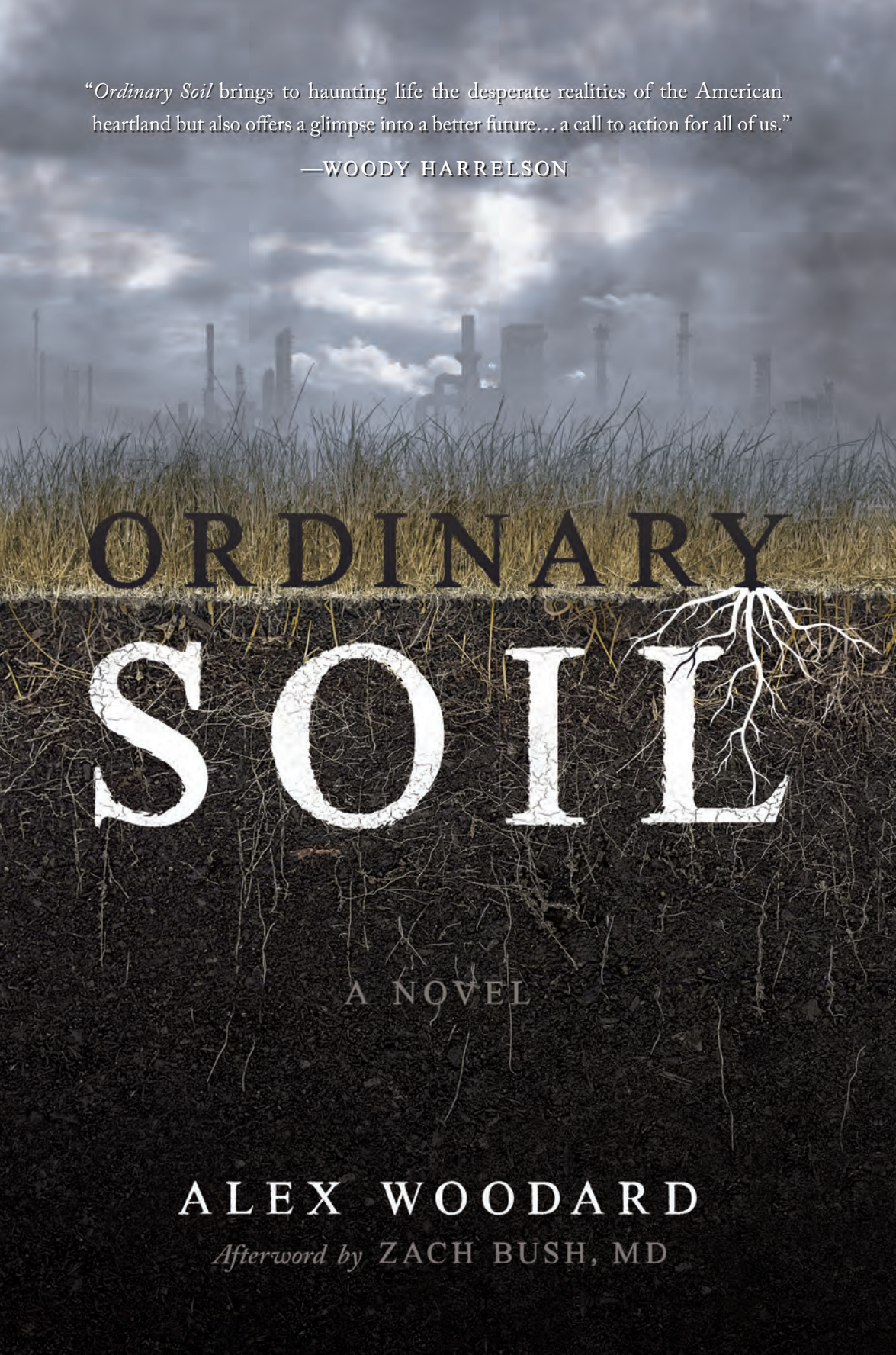
"*Ordinary Soil* brings to haunting life the desperate realities of the American heartland but also offers a glimpse into a better future… a call to action for all of us."
—WOODY HARRELSON
ORDINARY
SOIL
A NOVEL
ALEX WOODARD
Afterword by ZACH BUSH, MD

ORDINARY SOIL

ORDINARY SOIL

A NOVEL

ALEX WOODARD

Afterword by ZACH BUSH, MD

GREENLEAF
BOOK GROUP PRESS

This book is a work of fiction. Names, characters, businesses, organizations, places, events, and incidents are either a product of the author's imagination or are used fictitiously. Any resemblance to actual persons, living or dead, events, or locales is entirely coincidental.

