

Report of the Training Workshop for Grenada Marine Protected Area Data Standardization



L'Esterre, Carriacou

August 2012



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Citation:

Samuel, B., C. Jeffrey and Z. Khan. 2012. 55pp. Report of the Training Workshop for Grenada Marine Protected Area Data Standardization. Report for MPA Governance Project. 16 pp.

Disclaimer

This report was prepared as an activity under the MPA Governance Project implemented by the Centre for Resource Management and Environmental Studies (CERMES) under award NA11NOS4820012 from the NOS International Program Office (IPO), U.S. Department of Commerce. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of the NOS International Program Office (IPO) or the U.S. Department of Commerce.

INTRODUCTION

One of the findings of the recent scoping study for the Molinière-Beauséjour Marine Protected Area (MBMPA) Business Plan, conducted as part of the Centre for Resource Management and Environment Studies (CERMES) MPA Governance Project, was that MBMPA's revenue accounting is based on out-dated government procedures and systems, and could be simplified while at the same time providing more focused data on the MPA's financial and operational performance.

In reference to the MBMPA Management Plan 2010, the data standardization activity links to the following management objectives and actions:

- Improving the effectiveness and efficiency of the adaptive management plan on a continuous basis through preparation of a monitoring programme; through data collection (operational and financial) and information storage.
- Capacity-building among MPA wardens to better handle the improved data collection methods.

In addition, MBMPA's cost accounts are included with the expenses of the Ministry of Agriculture, Forestry and Fisheries, and there is no central recording of key economic data specifically relating to the MBMPA.

In order to improve the recording of critical operational, scientific and financial data, it was decided to hold a training workshop on 03 August, in L'Esterre, Carriacou for staff of MPAs in Grenada and Carriacou on ways of improving the recording and analysis of key economic data of MPAs. In addition, the Workshop would comprise practical training sessions to improve the technical capacity of MPA staff in Microsoft Excel.

WORKSHOP OBJECTIVES

- To standardize the day-to-day collection of the marine operations data (patrol logs) in the MPAs.
- To standardize the day-to-day collection and the periodic aggregation of key revenue and cost data for the MPAs.
- To build technical capacity in the MPA wardens on software needed to collect and analyze MPA revenue and cost data.

METHODOLOGY

There were four themes to the workshop:

- The first step was for participants to actively discuss the current situation regarding the recording of critical operational and economic data within the MPAs identifying the shortcomings and seeking to reach consensus on methods of improvement.

- Secondly, there were individual sessions on specified areas of data entry, looking in detail at the current situation, shortcomings, and agreement on a new format for Daily Rangers' Logs and Sales Reports.
- Thirdly, there was an afternoon session of practical hands-on training in Excel, with specific reference to the Daily Log Sheets and Sales Reports agreed upon in the morning sessions.
- Finally, the workshop looked at the organizational and staffing challenges facing MPA employees in meeting the objectives of an improved data entry system.

WORKSHOP OUTCOMES

Why and how do we collect data?

Desired outcome: Agreement on a list of operational data to be collected by MPA, by whom, and periodic reporting schedule.

Why do we need to monitor and record data?

- To map biophysical data
- To observe changes
- To establish a baseline for planning purposes
- To measure the effectiveness of management plans
- To measure positive or negative impacts

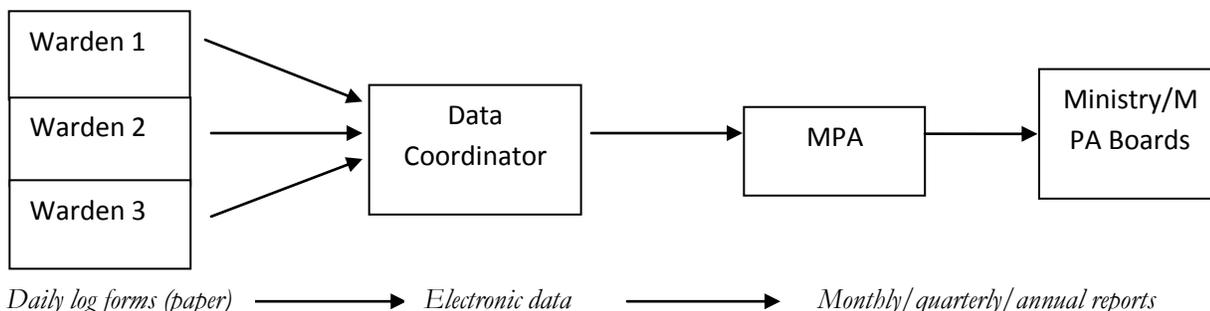
Current situation:

The workshop discussed the current situation and its inadequacies:

- There is no formal system for the recording of key operational and economic data in the MPAs
- Data is recorded, but it is done in an ad-hoc manner, without an agreed-upon reporting schedule
- MPA staff are using their personal computers on which to record data
- The Sandy Island/Oyster Bed MPA (SIOBMPA) has no central office and the posts of Manager and Data Coordinator remain unfilled
- No central data is maintained on MPA's operating costs

Desired situation:

The gathering and analysis of data within MPA/Fisheries should be as follows:



All data has to be referenced to a budget and even though MPAs currently do not have operational or financial budgets, data gathering is essential to establish the baseline for preparation of subsequent budgets.

