



Universiteit
Leiden

The Netherlands

Life in "Paradise" a social psychological and anthropological study of nature conservation in the Caribbean Netherlands

Mac Donald, S.

Citation

Mac Donald, S. (2022, May 17). *Life in "Paradise": a social psychological and anthropological study of nature conservation in the Caribbean Netherlands*. Retrieved from <https://hdl.handle.net/1887/3304059>

Version: Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/3304059>

Note: To cite this publication please use the final published version (if applicable).

LIFE IN “PARADISE”:

**A Social Psychological and Anthropological Study of
Nature Conservation in the Caribbean Netherlands**

Stacey Mac Donald

COLOPHON

Cover image

A collage of an imaginary island's historical and contemporary challenges related to its diverse society and pristine but threatened nature and heritage.

Cover Design

Stacey Mac Donald, 2022

Layout

Anna Bleeker, persoonlijkproefschrift.nl

Language editor

Prof. dr. Jessica V. Roitman

Printing

Provided by thesis specialist Ridderprint, ridderprint.nl

ISBN: 978-94-6458-163-8

© 2022 Stacey Mac Donald. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission in writing from the proprietor.

© 2022 Stacey Mac Donald. Alle rechten voorbehouden. Niets uit deze uitgave mag worden verveelvoudigd, opgeslagen in een geautomatiseerd gegevensbestand, of openbaar gemaakt, in enige vorm of op enige wijze, hetzij elektronisch, mechanisch, door fotokopieën, opnamen, of op enige andere manier, zonder voorafgaande schriftelijke toestemming van de rechthebbende.

Life in “Paradise”:
A Social Psychological and Anthropological Study of Nature Conservation in the Caribbean
Netherlands

Proefschrift

ter verkrijging van
de graad van doctor aan de Universiteit Leiden
op gezag van rector magnificus prof.dr.ir. H. Bijl
volgens besluit van het college voor promoties
te verdedigen op dinsdag 17 mei 2022
klokke 15.00 uur

door

Stacey Mac Donald

Promotores:

Prof. dr. G.J. Oostindie
Prof. dr. G.A. Persoon

Co-Promotor:

Dr. H.J.A.M. Staats

Promotiecommissie:

Prof.dr. B.A. Barendregt	(Wetenschappelijk Directeur Instituut Culturele antropologie en ontwikkelings-sociologie/ voorzitter)
Dr. F.E. Guadeloupe	(University of Amsterdam)
Prof.dr. C.L. Hofman	
Prof.dr. R.K. Jaffe	(University of Amsterdam)
Prof.dr. M.J. Spierenburg	
Dr. A.P. Wit	

The research in this PhD thesis was made possible with support of the Dutch Research Council (Nederlandse organisatie voor Wetenschappelijk Onderzoek - NWO).

ACKNOWLEDGEMENTS

What a journey this has been. Embarking on this adventure in 2015 was a dream come true. Researching a topic so dear to my heart on the islands in the Caribbean I love most is indescribable. It has been the most difficult, horrible, incredible, rewarding challenge I have ever faced. It's been lonely but I was never alone.

I am grateful to all who participated in my research. You all work tirelessly to conserve the natural and cultural heritage of three of the most magnificent islands in the Caribbean. I honor your work and I hope I have been able to tell your stories as you have recounted them to me. I thank the fishery cooperative, PISKABON for informing me, guiding me, and showing me the knowledge, cultural dynamics, and complexities that gave the depth my research needed. The World Wildlife Fund – The Netherlands trusted me and provided me with the opportunity to work with PISKABON which made my dissertation engaging, relevant, and valuable.

Re-entering academia was no easy task. I am grateful for my supervisors: Prof. Dr. Gert Oostindie, Prof. Dr. Gerard Persoon, and Dr. Henk Staats. Gert, thank you for always having an open door, for advising, and for your guidance. You allowed me to stay close to my interests, while ensuring that my work is valuable. Gerard, thank you for encouraging me to think broadly and critically. Your critical questions and constructive feedback made my writing more insightful and interesting. Henk, thank you for your determination, persistence, and guidance in making my chapters scientifically sound. Lastly, I want to thank all three of you for your patience and confidence in me that allowed me to finish my (*our!*) project.

