

KISS THE GROUND



ATRIA BOOKS

ALSO BY JOSH TICKELL

Biodiesel America

From the Fryer to the Fuel Tank



ATRIA BOOKS

KISS THE GROUND

HOW THE FOOD YOU EAT CAN REVERSE
CLIMATE CHANGE, HEAL YOUR BODY
& ULTIMATELY SAVE OUR WORLD



ATRIA BOOKS

JOSH TICKELL

FOREWORD BY JOHN MACKEY,
FOUNDER AND CEO OF WHOLE FOODS

ENLIVEN BOOKS

ATRIA

NEW YORK LONDON TORONTO SYDNEY NEW DELHI



An Imprint of Simon & Schuster, Inc.
1230 Avenue of the Americas
New York, NY 10020

Copyright © 2017 by Joshua Dupre Tickell

All rights reserved, including the right to reproduce this book or portions thereof in any form whatsoever. For information, address Atria Books Subsidiary Rights Department, 1230 Avenue of the Americas, New York, NY 10020.

First Enliven Books/Atria Books hardcover edition November 2017

This publication contains the opinions and ideas of its author. It is intended to provide helpful and informative material on the subjects addressed in the publication. It is sold with the understanding that the author and publisher are not engaged in rendering medical, health, or any other kind of personal professional services in the book. The reader should consult his or her medical, health, or other competent professional before adopting any of the suggestions in this book or drawing inferences from it.

The author and publisher specifically disclaim all responsibility for any liability, loss, or risk, personal or otherwise, which is incurred as a consequence, directly or indirectly, of the use and application of any of the contents of this book.

ENLIVEN BOOKS / **ATRIA** BOOKS and colophon are trademarks of Simon & Schuster, Inc.

For information about special discounts for bulk purchases, please contact Simon & Schuster Special Sales at 1-866-506-1949 or business@simonandschuster.com.

The Simon & Schuster Speakers Bureau can bring authors to your live event. For more information or to book an event, contact the Simon & Schuster Speakers Bureau at 1-866-248-3049 or visit our website at www.simonspeakers.com.

Interior design by Kyoko Watanabe

Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

Library of Congress Cataloging-in-Publication Data is available.

ISBN 978-1-5011-7025-6

ISBN 978-1-5011-7027-0 (ebook)

*The burning sand will become a pool,
the thirsty ground bubbling springs.
In the haunts where jackals once lay,
grass and reeds and papyrus will grow.*

—ISAIAH 35:7

(NEW INTERNATIONAL VERSION)

ATRIA BOOKS



CONTENTS

<i>Foreword</i>	000
<i>Author's Note</i>	000
Introduction	000
CHAPTER 1	
Showdown in Paris	000
CHAPTER 2	
Nazis and Nitrogen	000
CHAPTER 3	
Endless Summer	000
CHAPTER 4	
Meet the Regenetarians	000
CHAPTER 5	
The Buffalo Bank Account	000
CHAPTER 6	
Home on the Range	000
CHAPTER 7	
The Soilvangelist	000

CHAPTER 8	
Bismarck or Bust	000
CHAPTER 9	
A New Plate	000
CHAPTER 10	
The Regenerative Revolution	000
<i>Acknowledgments</i>	000
<i>Notes</i>	000



FOREWORD

What do I want to eat?” It’s a question most of us ask ourselves on a daily basis, but to what extent do we consider its implications? Our food choices have enormous impact. First and foremost, they have the power to transform our personal health and well-being, for better or worse. But as I have learned, in my role as cofounder and CEO of Whole Foods Market, the impact of our food choices reaches far beyond our personal health and well-being. They affect our society and our planet in numerous ways. Food is deeply intertwined with our beliefs, our ethics, our culture, our economics, and our politics. In addition, as the book you are holding highlights, it is inseparable from our agricultural systems and the essential element upon which they depend: the soil.

In this impressive and timely volume, Josh Tickell invites us to open our eyes to the beauty and significance of what lies beneath our feet. He makes a persuasive case that the importance of healthy soil is underappreciated, and as a result, the vitality of our agricultural ecosystems is under threat. Scientists estimate that it takes nature about five hundred years to create one inch of topsoil. Today, farms are losing topsoil at an alarming rate—perhaps ten times faster than nature is regenerating it. “Soil just might save us,” Tickell writes, “but we are going to have to save it first.”

Over the last century, we have witnessed the rise of an industrial-agricultural complex that has taken food production to a scale that was previously unimaginable. It has enabled us to produce enormous quantities of food at lower and lower prices and has been an important

contributor to increasing the worldwide standard of living and lessening poverty. Unfortunately, the negative unintended consequences of the chemical industrial–agricultural system have also been enormous. Practices such as the intensive use of chemical pesticides, aggressive tilling, and a focus on single crops (or monocultures) have denuded the rich biodiversity of America’s bountiful soil and contributed to a host of interconnected environmental problems.

There is no shortage of sobering stories about the industrialization of agriculture and its environmental impact, and Tickell recounts many of them in these pages. But even while shining a light on some of the uglier sides of our food system, the book never succumbs to pessimism. Rather, it presents what Tickell describes as “a unique opportunity to relearn and to truly understand our powerful role in the biological matrix of the planet on which we live.” In fact, *Kiss the Ground* is a manifesto for a new disruptive form of “regenerative agriculture”—one that is commercially viable as well as environmentally sustainable.