Published by Greenleaf Book Group Press
Austin, Texas
www.gbgpress.com

Distributed by Greenleaf Book Group

For ordering information or special discounts for bulk purchases, please contact Greenleaf Book Group at PO Box 91869, Austin, TX 78709, 512.891.6100.

Design and composition by Greenleaf Book Group
Cover design by Greenleaf Book Group
Cover Images: Vaceslav Romanov/stock.adobe.com; JT Jeeraphun/stock.adobe.com; kinwun/stock.adobe.com.

Publisher's Cataloging-in-Publication data is available.

Print ISBN: 979-8-88645-104-7

eBook ISBN: 979-8-88645-105-4

To offset the number of trees consumed in the printing of our books, Greenleaf donates a portion of the proceeds from each printing to the Arbor Day Foundation. Greenleaf Book Group has replaced over 50,000 trees since 2007.

Printed in the United States of America on acid-free paper

23 24 25 26 27 28 29 30 10 9 8 7 6 5 4 3 2 1

First Edition

The soil you see is not ordinary soil—it is the dust of the blood, the flesh, and the bones of our ancestors . . . You will have to dig down through the surface before you find nature's earth.

—ASHISHISHE, Crow Nation Warrior

For Ariel, who gave me a beautiful,
ancient connection to the land.

And for Armando, who tended this soil
with love long before I was here.

This symbol, drawn by several indigenous nations to indicate the passage of time, is used in this story for the same purpose.

CONTENTS

FEBRUARY

A frigid wind howled through the frayed weather stripping of the truck, rattling the windows in concert with his vibrating phone.

Jessica.

He wasn't going to answer, not now.

Not anymore.

His focus shifted from the full-moon midnight abyss of the pigweed-infested wheat field to the fine layer of dust coating the idling truck's windshield. The cracked glass morphed into an unwelcome mirror, where a stranger, lit by the harsh, artificial glow of the phone screen, stared back at him.

Two chins too many. Lifeless eyes, weighted by sandbags filled with worry. Pale, loose cheeks, hollowed by pills and creased by bourbon.

A ghost of himself at thirty-two.

He'd touched his nose to the cheek of his sleeping wife a moment longer tonight, as he tucked the top sheet around her shoulders and whispered a hopeful goodbye.

The money would help her, more than he ever could.

He'd made sure of that, forgoing farm maintenance these last few months to pay the life insurance premiums. The policy was tucked into the laundry pile, along with a letter to her and the wheat subsidy claim.

A light flickered a few hundred yards to the west in the old bunkhouse, where he'd moved his parents last year when the tremor in his dad's hands didn't go away. His mom could still handle the cooking and cleaning. For now, anyway. About six months ago, sometime in August, she'd started flipping the light switches on and off in the bunkhouse every night, in a search only she understood and rarely remembered. And since then, the widening gaps in her memory were just being filled by more and more confusion.

When it rains on the plains, it pours.

Jake's gaze turned back to his reflection in the windshield, the barely recognizable face mercifully reduced to a shadow in the darkness of the now dormant phone. He slouched into the bench seat until the moon pierced the dim outline of his forehead, like the all-knowing third eye on the cover of the hippie book Jessica had bought him when he stopped going to church. Only good use for that self-help bullshit was to help hold down his nightstand. He hadn't been back to church since last fall, when he'd confronted the pastor in the receiving line after the service.

"Tell me, Reverend. What kind of God would punish an innocent child? Hailey, our little girl? Remember her?"

The canned "Trust in Him" response—one he'd expected—had opened a line of questioning he'd been rehearsing for months. "You mean trust the Him who blessed our girl with leukemia, and then—"

Jessica had dug her fingernails into his forearm and dragged him away, but he'd kept calling over his shoulder. "Or trust that devil you're always railing against? Which one of those fellas kills little—"

She'd stopped in the grass bordering the church parking lot and covered his mouth with her other hand. "Jake. Enough."

He remembered the drive home, how that same hand had steadied his shaking leg.

How he'd been staring vacantly into his reflection in the passenger-side window, much like he was doing now, and shut his eyes tight against the tears starting to leak out.

How her gentle fingers moved to and through his hair, as she spoke calmly, always the deep, quiet ocean to his raging storm on the surface. "Everything'll be okay, baby."

How he wanted to believe her.

How that was then.

And this is now.