My project was part of the NWO-funded research program Confronting Caribbean Challenges, and I shared an office with an extraordinary group of researchers: Jessica Roitman, Wouter Veenendaal, Sanne Rotmeijer, and Malcom Ferdinand. Jess, I completed my dissertation confidently because of your brilliant editorial work. Wouter, you always cheered me on, and your drive inspired me to keep going. Malcom, our discussions about Caribbean environmental justice and inequalities were refreshing. I am happy we are still working together. Sanne, my best companion and the most critical and passionate researcher I know. We started together, and we are finishing together. Thank you for ensuring that I *am* an academic. Our chats, texts, and calls pulled me through, and I am eternally grateful. No hocus pocus, focus!

To my colleagues at the KITLV –the lunches, *entre nous*, ‘under construction’ sessions, drinks, boat rides, and coffee machine chats were enlightening, fun, and inspiring. To all the PhDs – we’ve got this. To the TCH team: Thank you for including me in your exciting work and providing me with platforms to share my work.

To my dearest friends: Femi, Natalie, Daniella, Gillian, Kyara, Cleo, Tirza, Farleya, Fayola, Gigi, Dichi - you are superwomen who inspire me every day. Thank you for listening, discussing, and believing in me. I believe in you! To Tim - I am happy we met on St. Eustatius in 2016. Thank you for daring to start a business with me in the middle of my dissertation. I blame you for my magnificent delays (kidding!). Thank you for the laughs and support. To John and Daniel: thank you for your encouragement and giving me and my work a platform. I am also grateful for the support I received through my social media network. I can be quite the 'over-sharer', but am thankful for all the direct messages, emails, postcards, and supportive comments. My dream to obtain my doctorate was ignited by a dear friend and his family: Phillip, Melinda, and Maarten. They have believed in me more than I did in myself. For that, I am eternally grateful.

To my family. A very big thank you to my mama and papa, my sisters, Debbie and Shanna, and my brothers Michael and Sander. You have supported me and cheered me on throughout this journey, despite not always understanding what I was saying or doing. To the rest of my family (Oma Helga, Oma Sonja, Ray, Ingrid & Ro Astrid & Hein, Jeremy, Rachel & Dean, Dave & Antoinette, Lilian, Amy, Kathleen & Walter, Victor & Jeannette, Chey, Serge, Robert, Lenny, Melissa, Dominique, Laurence, Ben, Ria, and Alicia): thank you for the support and accepting my absence from social engagements during the past years. I look forward to being more present from now on!

Lastly, to Eric, my love, for sticking around. We met when I started my Ph.D. journey and you have been by my side until the very end. We have both grown so much. Thank you for your endless support and patience. You have seen and loved the very worst and best of me. Now, let us celebrate!

CONTENTS

Colophon	2
Acknowledgements	5
List Of Figures	9
List Of Tables	10
Prologue REFLECTIONS: A CARIBBEAN RESEARCHER IN THE CARIBBEAN	11
Chapter 1. Introduction.	
1.1 DEFINITIONS AND DISCIPLINES	28
1.2 RESEARCH AREA: BONAIRE, SABA, AND SINT EUSTATIUS	36
1.3 SITUATIONAL FRAMEWORK	47
1.4 RESEARCH QUESTIONS AND METHODS	51
1.5 STRUCTURE OF THE BOOK	53
Part 1: A Social-Psychological Understandings Of Environmental Conservation In The Caribbean Netherlands.	
Chapter 2. Why Do You Protect The Environment? A Qualitative Analysis Of The Social Psychological Drivers Of Residents In The Caribbean Netherlands To Protect The Natural Environment.	
2.1 INTRODUCTION	62
2.2 METHOD	65
2.3 RESULTS	67
2.4 DISCUSSION	79
Chapter 3. A Thematic Analysis Of The Drivers Of Environmental Conservation In The Caribbean Netherlands.	
3.1 INTRODUCTION	84
3.2 METHOD	94
3.3 RESULTS	95
3.4 DISCUSSION	115
Chapter 4. Conservation As Integration: Need To Belong As Motivation For Environmental Conservation.	
4.1 INTRODUCTION	124
4.2 CONSERVATION AS INTEGRATION, BUT ONLY IF...	126
4.3 OVERVIEW OF HYPOTHESES AND STUDIES	128
4.4 STUDY ONE: A SURVEY IN THE CARIBBEAN NETHERLANDS	129
4.5 STUDY TWO: A SURVEY IN RURAL REGIONS OF THE UNITED KINGDOM	137
4.6 GENERAL DISCUSSION	145

