
TAYTAY, PALAWAN
RELEASED

BY: 
DATE: 06-24-22 ON 1817


ALAN L. VALLE

Cc: PAMO-MSPLS



Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region

PROTECTED AREA MANAGEMENT OFFICE
MALAMPAYA SOUND PROTECTED LANDSCAPE AND SEASCAPE (MSPLS)
Taytay-San Vicente, Palawan
Barangay Old Guinlo, Taytay, Palawan

Email add: pamomspls@gmail.com/Contact #: 0938-786-3728 (SMART)



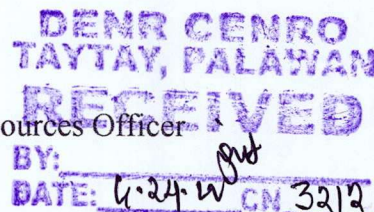
June 16, 2022

MEMORANDUM

FOR : The Community Environment and Natural Resources Officer
Taytay, Palawan

FROM : The Protected Area Superintendent
Malampaya Sound Protected Landscape and Seascape (MSPLS)
Taytay-San Vicente, Palawan

SUBJECT : **PROGRESS REPORT ON THE MONITORING OF SEAGRASS
FOR MALAMPAYA SOUND PROTECTED LANDSCAPE AND
SEASCAPE (MSPLS), TAYTAY-SAN VICENTE, PALAWAN**



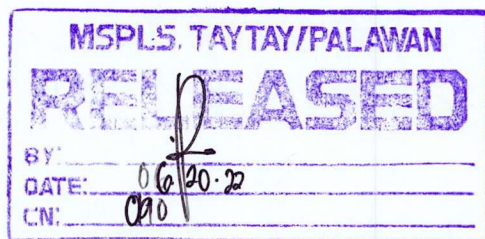
This pertains to the target activity on the Monitoring of Corals, Mangroves and Seagrass under 001 Management of Coastal and Marine Resources/Areas of Malampaya Sound Protected Landscape and Seascape (MSPLS), Taytay-San Vicente, Palawan.

Respectfully forwarded is the memorandum dated June 16, 2022 of CMEMP Extension Officer Maria Lilibeth E. Arojo concerning the above subject. Please be informed that this Office conducted the abovementioned activity in one (1) of the established site located at Katsibayugan, Barangay Pancol, Taytay, Palawan. An estimated area of 6.2 hectares was assessed and monitored.

During the activity, a total of four (4) seagrass species were monitored in the area namely *Halodule pinifolia*, *Cymodocea rotundata*, *Enhalus acoroides* and *Talassodendron Ciliatum* in which *Cymodocea rotundata* species got the highest occurrence, however, the status of the seagrass in the area is still in a poor condition.

Hence, this Office recommends increasing awareness through Communication, Education and Public Awareness (CEPA) campaign on the role of seagrass in marine ecosystem and their significant contribution to fisheries production and ecological functions.

For his information and record.



CLARISSA P. PADOR



Department of Environment and Natural Resources
MIMAROPA Region
PROTECTED AREA MANAGEMENT OFFICE
MALAMPAYA SOUND PROTECTED LANDSCAPE AND SEASCAPE (MSPLS)
Taytay-San Vicente, Palawan
Barangay Old Guinlo, Taytay, Palawan
Email add: pamomspls@gmail.com/Contact #: 0938-786-3728 (SMART)



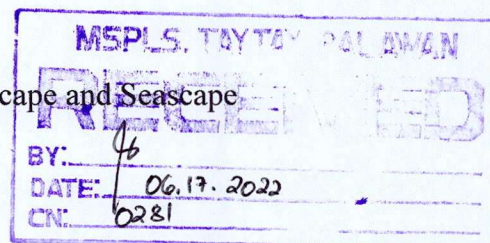
June 16, 2022

MEMORANDUM

FOR : The Protected Area Superintendent
Malampaya Sound Protected Landscape and Seascape
Taytay, Palawan

FROM : CMEMP Extension Officer
MSPLS, Taytay, Palawan

SUBJECT : **PROGRESS REPORT ON THE MONITORING OF SEAGRASS
FOR MALAMPAYA SOUND PROTECTED LANDSCAPE AND
SEASCAPE (MSPLS), TAYTAY-SAN VICENTE, PALAWAN.**



This pertains to the target activity on the monitoring of corals, mangroves, and seagrass of Coastal and Marine Ecosystems Rehabilitation Sub-Program under Management of Coastal and Marine Resources/Areas for Malampaya Sound Protected Landscape and Seascape (MSPLS), Taytay, Palawan.

