

Indigenous animal management practices on the eve of Columbus' landfall: Isotopic and zooarchaeological investigations in the Dominican Republic and Jamaica Shev, G.T.

#### Citation

Shev, G. T. (2022, December 6). *Indigenous animal management practices on the eve of Columbus' landfall: Isotopic and zooarchaeological investigations in the Dominican Republic and Jamaica*. Retrieved from https://hdl.handle.net/1887/3494380

Version: Publisher's Version

License: License agreement concerning inclusion of doctoral thesis in

the Institutional Repository of the University of Leiden

Downloaded from: <a href="https://hdl.handle.net/1887/3494380">https://hdl.handle.net/1887/3494380</a>

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

## Indigenous animal management practices on the eve of Columbus' landfall

Isotopic and zooarchaeological investigations in the Dominican Republic and Jamaica

## 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 6 december 2022
klokke 15:00 uur

door

Gene Timothy Shev geboren te Sydney, Australia in 1985

### **Promotor:**

Prof. dr. C.L. Hofman (Universiteit Leiden)

## Co-promotor:

Dr. J.E. Laffoon (Universiteit Leiden)

### Promotiecommissie:

Prof. dr. P.A.I.H. Degryse (Katholieke Universiteit Leuven)

Prof. dr. S. Perdikaris (University of Nebraska-Lincoln)

Dr. A.G. Henry (Universiteit Leiden)

Dr. L. Llorente-Rodríguez (Universiteit Leiden)

Prof. dr. M.A. Soressi (Universiteit Leiden, secretaris)

## Acknowledgements

Throughout the undertaking of this PhD project there were many that were instrumental in assisting me academically, professionally, and personally. First and foremost, I want to extend my heartfelt gratitude to my promoter, Prof. dr. Corinne Hofman, whose guidance, foresight, and expertise in Caribbean archaeology has been of the utmost aid to me. Thank you for your time, patience and understanding, and for facilitating such an engaging research environment. I would also like to thank my co-promotor, Dr. Jason Laffoon, for imparting his knowledge and expertise in isotopic analysis from the beginning of the RMA, and for the support and guidance he has given me throughout my time at Leiden University. This work would not have been accomplishable without both of your efforts.

I would like to thank the Faculty of Archaeology, and the Caribbean Research Group for providing me with an invaluable network of colleagues and lifelong friends. Thank you especially Dr. Laura Llorente-Rodriguez, head of the zooarchaeology lab, and to Rebecca van der Ham, who helped keep the chemical laboratory organized, stocked, and safe. Thank you Vrije Universiteit (VU) Amsterdam, for allowing me access to your labs for the weighing of my samples and thank you Suzan Verdegaal-Warmerdam at the Earth Science Stable Isotope Laboratory at VU for analyzing those samples.

I want to express my appreciation to my BA supervisor at La Trobe University, Melbourne, Dr. Phillip Edwards, who was the first to take me under his wing and provide me with opportunities to teach, work as a research assistant, and co-supervise excavations. I would also like to thank a personal mentor for me at Leiden University, Dr. Andrzej Antczak, for the opportunities to teach and the quality of education you provided me. Your helpfulness, bright and infectious demeanor, and insightful perspectives serve as a great inspiration for me as they do many others.

This was research was not possible without the assistance of the Museo del Hombre Dominicano and the Ministerio de Cultura of the Dominican Republic. Special thanks go to Sr. Carlos Suriel, and Juan Almonte at the Museo Nacional de Historia Natural Prof. Eugenio de Jesus Marcano. Thank you, Dr. Menno Hoogland for aiding in the smooth running of excavations and laboratory work, and for the professional photography of specimens. I would also like to thank Dr. Renato Rimolí, who assisted me with animal identifications during my RMA. From Jamaica, I thank Zach Beier and Romaine Thomas from the University of West Indies Mona, and the Jamaican National Heritage Trust for providing export permits.

For assistance in administration and the coordination of the projects I have been involved in I would like to thank Dr. Arelis Arocho-Montes, Dr. Maribel Adame, Dr. Roswitha Manning, Emma de Mooij, Claudia Regoor, Maayke de Vries, Ilone de Vries-Lemaire, and the Dean of the Faculty of Archaeology, Prof. dr. Jan Kolen.