Part 2: A Case Study Of The Fishery Sector Of Bonaire

Chapter 5. The Fishery Sector Of Bonaire And Its Management Through Time.	
5.1 INTRODUCTION	158
5.2 BONAIRE'S FISHERY SECTOR AND ITS FISHERS: AN HISTORICAL AND CULTURAL OVERVIEW	161
5.3 POLICY SHIFTS IN BONAIRE'S FISHERY MANAGEMENT	173
5.4 DISCUSSION	195
Chapter 6. Establishing A Fishery Cooperative On Bonaire: The Silver Bullet To All Fishery Management Problems?	
6.1 INTRODUCTION	202
6.2 CO-MANAGEMENT	204
6.3 METHODS	207
6.4 CO-MANAGEMENT OF FISHERIES THROUGH A FISHERIES COOPERATIVE: THE ESTABLISHMENT OF PISKABON	209
6.5 FINDINGS	220
6.6 DISCUSSION	230
Chapter 7. Conclusion.	
7.1 RECAPITULATION OF THE FINDINGS	243
7.2 IMPLICATIONS OF THE FINDINGS	248
7.3 SCIENTIFIC AND SOCIETAL RELEVANCE OF THE FINDINGS	252
7.4 AVENUES FOR FUTURE RESEARCH	254
Bibliography	256
Appendix A: Overview Of Personal And Social Drivers Influencing Pro-Environmental Behavior By Gifford & Nilsson (2014).	271
Appendix B: Overview Of Conservation Actor Informants.	273
Appendix C: Disadvantages Of Islands Summarized By Briguglio (1995).	274
Appendix D: Interview Questions.	275
Appendix E: Online Survey.	276
Appendix F: Pca Factor Loadings Psoc And Desire To Belong.	281
Appendix G: Ostrom's Common Resource Pool Design Principles Adapted To The Context Of Fisheries By Pomeroy & Williams (1994) And Complimented With Principles From Wiederkehr, Berghofer And Otsuki (2019).	282
Appendix H: Historic Overview Of The Management Of Bonaire's Fishery Sector.	284
Summary	290
Nederlandse Samenvatting	294
Curriculum Vitae	298