Please be informed that the undersigned together with Forest Ranger Ricardo S. Tandoc, Francis Abe G. Bose and Office Support Staff of Protected Area Management Office (PAMO) of MSPLS conducted seagrass monitoring on May 6, 2022, May 12, 2022 and May 26, 2022 at the established site located in Katsibayugan, Barangay Pancol, Taytay and Palawan. The total area assessed/monitored during the activity has an estimated area of 6.2 hectares.

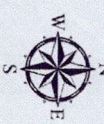
The activity started laid out of three (3) 50-meter transect line which is perpendicular to the shoreline, starting at the shallow point where the seagrass first appears, going seaward. A 0.5 m x 0.5 m stainless steel quadrat was placed every 5 meters, on the right side of the transect. Reading and recording of parameters was done for the three replicated transect per station to get the substrate type, seagrass species, percent cover and canopy height. Furthermore, the percent cover of algae and epiphytic algae found on the seagrass was also noted. A total of four (4) seagrass species were recorded during the monitoring including the new species found out of the team. These include *Halodule pinifolia*, *Cymodocea rotundata*, *Enhalus acoroides* and *Talassodendron Ciliatum*. Among these species, *Cymodocea rotundata* species have the highest occurrence and the status of the seagrass is still considered in poor condition.

The undersigned recommends increasing awareness through intensive Information Education Communication (IEC) campaign on the role of seagrass in the marine ecosystem and their significant contribution to fisheries production and their ecological functions.

Attached are the maps, photos and complete seagrass data monitoring sheet with graphs.

For information and record.

MARIA LILIBETH E. AROJO



LOCATION MAP
SHOWING THE SEAGRASS ASSESSMENT
SITE WITHIN MALAMPAYA SOUND PROTECTED
LANDSCAPE AND SEASCAPE
WITH THE TOTAL AREA OF 6.02 HECTARES
LOCATED AT SITIO KATSI,
BARANGAY PANCOL, TAYTAY, PALAWAN.

SCALE: 1:3,500
0 15 30 60 90 120
Meters
Projection: Transverse_Mercator
Projected Coordinate System: WGS_1984_UTM_Zone_50N

Legend

- LOCATION
- TRANSEC LINE
- SEAGRASS SITE
- CENRO_TAYTAY_EL_NIDO
- LC STATUS**
- Alienable & Disposable
- Forestland
- UPF