I’m personally hopeful about our capacity to make the shift to an agricultural system that nourishes both people *and* planet. And I believe that business, while it’s contributed to many of the challenges that we’re collectively facing, must also be part of the solution. After all, business is one of the most dynamic and innovative institutions we have. It can be tempting, when surveying the downsides of modern industry, to harken back to a “simpler” preindustrial time when humans supposedly lived in harmony with nature and closer to the rhythms of the land. However, I don’t believe in going back, even if it was possible, and it is not. I am a firm believer in progress, in potential, and in the redemptive power of human ingenuity and creativity.

In the last few decades, I have watched a generation of entrepreneurs begin to revolutionize America’s food systems and sensibilities in completely unexpected ways. I’m proud that Whole Foods Market has been a leader in this regard, and made things that were once considered fringe now commonplace. There’s a long way to go, but as a “conscious capitalist,” I’m consistently inspired by the ability of individuals and businesses to disrupt traditional and established systems

for the better. And this shift in agriculture is driven by the food choices people make every day—by more informed and conscious answers to the question “what do I want to eat?”

Tickell includes a host of practical, everyday suggestions for making choices that can power change. Interestingly, his dietary advice happens to align closely with the dietary habits that have been scientifically proven to optimize individual health and longevity (as outlined in my recent book *The Whole Foods Diet*). Eat more whole plant foods and less animal foods, and eat real, unprocessed foods. Healthy eating is a win-win—better for you *and* better for the planet.

These types of win-wins, I believe, are the hallmark of sustainable solutions. In *Conscious Capitalism*, I proposed (together with my coauthor Raj Sisodia) that a more evolved model of capitalism recognizes the many stakeholders that are critical to a business reaching its full potential. These stakeholders include not only customers and investors, but also team members, suppliers, communities, and last but not least, the environment. Conscious businesses create win-win-win solutions for all these multiple stakeholders. As Tickell argues in this book, regenerative forms of agriculture provide just that: a win-win-win. They reduce costs, increase yield, and sustain the environmental diversity and richness of the land. If he is right, they may even help address the challenges of climate change.

Our science in this respect is young. We are still in the early stages of grasping the complex biochemistry that transfers energy from soil to seed and beyond. Can regenerative agriculture preserve and renew our topsoil while still adequately feeding the Earth’s billions of people? Can it be commercially viable, as well as environmentally sustainable? Can it, as the book’s subtitle boldly claims, reverse climate change? This book makes an argument that is worthy of careful consideration.

Big changes require big dreams. Changing the world is rarely easy, or fast. But the world does change. Systems do evolve. Culture does move forward. Pioneers experiment and innovate and disrupt existing paradigms. People become more conscious and make different choices. New truths emerge and take hold. A more ethical and com-

passionate way forward emerges as we begin to take responsibility for our choices. *Kiss the Ground* is a book rich with big dreams and important new truths. I look forward to seeing what kind of change in our world it will inspire.

JOHN MACKEY

AUSTIN, TEXAS

APRIL 2017



AUTHOR'S NOTE

A long time ago I abandoned a college degree in economics to work my way across Europe as a volunteer on organic farms. That decision set in motion a path that ultimately culminated in the book you are reading. Along the way I had many unusual adventures, including getting a graduate degree in film and finding a life partner who is as passionate as I am about using the power of books and film to bring awareness to important issues.

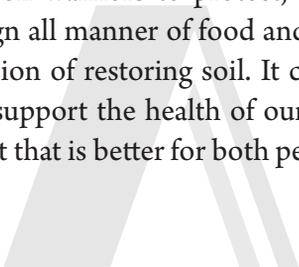
Working as film directors my wife, Rebecca, and I, along with the help of many great people, have turned this book into a documentary with the same title: *Kiss the Ground*. While this book provides a breadth of information that could never be covered in a movie, watching *Kiss the Ground* is a deeply emotional experience. If you like this book, you'll love the movie and vice versa.

Both the book and the film are due to a single catalyst. In this case, the spark that helped ignite this fire is a young man named Ryland Engelhart. Ryland and his family run a chain of organic vegan restaurants called Café Gratitude. His father, Matthew, and stepmother, Terces, also run a farm called Be Love Farm, both of which are profiled in chapter 9.

It was Ryland who first began talking my ear off about the power of soil to pull carbon dioxide from the atmosphere and the power of our food to change how we treat our soils. Since that time he and his wife, Sarah, have moved into the house where my wife and I once lived. With a group of dedicated people, Ryland operates the nonprofit organization Kiss the Ground.

Their mission is “to inspire and advocate for the restoration of soil worldwide.” Their activities span the gamut, from producing viral educational videos to creating community gardens, to helping to inform community, state, and national leaders about the power of healthy soil to simultaneously sequester carbon dioxide, store water, and grow more and healthier food for our cities, our country, and our world. Their mission is bold and critically important for the future of our species. Hence, I am donating 50 percent of the proceeds from this book to Kiss the Ground in perpetuity.

As you will see in the following pages, *Kiss the Ground* is more than a book, a documentary, or a nonprofit. It is a global movement to amass an army of soil warriors to protect, regenerate, and heal our soils. It aims to align all manner of food and product companies and NGOs in the mission of restoring soil. It calls on governments to create policies that support the health of our soils. And finally, it advocates for a new diet that is better for both people and the planet.



ATRIA BOOKS