A shotgun would be too obvious. So would a rope or a belt or a handful of the Oxys hidden in the glove compartment. This had to look like an accident . . . his old F-150 with the sticky clutch, wrapped around the elm by the dry creek bed, during a late-evening check on the wheat.

He took a long pull from the bottle of bourbon stashed under the seat, to both steel his resolve and sell the story. Bitterness lingered from the pill he'd chewed on the way out here—he'd heard doing that could speed the opioid release, and he was out of time—so he hit the bottle one more time to kill the aftertaste, before shoving a cassette into the ancient tape deck. He cranked the radio volume all the way to the right and waited for the first tentacles of numbness to creep behind his eyes, and within a few labored breaths, scenes started playing on the movie screen draped over his brain.

Hailey, chasing a butterfly through the wheat, bathed in late-afternoon light.

Foot slipping off the brake, truck rolling in neutral.

Jessica, tears dancing with the early spring rain on her cheeks, the morning he proposed.

Dropping into first, hitting the gas, turning away from the house, lurching toward the creek bank.

Grinding the gears into second, then third, and then the old elm taking over the frame.

In the final, blissful detachment of no past and no future, a muted present-tense washes over him. His spine turns to rubber as his head nods to the right, and there, in the half-breath before the truck hits the tree, he sees what has truly driven him to this opiate-addled madness.

The figure with the braids, in a fringed leather shirt, with deerskin breechcloth and leggings, raising a translucent hand, reaching to the passenger window . . .

Windshield shattering, engine pushing into the cab, gravity escaping the creek bank against a grinding orchestra of metal and glass.

And, as suddenly as it was stolen, the quiet peace of the open sky returns, save for the warbled playback from the thin reel of the cassette tape, echoing through the dead night of the prairie.

See this hole, I dug her deep
With these two hands
Black as coal like forever sleep
I hope you understand
I'm a working man tired of fighting the land
Gonna let these bones turn to oil
In this ordinary soil

GHOST DANCER

—1898—

> The American Indian is of the soil, whether it be the forests, plains, pueblos, or mesas. He fits into the landscape, for the hand that fashioned the continent also fashioned the man for his surroundings. He once grew as naturally as the wild sunflowers: he belongs, just as the buffalo belongs.
>
> —**LUTHER STANDING BEAR,** Sioux Chief

He climbed the creek bank, holding the elm sapling for balance as he ground his bare foot deep into the soft earth.

No fish today, but he had much to be thankful for. The spring rains had come early, not too strong, and the growing season for the three sisters of corn, beans, and squash would be good.

His father had told him the story of the three sisters, how they lived in peace and loved one another with all their hearts, protecting and helping each other grow strong. And yet, they were all so different from one another . . . the smallest, youngest sister, crawling in a vibrant green dress . . . the middle, dressed in yellow, as she wandered through the field . . . and the oldest in a pale green shawl, standing tall, yet bent to the wind, long yellow hair falling from her body.

His gaze traveled across the field. The squash leaves were beginning to weave their protective blanket over the ground, and soon, the cornstalks would rise high enough to support the sprouted beans.

He followed the shoots of green to the horizon, where man-made warriors stood ready, trained for combat against the soil, their metal talons poised to dig deep into the earth's skin. He knew she would not like this penetration, hard and unwanted, an undesired aggressor forcing himself into his virgin bride.

How many more growing seasons would there be, with his fingers dug into the earth, the mother blackening his palms?

The big machines had already come for the land, as the government had for his son.

The man in the suit had been impatient, standing in the strong sun of last harvest season and speaking fast words, as he wiped his wet brow with a white handkerchief.

I don't know when he'll be back. But the boarding school at Chilocco's for his own good. And compulsory. Means you ain't got no choice. The Indian Wars are over, and your people lost. Boy, you don't need no Indian clothes where you're going. Leave that sack there.

He had never known helplessness, and still did not know the word, but a foreign energy brought his heart into his throat when he watched the government man dig his fleshy fingers into the boy's small left forearm and pull him from the porch.

He paused now in the small field by the creek and closed his eyes, trying to see his son in short hair and a stiff shirt, like the horse trader in town. But his *shilombish,* his spirit, would not allow the vision, only the image of his boy looking back, dark eyes wide and confused, his soil-smudged cheek disappearing in the dust of the buckboard wagon.

His eyelids fluttered in deeper meditation, as he touched the fringes of the leather shirt he'd worn every day since his son had been taken. Rhythmic words rose against his breath, a spoken song learned from

the Lakota Sioux who had given him the shirt in gratitude for making camp by the creek.