CERTIFICATION

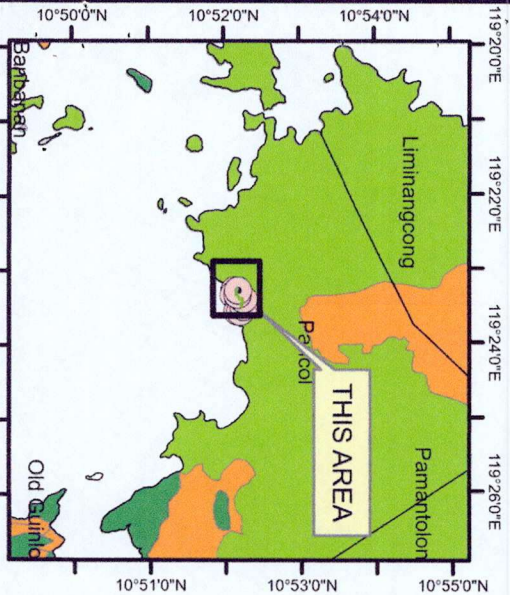
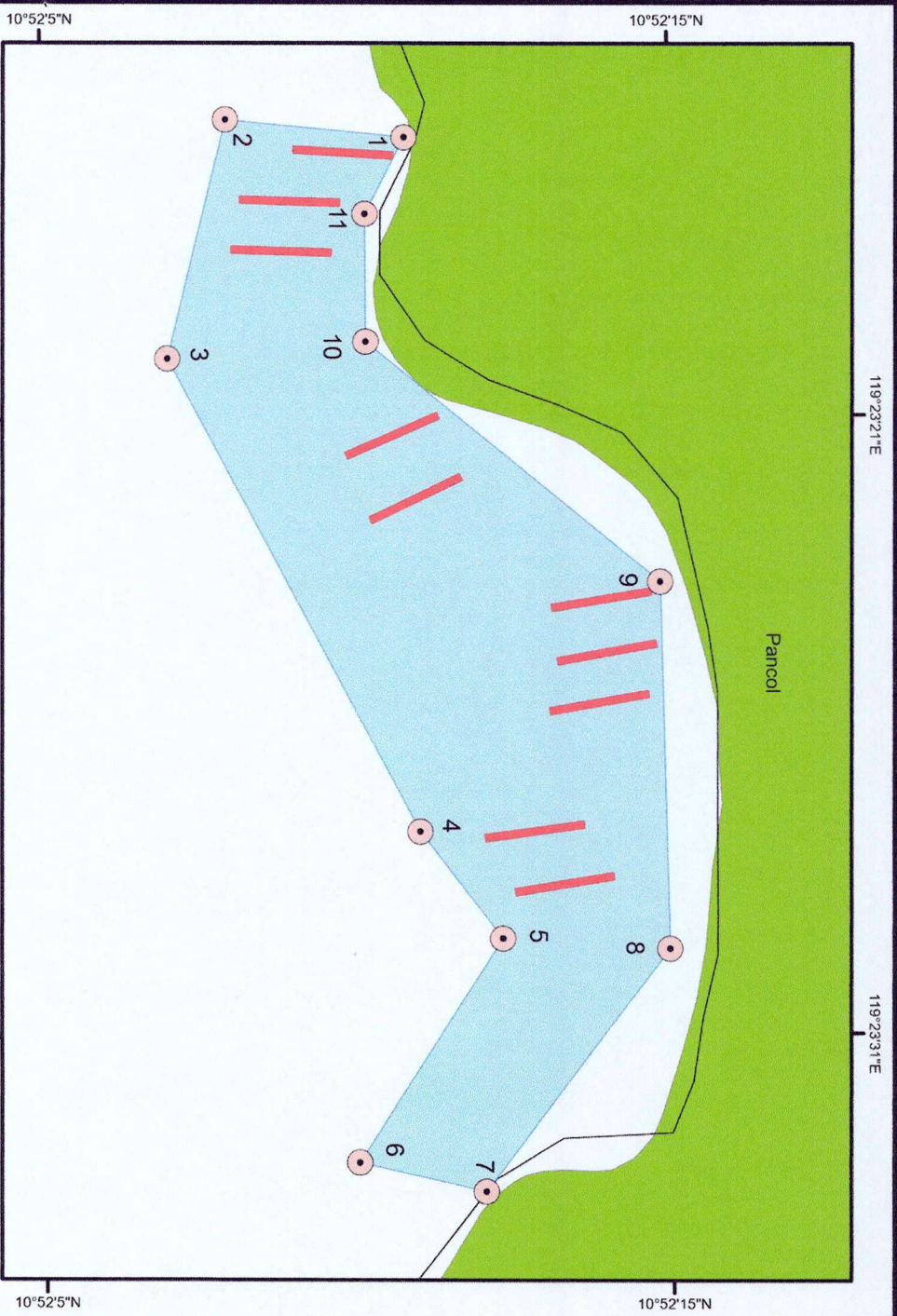
THIS IS TO CERTIFY that this area is within MALAMPAYA SOUND PROTECTED LANDSCAPE AND SEASCAPE (MSPLS) per Presidential Proclamation No. 342 dated July 12, 2000

Digitized by:

RONIEL C. SOLANA
Office Support Staff

Checked/Verified:

CLARISA P. PADOR
For: III/PASU, MSPLS



THE POINT GEOGRAPHIC COORDINATE	TECHNICAL DESCRIPTION			
	DEGREES	MINUTES	SECONDS	DIRECTION
119	23	16.399	10	52
CORNER	B E A R I N G			
	DIRECTION	DEGREES	MINUTES	SECONDS
TIE LINE	DISTANCE	DIRECTION	DEGREES	MINUTES
1	87.5548374	S	6	43.07
2	121.722323	S	76	14
3	264.618359	N	62	32
4	66.4995819	N	53	0
5	131.087636	S	57	25
6	63.5513178	N	13	25
7	150.048616	N	52	58
8	181.566335	S	88	48
9	186.465678	S	39	52
10	63.4194056	S	89	58
11	42.4221555	N	63	0