Data gathering is a critical component of an effective monitoring and evaluation process whereby management of the MPAs can receive continual feedback on operational and financial changes affecting the MPAs, and make appropriate changes as necessary. This is an integral part of the Adaptive Management Cycle.

Daily Rangers' Log Sheet

Current situation:

Currently, the Daily Log Sheets in use do not capture all the data required, while at the same time there are spaces in the forms for certain operational and scientific data which are not required. The situation regarding data gathering in SIOBMPA is made difficult by the absence of a central MPA office, the lack of a Data Coordinator, and the lack of SIOBMPA computers.

Desired situation:

The workshop went through in detail the new draft MBMPA Daily Rangers' Log Sheet prepared by the Consultant. A number of changes were agreed upon, with separate Log Sheets for MBMPA and the SIOBMPA.

The main area of difference is that in MBMPA, the bulk of entry fees (as distinct from user fees) are obtained from snorkelling and scuba diving activities whereas in SIOBMPA the bulk of fees come from yacht moorings.

Once the data have been transferred from paper to electronic format (Microsoft Excel), it enables the easy analysis and manipulation of the raw data to better monitor MPA operations. For example, it enables yacht traffic to be monitored in terms of the number of times certain yachts use enter the MPA; the breakdown between cruising and charter yachts; and the breakdown of nationality of yachting traffic. Also, it enables infringements to be better monitored, for example to log the number of speeding infringements, etc.

See attached:

- Appendix 2: Daily Rangers' Daily Log Sheets for MBMPA
- Appendix 3: Daily Rangers' Daily Log Sheets for SIOBMPA
- Appendix 4: SIOBMPA Daily Yachting Report
- Appendix 5: MBMPA Daily Yachting Report

MPA Revenue Accounting

Current situation:

The Workshop went through in detail the current accounting processes and Excel software used to record MBMPA revenues and discussed the inadequacies and areas for improvement:

- MBMPA's system of recording and accounting for its revenues is archaic and based on government procedures and systems

- There are 2 sets of accounting books:
 - Sales ledger: Excludes mooring fees; captures band/tag inventory data
 - Receipts ledger: Includes mooring fees; signed off by Fisheries cashier
- Receipt books held by Wardens for cash sales “on the water”
- 90% of sales occur at MBMPA office to charter and dive operators

Desired situation:

Improvements were proposed in the following areas:

- Do away with “two-book system” – capture all accounting data at point of sale
- Computerize sales: a simple accounting package can be obtained relatively cheaply, which prints receipts while automatically generating accounts
- Split the recording of sales among: the number of tags/bands sold, unit price, and total revenue per item sold
- Account separately for dive and day charter operators; and
- Automatic summation of sales on a monthly basis

See attached Excel spreadsheets:

- Appendix 6: MBMPA Scuba Operator Sales – Summary
- Appendix 7: MBMPA Scuba Operator Sales – Details
- Appendix 8: MBMPA Day Charter Sales – Summary

The Consultant will install these files onto the computer used at MBMPA for data recording; and provide hands-on training to the Data Coordinator.

MPA Cost Accounting

Due to the extensive and productive discussions on the first two topics, the Workshop did not have the time to dwell on this aspect of data gathering. In any event, it was noted that, at the level of MPA Rangers, most of the cost data is not available to them. This is an issue to be taken up with senior management of MPA.

Excel Training

The Workshop concluded with a practical hands-on session on basic Excel skills to enable the Rangers to better enable the transition from paper to electronic data gathering.

- Appendix 9: Excel tutorial that was created by the class

Organizational and Staffing Challenges

The Workshop discussed some of the challenges facing MPA staff in the area of data gathering and analysis. One such constraint is time: Rangers will fill in the Daily Log Sheets on the water by hand; if there are operational issues to take care of after the patrols, Rangers may not have the time to transfer the written data into electronic format.

Another challenge concerns computers in which most Rangers are currently using their personal computers to perform MPA functions. Rangers need to be issued with MPA computers, that feature all the software needed to perform their functions.