Wear this Ghost Shirt
Dance this Ghost Dance
Loved ones will reunite
White man will retreat
Old ways will return

He stood unmoving, creek water pooling at his feet, earth ground into the fabric of his skin, yet separate from his loved ones, in the eclipse of the white man's machines and laws.

Here.

Indian Territory.

Where the Trail of Tears had come to an end for his Choctaw.

Where his father and mother settled on this unclaimed land and taught him the old ways.

Where he lost his wife to smallpox and his son to the government.

Where he began to move in the slow circle of the Ghost Dance, fringes of leather swaying in rhythm, late afternoon sun making shadow shapes behind his eyes.

MARCH

A sharp, searing pain in his left forearm rocketed Jake awake.

"Goddamnit!"

A nurse hustled into the room, frowning as she reinserted the needle in Jake's arm. "Third time you've pulled this thing out. First time you've noticed."

He blinked against the fluorescent light. "How long have I been here?"

"Couple of weeks . . . only started to come out of your coma about an hour ago. Looks like you're completely out now, though. I'll get the doctor and let your wife know."

She left the room and Jake craned his neck to get a glimpse out the window. Bright white lines on new asphalt, parking attendant checking his phone in a dilapidated booth, no trees in sight.

I've been here before. Oklahoma City. U of O Medical Center.

Hailey had spent a couple of months in this place's pediatric cancer facility, and Jessica had brought him to the emergency room here last year, when she'd found him doubled up in the fetal position, wedged between the toilet and the tub in their bathroom. He hated doctors, so he'd been burying his excruciating stomach pain with Advil, leftovers from the liquor cabinet, and everything on offer from the Sonic in

Guymon. The ER resident had said he had severe advanced diverticulitis and ulcerative colitis, and probably leaky gut . . . words that didn't register, and he promptly forgot them as soon as she sent him home with a list of dietary changes and a bottle of pain pills.

Could use a few of those right now.

Everything hurt.

Everything.

Jake rang the nurse call button, in search of something stronger than saline solution, or whatever was in the IV drip. "Me again, sorry. Can I get something to take the edge off? Hurts to even blink."

"No can do. Doctor's orders. You had enough Oxy running through you to take down a horse when they brought you in here. And your wife let us know you've developed quite an affinity for opioids."

Thanks, Jessica.

"She wasn't ratting you out." This nurse must've studied to be a mind reader as well as a medical professional. "You were in bad shape, and she was trying to help."

He clenched his fist in frustration, immediately relaxing his fingers when another surge of agony ran from his wrist all the way up to his shoulder. A guttural expletive, indecipherable even to him, caught in his throat as he watched the door close behind the nurse. He recognized the familiar chart taped a few inches under the coat hook . . . a laminated piece of paper with a line of happy to angry cartoon faces numbered 1 to 10. The ER resident had shown him that same scale last year and asked him where his pain landed before writing him that prescription for the pills.

Jessica was probably at least three hours away, and apparently the only way out of this place was to escape being awake. He closed his eyes and tried to paint pictures behind his eyes, doubting his body would let him sleep on command. Sometimes imagining scenes of mountains or the ocean or other places he'd never been sent him into

dreamland, but the only image he could see now was a man with braids standing in the wheat, the reason he . . .

He woke to soft fingers combing his matted, thinning hair, his blurred vision coming into focus on a tanned, lean forearm. His gaze shifted to the familiar feminine jawline, then moved to his wife's cornflower blue eyes.

"Hey, Jake."

"Hey."

"Took you long enough to wake up."

He breathed shallowly, trying to find pockets in his lungs that didn't hurt. "That wasn't part of the plan. Which you know by now."

"Pretty bad plan, huh?"

"You think talking about this right now is a good idea?"

"You think killing yourself is?"

Jake stared past her, at the television mounted in the upper corner of the room. *America's Most Wanted* at work, catching those bad guys. "I'm sorry."

"What?"

He brought his eyes back to her. "I said I'm sorry."

"You're sorry? That's all you can come up with?" Her fingers raked his scalp as she pulled them away, sending stinging strikes of lightning into his skull. "How could you *ever* think we'd be better off without you?"

Jake waited for the flashes to die behind his eyes before answering. "I thought the money would help."

"Really? The money? What the fuck . . . am I supposed to buy a new dad for Hailey? Or a son for your parents?"

"Please . . . don't bring the Hailey thing into this. And I guess I didn't think about my parents."

"You didn't think at all."