Observer: Ricardo Tandoc, Francis Abe Bose, Maria Lilibeth Arojo and Richard Valones

Location: Katsibayugan, Bgy. Pancol, Taytay, Palawan

Site: 1

Date: May 6, 2022

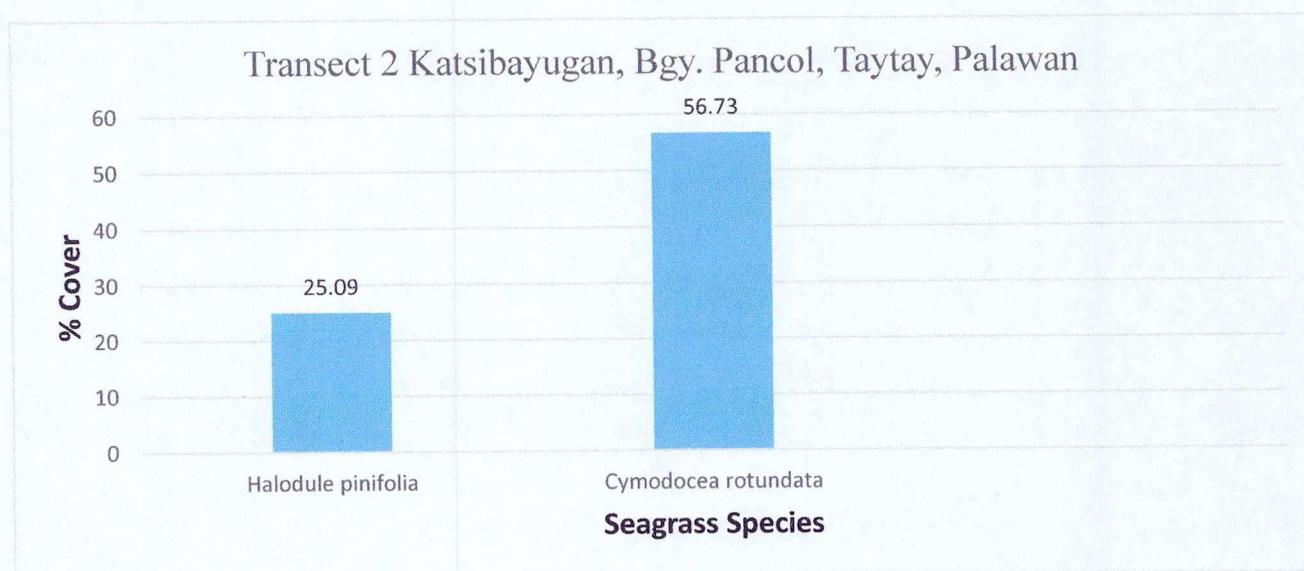
Transect No. 1

Start time: 11:35

Time end: 12:15

Quadrant	Distance (meters)	Sediment	Photo	% SC	%SG Species		CH	% AC	% EC
					Halodule pinifolia	Cymodocea rotundata			
1	0	Sand/Silt		10	0	100	60,80,110	0	20
2	5	Sand/Silt		10	15	85	40,50,70	0	15
3	10	Sand/Silt		80	50	50	110,120,140	5	30
4	15	Sand/Silt		85	40	60	60,70,80	10	35
5	20	Sand/Silt		35	50	50	6,10,12	0	40
6	25	Sand/Silt		10	50	50	25,70,75	50	15
7	30	Sand/Silt		15	21	79	20,50,60	0	30
8	35	Sand/Silt		0	0	0	0	0	0
9	40	Sand/Silt		0	0	0	0	0	0
10	45	Sand/Silt		20	40	60	90,100,110	0	25
11	50	Sand/Silt		25	10	100	30,80,90	0	30

SUM	290	276	624	0	65	240
AVE	26.364	25.0909091	56.72727273	0	5.909	21.81818



Observer: Ricardo Tandoc, Francis Abe Bose, Maria Lilibeth Arojo and Richard Valones