A final challenge concerns staffing: the MBMPA has hired a Data Coordinator whereas this position has yet to be filled in SIOBMPA.

The summary of challenges and potential solutions appears below:

Table 1 Challenges, prerequisites and ways forward

Challenge	Prerequisite	Way Forward
Capturing accurate operational data - MBMPA	Basic Excel proficiency among Rangers. Access to MPA laptops	Revised Daily Rangers' Log Sheet: MBMPA
Capturing accurate operational data – SIOBMPA	Basic Excel proficiency among Rangers Access to MPA laptops Dedicated office space Fill staffing gaps	Revised Daily Rangers' Log Sheet: SIOBMPA Revised Daily Yachting Report: SIOBMPA
Capturing accurate revenue data – MBMPA/SIOBMPA	Basic Excel proficiency among Rangers Access to MPA laptops Dedicated office space Fill staffing gaps	Revised MBMPA Day Charter Sales Revised MBMPA Scuba Operator Sales Revised SIOBMPA Daily Yachting Report
Capturing accurate MPA cost data	Access to MPA cost data	Agree on system for capturing MPA costs with MPA management and Fisheries

NEXT STEPS

The final steps in this assignment are:

- Workshop participants to agree on the revised Log Sheets for MBMPA and SIOBMPA (including the Daily Yachting Report)
- Workshop participants to agree on the modified Sales Reports for scuba and day charter operators; and
- Consultant to electronically install the software into the MBMPA computer(s), and to provide hands-on training to the Data Coordinator.

APPENDIX 1 WORKSHOP AGENDA

Workshop Agenda

0800 – 0830	Coffee
0830 – 0900	Opening remarks: Zaidy Khan
0900 – 1030	<p>MPA operational and scientific data:</p> <ul style="list-style-type: none">• What data relating to the marine operations of MPA do we need to capture on a daily basis? (number of patrols, duration, location, observations, number of divers/snorkelers, number of yachts & passengers, fisher-folk activities, illegal activities, etc)• What data relating to the marine operations of MPA do we need to capture on a periodic basis? (condition & maintenance of buoys, boats, engines, etc)• Who does the initial data recording?• In what form is the data initially recorded (paper, electronic, etc)?• Who does the periodic aggregation of the data; and to what purpose?• Is there a set schedule for the daily/weekly/monthly compilation of data? To whom is the data sent? The MPA Board? Ministry? Stakeholders?• Is there an operational budget (number of patrols per day/week, gallons fuel consumption, etc)?• If not, what activities need to be budgeted, and how often?• What scientific data needs to be collected, over what time periods?• <i>Outcome: Agreement on a list of operational & scientific data to be collected by MPA, by whom, and periodic reporting schedule.</i>
1030 – 1045	Coffee break
1045 – 1200	<p>MPA revenue data:</p> <ul style="list-style-type: none">• Principal sources of MPA revenues• Principal methods of revenue collection• Format of electronic data collection• Responsibility for data collection & aggregation• Suggested improvements in the format of revenue data recording (practical exercise on Excel)

	<ul style="list-style-type: none"> • <i>Outcome: Agreement on format for revenue accounting; and a schedule of periodic revenue reporting.</i>
1200 – 1300	<p>MPA cost data:</p> <ul style="list-style-type: none"> • Agreement on list of capital, operational and extraordinary costs that pertain to the establishment operations of the MPAs • How are expenses authorized? • Where are source documents maintained? • Agreement of “paper trail” to record MBMPA cost data before source documentation is turned over to Fisheries (and hence lost) • <i>Outcome: Agreement on content and format of periodic MPA cost accounting</i>
1300 – 1400	Lunch
1400 – 1500	Practical training in Microsoft Excel; with specific reference to MPA data gathering & analysis
1500 – 1600	Practical training in Microsoft Word and PowerPoint; with specific reference to MPA data gathering & analysis
1600 – 1630	Summing up and work plan
1630 – 1645	Concluding remarks: S. Brian Samuel, Business Consultant; Zaidy Khan, Environmental Consultant, Coddinton Jeffrey, MBMPA; Ashaki Lessey, MBMPA; Anique Coy, SIOBMPA; Bryan Prince, SIOBMPA; Jody Placid, SIOBMPA, Orlando Harvey, TCMFA

Facilitators: S. Brian Samuel, Business Consultant; Zaidy Khan, CERMES MPA Governance Project MPA Specialist. Resource Person. Orlando Harvey, Marine Biologist TCMFA