Jessica leaned into the vinyl chair by the window. Her tired eyes

reflecting in the glass took on a warped sadness, as she stared at the shimmering waves of heat rising from the hospital parking lot. "And the Hailey *thing* isn't a thing. She's our daughter."

"She's not—"

Jessica raised her hand in warning, forcing Jake to search for another response in the calloused crease of her soil-stained palm.

"Everything just got so tangled up, Jess."

She turned from the window. "Better start untangling."

Two floors up, a lab coat pocket rattled with electromagnetic radiation.

Damn phone.

He knew the paralegal he'd met last night had only taken his number to be polite, so the only person likely to be calling him was his mom. His thirties had disappeared into a black hole of long nights at this chemo lab, punctuated by the occasional nervous dinner with a lovely match from the online dating service he'd reluctantly joined. The women had always been more kind, intelligent, and attractive than he thought he deserved, which stymied most decent conversation, as well any hope for finding *the one.*

And so, here he was, another night at work, trying to distract himself from these things that mattered—these moving goalposts thrust into an impossible sky of dreams, forged from meaningful work and a life partner, wedged into the dirt of where he thought he'd be by now.

He'd come up with that metaphor on the elevator ride up this morning. His time spent sitting alone in the bleachers, under the Friday night lights of high school football, was finally paying off in useless verbiage.

His pocket vibrated again.

Yep. The woman in his life.

"Hey, Mom."

"Mark, you better come home."

He knew what those five words meant, and watched them fall through the phone, cleaving the night into everything that was before, and all that would come after.

He wasn't sure when he'd be back, so he grabbed the cardboard file box filled with his research and raced to his apartment, where he threw some clothes in a bag and made coffee for the drive. The city skyline was soon in his rearview mirror, buildings melting into double-wides into the occasional lonesome shed, until the pale night clawed at the dawn and livestock silhouettes cut across the horizon to the north of the highway. A few stray shadows loitered near the roadside, and he rolled down the window to let in the lowing of the cows. Maybe they had some self-help mantras he could cop, a quick fix for a cracked soul.

The answer was indeed there, in their instinctual acknowledgment of the new day, but Mark only heard the baritone rumble of cattle and shuddered against the frigid night, turning over and over what his first words to his father might be. But he knew no matter how much he might rehearse, all bets were off when he actually walked into his parents' house.

He scrolled through his phone for an artist that a colleague had told him about, hoping to replace his mental chatter with a better soundtrack.

Started with a *B*, right?

Right.

He hit *Play*, left the window down, cranked both the heat and the radio, and settled a little deeper in the seat. The songs were good, every-man stories sung by a road-weary voice that carried Mark through that hour before dawn that is not only the darkest, but also the coldest.

At first light, he passed the field where the high school kids used

to circle up their trucks, headlights illuminating whatever their cornfield whiskey bonfires couldn't. He'd only been invited to one of those parties, but he still sometimes wistfully replayed the scenes of tilted red Solo cups and Daisy Dukes dancing under the dripping summer sky.

Was that single July night, when he skirted the edge of popularity, actually a coming-of-age highlight?

And maybe the starkness of the frigid gray light was lending a depressive bend to the landscape, or maybe he was overtired, but that field looked bleak now, bordering on barren.

Not quite apocalyptic, but no Garden of Eden, either.

The sun was barely cresting the roof when he pulled into his parents' driveway, dropped his chin to his chest, and sobbed for the first half of Bruce Springsteen's "The Rising" until the clutching of drapes in the living room window caught his attention.

His mom, silhouetted in the glass, waved him in. He made his way out of the car, stepped onto the porch, and pushed through the front door to see a withered figure crumpled into the living room couch.

His father waited until he was sitting next to him to pivot his head in acknowledgment. "Hey, kid."

Mark's unease with confrontation, rooted in this place, in this man, rose from his childhood up to his chest, where nerves fought the first few words for air. "Oh, you taped the Thunder game last night? I haven't watched the NBA in a long time. How are they doing?"

"Better than me, I guess. Which is the only reason you're here."

"Come on, I—"

His father pushed himself up against the cushions. "Just saying you haven't seen fit to find another reason."

Mark bristled at the passive-aggressive bend. His old man had never asked him to come visit. Ever. "So, now this is my fault? What about you? Why did you . . ."

"Why did I what? Wait? I knew what was coming. Didn't want to worry your mother."

"But we could've done something. I mean, this is what I do for a living. What we took loans out to pay for . . . for Christ's sake, I'm an oncologist."