Location: Katsibayugan, Bgy. Pancol, Taytay, Palawan

Site: 1

Date: May 6, 2022

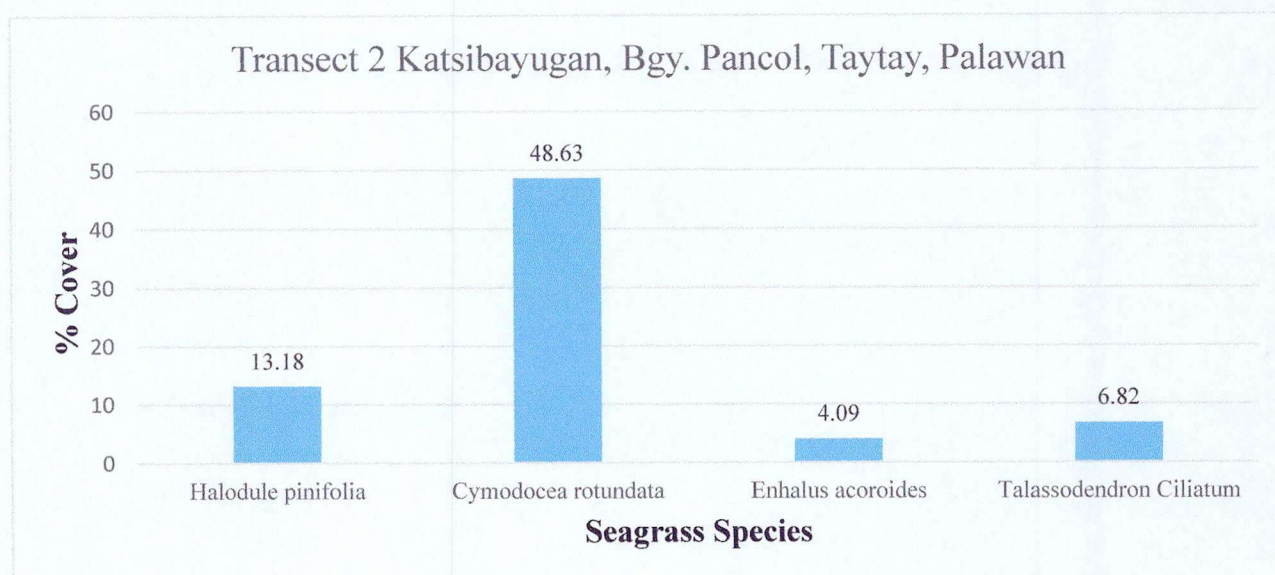
Transect No. 2

Start time: 12:22

Time end: 1:05

Quadrant	Distance (meters)	Sediment	Photo	% SC	%SG Species				CH	% AC	% EC
					Halodule pinifolia	Cymodocea rotundata	Enhalus acoroides	Talassodendron Ciliatum			
1	0	Sand/Silt		40	50	50	0	0	10,85,100	0	35
2	5	Sand/Silt		55	60	40	0	0	70,90,100	5	45
3	10	Sand/Silt		30	30	70	0	0	10,95,110	0	50
4	15	Sand/Silt		0	0	0	0	0	0	0	10
5	20	Sand/Silt		5	0	100	0	0	60,110,120	0	10
6	25	Sand/Silt		35	0	90	10	0	20,85,100	0	25
7	30	Sand/Silt		10	0	90	10	0	60,400,460	0	10
8	35	Sand/Silt		0	0	0	0	0	0	0	0
9	40	Sand/Silt		0	0	0	0	0	0	0	0
10	45	Sand/Silt		30	5	95	0	0	60,80,100	0	10
11	50	Sand/Silt		85	0	0	25	75	60,95,115	0	25

Sum	290	145	535	45	75	5	220
Ave.	26.364	13.1818182	48.63636364	4.090909091	6.818181818	0.455	20



Observer: Ricardo Tandoc, Francis Abe Bose, Maria Lilibeth Arojo and Richard Valones