Participant Trainees

MPA Wardens: Coddinton Jeffrey MBMPA; Ashaki Lessey, MBMPA; Anique Coy, SIOBMPA; Bryan Prince, SIOBMPA; Jody Placid, SIOBMPA, Bryan Prince, SIOBMPA

APPENDIX 2 MBMPA RANGERS' LOG SHEET

 MBMPA RANGERS' DAILY LOG SHEET - TOTAL FOR THE MONTH OF:											
MONTH:											
Rangers/Initials:											
(A) SNORKELERS:					(B) SCUBA DIVERS:			(C) YACHTS:			
Snorkel Operators:	Mol	GM	FB	DB	Dive Operators:	# Dive Bands	# Dive Tags	# Yachts	# Sailors	Comments	
Carib Cats	0	0	0	0	Aquanauts	0	0	Beausejour	0	0	
Starwind	0	0	0	0	Dive Grenada	0	0	Dragon Bay	0	0	
Shadowfax	0	0	0	0	D20 Scuba	0	0	Flamingo Bay	0	0	
Grenada Seafari	0	0	0	0	Ecodive	0	0	Grand Mal	0	0	
SNS Kayaking	0	0	0	0	Native Spirit Scuba	0	0	Happy Hill	0	0	
Sunlover	0	0	0	0	Scubatech	0	0	Moliniere Bay	0	0	
Timshel	0	0	0	0	Miscellaneous	0	0				
Other	0	0	0	0							
Sub-Total	0	0	0	0	TOTALS	0	0	TOTALS	0	0	
Dive Operators:					(D) FISHER FOLK:			(E) MAINTENANCE (number of incidents):			
Aquanauts	0	0	0	0	Location:	# of Fisherfolk	Type	Maintenance:	Inspection	Damage	Comments
Dive Grenada	0	0	0	0	Beausejour	0		Moorings - yacht			
D20 Scuba	0	0	0	0	Dragon Bay	0		Moorings - dive			
Ecodive	0	0	0	0	Flamingo Bay	0		Buoys			
Native Spirit Scuba	0	0	0	0	Grand Mal	0		Signs			
Scubatech	0	0	0	0	Happy Hill	0		Boat			
Others	0	0	0	0	Moliniere Bay	0		Engine			
Sub-Total	0	0	0	0	TOTALS	0		Other			
TOTAL SNORKELLERS	0	0	0	0							
(F) INCIDENT REPORTS / ILLEGAL ACTIVITIES (comments):								(G) COMMENTS AND SIGNATURE:			
	Incident No. 1	Incident No. 2	Incident No. 3					Name of Rangers	Initials	Any other comments?	
Area observed											
Type of activity											
Time											
Number of individuals/boats											
Names (if available)											
Gear seized											
Fines imposed											
Arrests made											
Other actions taken											
Other actions taken											

APPENDIX 3 SIOBMPA RANGERS' LOG SHEET



SIOBMPA RANGERS' DAILY LOG SHEET

Date/Day:
Rangers/Initials:
Time out/in:

(A) SNORKELERS:		(B) SCUBA DIVERS:			(C) FISHER FOLK:			
		<u>Dive Operators:</u>	<u># Dive Bands</u>	<u># Dive Tags</u>	<u>Location:</u>	<u># of Fisherfolk</u>	<u>Type</u>	<u>Comments:</u>
Lauriston		Lumba Dive						
L'Esterre		Arawak Dive						
Sandy Island		Deefer Dive						
Mabouya Island		Miscellaneous						
Sister Rocks								
Jack Iron Point								
Oyster Bed								
TOTAL	0	TOTAL	0	0				
		(D) FISHER FOLK:			(F) VISUAL INSPECTION/MAINTENANCE:			
		<u>Location:</u>	<u># of Fisherfolk</u>	<u>Type</u>	<u>Inspection</u>	<u>Damage</u>	<u>Action Taken</u>	
					Moorings - dive			
					Moorings - yacht			
					Buoys			
					Boat			
					Engine			
					Others			
		TOTALS	0					
(G) INCIDENT REPORTS / ILLEGAL ACTIVITIES (strike through if nothing to report):					(H) COMMENTS AND SIGNATURE:			
		<u>Incident # 1:</u>	<u>Incident # 2:</u>	<u>Incident # 3:</u>	<u>Senior Warden</u>	<u>Initials</u>	<u>Any other comments?</u>	
Area observed								
Type of activity								
Time								
Number of individuals								
Name of boat								
Name of offenders (if poss)								
Gear seized								
Fines imposed								
Arrests made								
Repeat offender?								
Other actions taken								