This research was made possible by the European Research Council (ERC) NEXUS-1492 project (grant no. 319219) led by Prof. dr. Corinne Hofman, Prof. dr. Gareth Davis, and Dr. Ulrik Brandes from the University of Konstanz, and the Nederlandse Organisatie voor Wetenshappelijk Onderzoek (NWO) project 'Houses for the Living and the Dead (grant no. 360-62-030) led by Dr. Menno Hoogland and

Prof dr. Corinne Hofman. I am especially grateful to the NWO for the PhD in the Humanities grant (no. PGW.18.015), which allowed me to pursue my PhD research without financial burden.

I would like to express my gratitude to my reading committee, Prof. dr. Patrick Degryse, Dr. Amanda Henry, Dr. Laura Llorente-Rodriguez, Prof. dr. Sophia Perdikaris, and Prof. dr. Marie Soressi. Thank you to all the anonymous reviewers and editors of academic journals, and to all my co-authors, Zara Ali, Juan Almonte, Zachary Beier, Simone Casale, Igor Djakovic, Sandrine Grouard, Corinne Hofman, Jason Laffoon and Romaine Thomas. Additionally, thank you Sven Ransijn, Emma de Mooij, Corinne, and Menno for your help with the samenvatting, and to Finn van der Leden for the cover illustration. Of course, I must extend my utmost gratitude to my very good friends, colleagues and paranymphs, Simone Casale and Igor Djakovic.

Thank you to all the people I have shared an office, a floor, or a department with over the years, Zara Ali, Dr. Marlena Antczak, Dr. Arie Boomert, Dr. Lewis Borck, Dr. Tom Breukel, Simone Casale, Dr. Andy Ciofalo, Dr. Noa Corcoran-Tadd, Dr. Natalia Donner, Marlieke Ernst, Dr. Catarina Falci, Dr. Eduardo Herrera-Malatesta, Katarina Jacobson, Dr. Jaime Pagán-Jiménez, Dr. Jana Pesoutová, and Dr. Joseph Sony Jean. To my friends and colleagues in the Netherlands and abroad, Andy, Alex, Ash, Daniel, Daniela, Dasha, Emma, Felicia, Femke, Finn, Gigi, Holly, Irini, Jay, John, Kwinten, Lucy, Maria, Riia, Roberto, Roos, Rory, Simon, and Sven, thank you all for the company these last few years. Lastly, I would like to thank my loving partner, Sascha, my dog Loki, and family, Vadim, Denise, Wyatt and Zara, for their unconditional love and support during this pivotal period of my academic career.

# Contents

	Acknowledgements	iii
1	Introduction	9
1.1	Research questions and approaches	14
1.2	The historical ecology of the Caribbean region: a prolonged history of human impacts on the environment	
1.3	Domesticated animals in the precolumbian Caribbean	
1.4	Animal translocations and human-hutia interactions	
1.5	Defining 'domestication' and 'management'	
1.6	Human-animal interactions in the Neotropics: between wild and domestic	23
1.7	Niche Construction Theory	
1.8	Isotopic extraction and analysis methods	
1.9	Dissertation structure and chapter summaries	29
	References	34
2	An isotopic and morphometric examination of island dogs ( <i>Canis familiaris</i> ): Comparing dietary and mobility patterns in the precolumbian Caribbean	
3	Coastal-hinterland exchange and garden hunting practices prior to the European invasion of Hispaniola	
4	Human and hutia ( <i>Isolobodon portoricensis</i> ) interactions in pre-Columbian Hispaniola: The isotopic and morphological evidence	
5	Palaeodietary reconstruction of endemic rodents from the precolumbian Dominican Republic: Discriminating between wild feeding behaviour from diets linked to human niche construction activities	
6	Zooarchaeological and isotopic findings from White Marl, Jamaica: Indigenous human-animal interactions and evidence for the management of Jamaican hutias	
7	Synthesis and Concluding Remarks	173
7.1	Addressing the research questions	174
7.2	Were Indigenous peoples in the insular Caribbean managing native animals prior to the European invasion?	179
7.3	Amerindian perspectivism and niche construction: two sides of the same coin?	181

7.4	Scope of future research	182
7.5	Concluding remarks	185
	References	186
S	Summary	191
S	Samenvatting	193
(	Curriculum Vitae	195