Location: Katsibayugan, Bgy. Pancol, Taytay, Palawan

Site: 1

Date: May 12, 2022

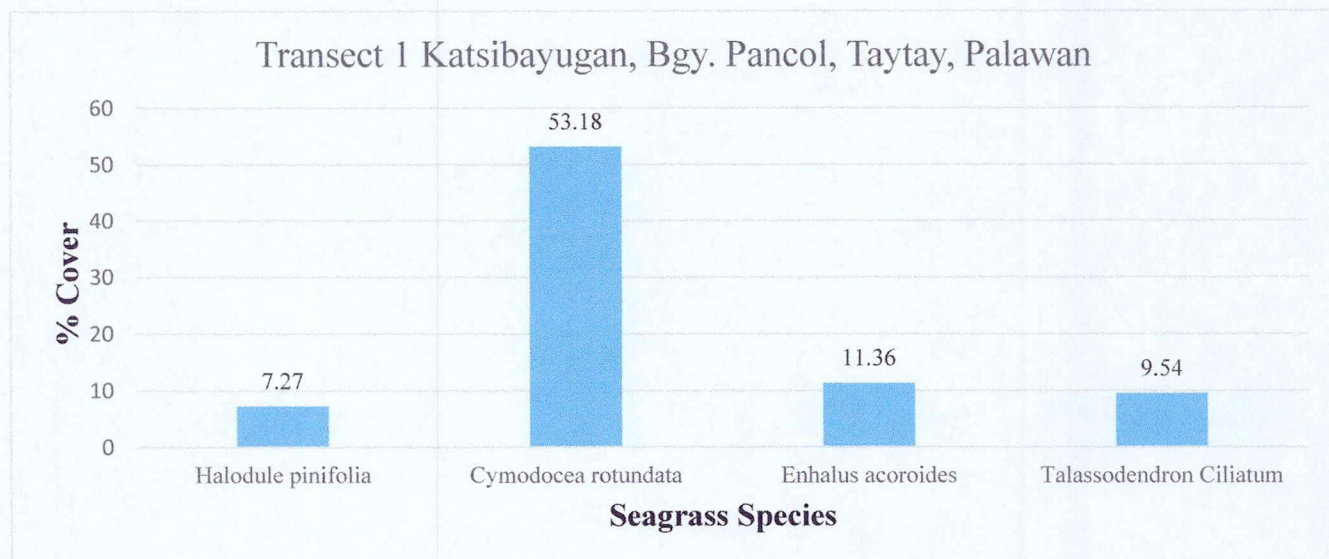
Transect No. 1

Start time: 10:22

Time end: 11:09

Quadrant	Distance (meters)	Sediment	Photo	% SC	%SG Species				CH	% AC	% EC
					Halodule pinifolia	Cymodocea rotundata	Enhalus acoroides	Talassodendron Ciliatum			
1	0	Sand/Silt		25	15	85	0	0	45,100,120	0	0
2	5	Sand/Silt		0	0	0	0	0	0	5	25
3	10	Sand/Silt		45	10	90	0	0	85,95,120	0	20
4	15	Sand/Silt		35	10	90	0	0	55,90,110	0	90
5	20	Sand/Silt		35	20	80	0	0	55,110,140	0	15
6	25	Sand/Silt		25	20	70	10	10	30,140,145	10	15
7	30	Sand/Silt		10	10	90	10	0	35,75,90	0	0
8	35	Sand/Silt		0	0	0	0	0	0	0	20
9	40	Sand/Silt		25	0	80	0	20	30,40,60	0	25
10	45	Sand/Silt		50	0	0	0	75	110,280,480	0	20
11	50	Sand/Silt		5	0	0	25	0	380,410,500	0	20

Sum	255	85	585	125	105	0	10	250
Ave.	23.182	7.72727273	53.18181818	11.36363636	6.818181818	0	0.909	22.72727



Observer: Ricardo Tandoc, Francis Abe Bose, Maria Lilibeth Arojo and Richard Valones