LIST OF FIGURES

Figure 1. Green Iguana disguised against the cliffs on Bonaire, starkly contrasted by the turquoise waters housing Bonaire's coral reefs.	13
Figure 2. Colonial ruin on St. Eustatius in Lower Town, being engulfed by trees.	23
Figure 3. Overview over the different ways in which environmental behavior can be categorized	32
Figure 4. Downtown Kralendijk, Bonaire. Dutch influences are clearly visible in the facades of the buildings	37
Figure 5. Bonaire, Saba, and Sint Eustatius in the Caribbean region. Source: Wikimedia Commons.	39
Figure 6. Map of Bonaire. Source: DCNA.	40
Figure 7. Bonaire's pink Salt flats. Source: We Share Bonaire.	41
Figure 8. Map of Sint Eustatius. Source: DCNA.	42
Figure 9. Historical building in Oranjestad, St. Eustatius.	43
Figure 10. Map of Saba. Source: DCNA.	44
Figure 11. The Level on Saba - all houses and buildings are white, with green trimmings and red roofs and Mt. Scenery in the background.	45
Figure 12. Canons in Fort Oranje in Oranjestad, St. Eustatius.	49
Figure 13. Example of collective conservation actions in the public sphere: a group of volunteers participating at an organized beach clean-up on Bonaire.	64
Figure 14. Signage with a nature conservation message made by children on St. Eustatius, placed in Oranjestad invoking the reading to protect the natural environment.	74
Figure 15. Sint Eustatian politician Clyde van Putten speaking to a group of protesters in front of the RCN building on Bonaire.	91
Figure 16. Protest sign hanging on the gates of the government building of the public entity of Bonaire.	91
Figure 17. Small herd of cows roaming and grazing in a neighborhood on St. Eustatius.	96
Figure 18. The eroding cliff in Oranjetown referenced to by the ecologist offering to shoot down the goats on St. Eustatius.	97
Figure 19. Goats roaming in the village 'The Bottom' on Saba.	98
Figure 20. An image made by the Bonaire Donkey Protection League Foundation posted on social media to wish the community a happy Bonaire Day (national holiday).	102
Figure 21. A group of volunteers after participating in a clean-up activity on Bonaire, with (mostly) foreigners participating during this clean up. Source: Facebook.	108
Figure 22. Summary of the Identified Characteristics of Small Scale and Islandness and their Impact on the Motivation to Engage in Conservation Actions.	118
Figure 23. Summary of the Identified Characteristics of the Constitutional Reforms and their Impact on the Motivation to Engage in Conservation Actions.	118
Figure 24. Marine Limits and Boundaries of Bonaire (Credit: Tim van Wagensveld)	160
Figure 25. Performance of fisher "ShonBoeBoe" during the annual Marquarade celebration on Bonaire. Source: Skyview Bonaire.	162
Figure 26. Local fisher cleaning his catch by the water after a long day of fishing.	165
Figure 27. The old fishmarket, Plasa Machi Mimi in Kralendijk, Bonaire.	166
Figure 28. Small fishing boats at Lac Bay, Bonaire.	167

Figure 29. Overview of the number of fishing vessels and fishers on Bonaire (adapted from de Graaf et al, 2016).	168
Figure 30. A timeline summarizing the date of the key projects, developments, policy documents, and legislation. The stated dates represent the starting date of the activity	173
Figure 31. Flyer made for the Conch restoration project. Use of a 'White' hand and 'Black' to indicate collaboration between the different communities of the island..	180
Figure 32 . Range of co-management arrangements categorized by Sen & Nielsen (1996) (Original figure adapted from McCay 1993 and Berkes 1994).	205
Figure 33. Action Research Interacting Spiral (Stringer, 2007).	208
Figure 34. Opening the first official general member meeting with the goal of choosing the Board members for the fisheries cooperative PISKABON (Credits: Arjan de Groene).	212
Figure 35. The crucial moment: the brand-new members vote for the nominated fishers to form the new Board of PISKABON (Credits: Arjan de Groene).	214
Figure 36. Overview of my assistance required for PISKABON establishment and management.	217

LIST OF TABLES

Table 1. Overview of categorization of environmentally significant behavior by Stern (2000)	31
Table 2. Country of birth inhabitants, 1 January 2017 (CBS, 2017).	45
Table 3. First nationality of inhabitants, 1 January 2017 (CBS, 2017).	46
Table 4. Outline of empirical chapters.	54
Table 5. Overview of drivers expressed by Conservation Actors in the Caribbean Netherlands.	76
Table 6. Summary of implications of the context of the Caribbean Netherlands on the relationship between belonging and (motives of) conservation actions.	121
Table 7. PCA factor loadings for the items of Environmental Action Scale Study One.	131
Table 8. Overview psychological measures.	133
Table 9. Means, Standard Deviations, and Inter-correlations for the EAS subscales, and all predictor variables Study One.	135
Table 10. Hierarchical Multiple Regression Analyses Predicting Conservation Actions Study One	136
Table 11. Mean, Standard Deviations and Correlations Study Two.	141
Table 12. Hierarchical Multiple Regression Analyses Predicting Conservation Actions Study Two.	142
Table 13. Overview of marine zones and applicable legislation and legally responsible parties for fishery management on Bonaire.	184
Table 14. Stakeholder interview sample: overview.	209
Table 15. Analysis CPR principles on Bonaire's fishery sector.	235