APPENDIX 4 SIOBMPA YACHTING REPORT



DAILY SIOBMPA YACHTING REPORT

#	VESSEL NAME	SIZE (ft)	FEES COLLECTED:			DATE/TIME ARRIVE	DATE/TIME DEPART	PORT OF ENTRY	# OF CREW	VESSEL NATIONALITY
			US\$	Euros	EC\$					
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
TOTAL			\$ -	€0.00	\$ -				-	

APPENDIX 5 MBMPA YACHTING REPORT



MONTHLY MBMPA YACHTING REPORT

Month: _____

#	VESSEL NAME	SIZE (ft)	FEES COLLECTED:		DATE	CHARTERER/CRUISER	# OF PERSONS	LOCATION	VESSEL FLAG
			US\$	EC\$					
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
TOTAL			\$ -	\$ -			-		
TOTAL MOORING FEES (EC\$)			\$	-					

APPENDIX 6 MBMPA SCUBA OPERATOR SALES SUMMARY

MBMPA SCUBA OPERATOR SALES - SUMMARY									
Month/Year:									
(A) DIVE TAGS			(B) DIVE BANDS			(B) SNORKEL BANDS			TOTAL REVENUE (EC\$)
Operator	Number of Tags Sold	Tag Revenue (ECS)	Operator	Number of Bands Sold	Band Revenue (ECS)	Operator	Number of Bands Sold	Band Revenue (ECS)	
Aquanauts	0	\$ -	Aquanauts	0	\$ -	Aquanauts	0		
Dive Grenada	0	\$ -	Dive Grenada	0	\$ -	Dive Grenada	0		
D20 Scuba	0	\$ -	D20 Scuba	0	\$ -	D20 Scuba	0		
Ecodive	0	\$ -	Ecodive	0	\$ -	Ecodive	0		
Native Spirit Scuba	0	\$ -	Native Spirit Scuba	0	\$ -	Native Spirit Scuba	0		
Scubatech	0	\$ -	Scubatech	0	\$ -	Scubatech	0		
Others	0	\$ -	Others	0	\$ -	Others	0		
TOTALS	0	\$ -	TOTALS	0	\$ -	TOTALS	0	\$ -	\$ -

APPENDIX 8 MBMPA DAY CHARTER SALES

MBMPA DAY CHARTER SALES – SUMMARY		
Month/Year:		
SNORKEL BANDS		
Price per Snorkel Band (US\$)		\$ 1.00
Day Charter Operator	Number of Snorkel Bands Sold	Snorkel Band Revenue (ECS)
Carib Cats	0	\$ -
Starwind	0	\$ -
Shadowfax	0	\$ -
Grenada Seafari	0	\$ -
SNS Kayaking	0	\$ -
Sunlover	0	\$ -
Timshel	0	\$ -
Other	0	\$ -
TOTALS	0	\$ -

APPENDIX 9 EXCEL TUTORIAL

	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Total</u>
<u>Dive bands:</u>						
Price per Dive Band	\$ 26.67	\$ 26.67	\$ 26.67	\$ 30.00	\$ 30.00	\$ 27.74
Number of Dive Bands sold	200	350	400	250	200	1,400
Total Dive Band Revenue	\$ 5,334.00	\$ 9,334.50	\$ 10,668.00	\$ 7,500.00	\$ 6,000.00	\$ 38,836.50
<u>Dive tags:</u>						
Price per tag	\$ 5.34	\$ 5.34	\$ 5.34	\$ 6.00	\$ 6.00	\$ 5.37
Number of Tags sold	250	500	600	25	50	1,425
Total Tag Revenue	\$ 1,335.00	\$ 2,670.00	\$ 3,204.00	\$ 150.00	\$ 300.00	\$ 7,659.00
<u>Snorkel Bands:</u>						
Price per snorkel band	\$ 2.67	\$ 2.67	\$ 2.67	\$ 3.00	\$ 3.00	\$ 2.75
Number of snorkel bands sold	500	300	400	200	200	1,600
Snorkel band revenue	\$ 1,335.00	\$ 801.00	\$ 1,068.00	\$ 600.00	\$ 600.00	\$ 4,404.00
TOTAL REVENUE PER MONTH	\$ 8,004.00	\$ 12,805.50	\$ 14,940.00	\$ 8,250.00	\$ 6,900.00	\$ 50,899.50
<u>Percentage breakdown:</u>						
- dive bands	67%	73%	71%	91%	87%	76%
- dive tags	17%	21%	21%	2%	4%	15%
- snorkel bands	17%	6%	7%	7%	9%	9%
Total	100%	100%	100%	100%	100%	100%

APPENDIX 10 WORKSHOP PHOTOGRAPHS