Location: Katsibayugan, Bgy. Pancol, Taytay, Palawan

Site: 1

Date: May 12, 2022

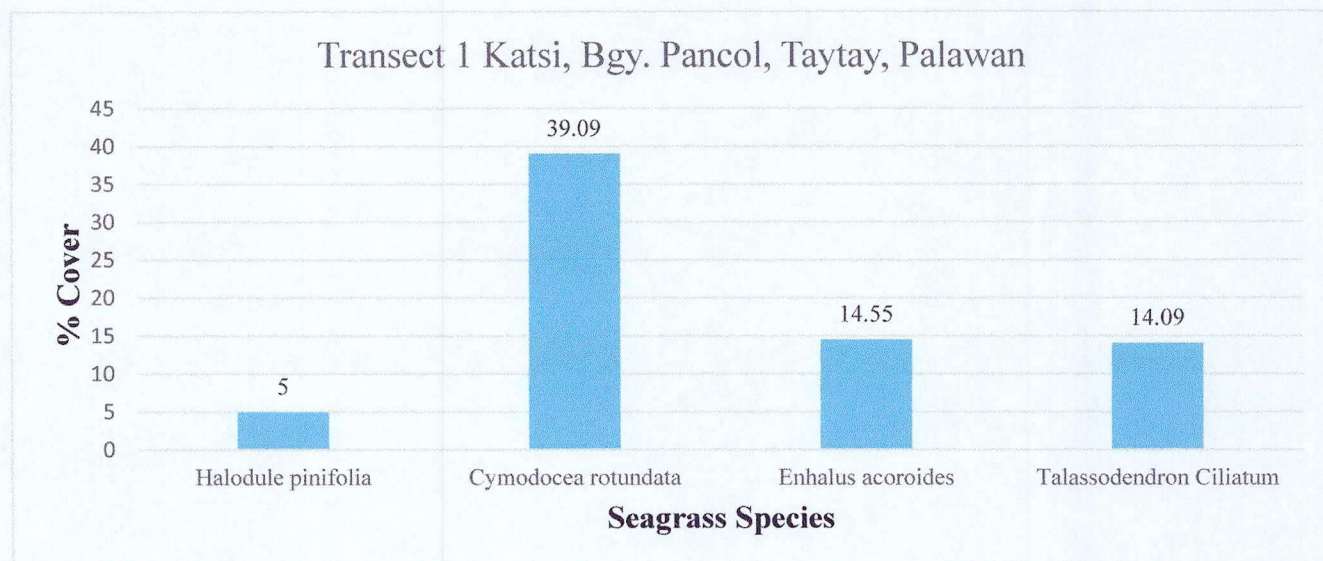
Transect No. 2

Start time: 11:15

Time end: 12:30

Quadrant	Distance (meters)	Sediment	Photo	% SC	%SG Species				CH	% AC	% EC
					Halodule pinifolia	Cymodocea rotundata	Enhalus acoroides	Talassodendron Ciliatum			
1	0	Sand/Silt		0	0	0	0	0	0	0	0
2	5	Sand/Silt		0	0	0	0	0	0	0	0
3	10	Sand/Silt		0	0	0	0	0	0	0	0
4	15	Sand/Silt		10	5	95	0	0	30,70,110	0	15
5	20	Sand/Silt		25	50	50	0	0	25,80,100	0	20
6	25	Sand/Silt		5	0	100	0	0	70,75,100	0	10
7	30	Sand/Silt		5	0	0	0	0	70,100,120	0	15
8	35	Sand/Silt		30	0	0	5	10	80,85,100	0	15
9	40	Sand/Silt		25	0	0	0	100	50,75,95	0	20
10	45	Sand/Silt		10	0	0	50	50	100,370,460	0	25
11	50	Sand/Silt		5	0	0	100	0	130,300,320	0	15

Sum	115	55	430	160	155	0	5	135
Ave.	10.455	5	39.09090909	14.54545455	14.09090909	0	0.455	12.27273



Observer: Ricardo Tandoc, Francis Abe Bose, Maria Lilibeth Arojo and Richard Valones
 Location: Katsibayugan, Bgy. Pancol, Taytay, Palawan
 Site: 1
 Date: May 26, 2022
 Transect No. 2
 Start time: 9:01
 Time end: 9:26

Quadrant	Distance (meters)	Sediment	Photo	% SC	%SG Species				CH	% AC	% EC
					Halodule pinifolia	Cymodocea rotundata	Enhalus acoroides	Talassodendron Ciliatum			
1	0	Sand/Silt		0	0	0	0	0	0	0	0
2	5	Sand/Silt		10	0	100	0	0	7,9,10	0	25
3	10	Sand/Silt		20	0	100	0	0	6,9,13	0	20
4	15	Sand/Silt		20	0	100	0	0	4,14,16	0	15
5	20	Sand/Silt		25	0	100	0	0	4,5,12,18	0	25
6	25	Sand/Silt		35	0	100	0	0	3,13,17	0	25
7	30	Sand/Silt		20	0	100	0	0	9,10,17	0	15
8	35	Sand/Silt		5	0	100	0	0	5,10,11	0	20
9	40	Sand/Silt		5	0	0	100	0	63,72,80	0	15
10	45	Sand/Silt		0	0	0	0	0	0	0	0
11	50	Sand/Silt		10	0	0	100	0	10,30,45	0	25

Sum	150	0	700	200	0	0	0	185
Ave.	13.636	0	63.63636364	18.18181818	0	0	0	16.81818

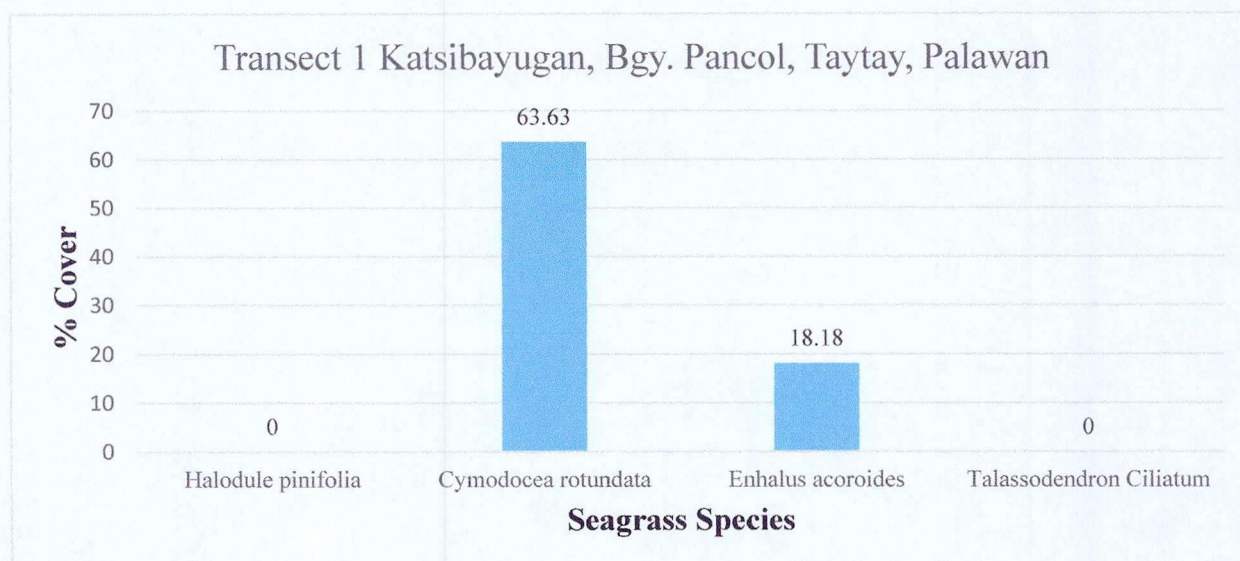


Photo Documentation

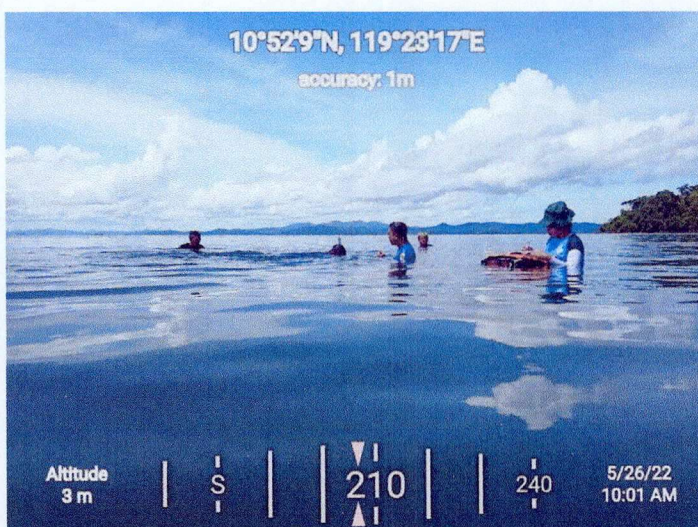


Figure I. Reading and recording of seagrass beds in the three replicated transect.

I hereby certify that the above photos are true and correct and was taken during the Seagrass monitoring in Katsibayugan, Bgy. Pancol, Taytay, Palawan.

MARIA LILIBETH E. AROJO