His father waved a dismissive hand at the air of separation that would always linger between them. "You work in a lab."

"I'm still an MD. I work on the cure."

"You don't cure anything, son. You figure out ways to kill one demon at a time, and there's a million of 'em."

"Where are you getting this bullshit from? *Coast to Coast AM*?"

His father angled his torso and leaned in toward Mark, as if he was about to share a deep secret. "This cancer didn't just show up out of thin air for Sunday dinner."

"No one really knows where non-Hodgkin's lymphoma comes from."

"Well, the enemy came from somewhere. Seek and destroy that target, and you'll really be onto something."

"This is medicine, not the Marines."

"Semper Fi, baby."

"Alright, then. Nice work using military lingo to solve medicine's greatest mystery, all while making your son feel like shit for being a doctor. I'm going upstairs to check on Mom, and then we're going to not talk about this ever again."

Mark left his father to stew in sickness on the couch and headed upstairs to find his mom. She'd been full of life when she was younger, according to his aunt. Big smile, big laugh, big dreams of being a dancer. But almost fifty years of living with his old man had shrunk her somehow . . . she talked less and laughed quieter these days, if at all. One of two things was probably going to happen when his father passed: Either she was going to retreat and get even smaller, or she was going to allow herself to be who she was supposed to be, at least for the last few laps of her life.

He was hoping for the latter.

For both of them.

Jessica handed her ticket to the parking lot attendant, who looked up from his phone just long enough to take her two dollars. She pointed the Toyota Tercel toward Highway 412, thankful for the little car she'd bought from another sales associate at the Walmart in Guymon.

She'd picked up shifts there to help soften the monthly gut-punch of bills. Decent employee discount, too, but probably not what her daddy had in mind for his baby girl. Stocking shelves and driving a '95 Tercel hadn't been in her plan, either. But they needed a car. And the money.

And an addicted, suicidal husband? Also not part of the plan.

She turned onto 412 and shifted gears as quickly as the tiny four-cylinder engine would allow, finally getting ahead of the momentum-laden semi in her rearview mirror. The metaphor for her life wasn't lost on her, but outrunning her kind of trouble took more than a Tercel. A few days after Jake's accident, his doctor had told her he'd eventually come out of his coma, with a long road back to any kind of normal. But he'd live.

After the wave of relief had washed over her, the tide of anger filled in. She'd walked around the house for the first few hours, turning the suicide note over and over in her hands, trying to shake the sense of betrayal. Screaming at the walls. Crying in the mirror. Whispering to Hailey.

Reeling, for two weeks.

And now, she was so tired of thinking. Feeling. Everything, really.

She looked at Hailey, smiling from the rearview mirror.

Didn't plan for her, either.

But the Lord works in mysterious ways, right?

At least according to the only Oklahoma City station that the radio could pick up at the moment, courtesy of the broken tuner.

The Lord is coming.

Any day now.

Tick, tick, tock.

Talk, talk, talk.

Some of these preachers made the worst salesmen. Politicians, too. Never a real conversation, just one insecure guy trying to be louder than the guy next to him, looking for ways to crawl into this car radio and her computer and television . . . and especially the goddamn smartphone sitting on the passenger seat.

Only way not to drown in all this noise was to turn everything off, which she couldn't do. Especially now, with a husband teetering on the edge of suicide.

And not with a sick daughter, although Hailey was always with her now.

Still, there was Jake. She needed to be available if he got into trouble. Had to be a better way, though. Growing up in a family of five, she'd survived with the simplicity of a landline. Sure, as a teenager she'd had to convince her dad to buy an extra-long phone cord, so she could talk to boys in the privacy of her room. And a flip phone had admittedly come in handy here and there in college, but she'd resisted these smartphones until Jake got her one last Christmas.

Wait.

That's it.

She could answer calls on an old-school flip phone just as easily as a smartphone.

And those fat media bastards would have a way harder time crawling into a flip phone.

The evangelist's screams through the tiny Tercel speakers distorted into warbles, as he reached the only kind of climax he'd probably ever have. Jessica cranked down the car window and turned the radio volume knob all the way to the left, until she heard nothing but the elm

branches rustling in the late spring air. She caught and held a piece of the prairie wind deep in her chest, let the breath slowly escape, and felt her cheeks rise against an unexpected smile.

Poor guy.

She pulled into the driveway and took the dog-eared photo of Hailey from the rearview mirror. The heat exposure from the direct sun already was starting to fade the image, so she tucked the picture into her jeans pocket and brought Hailey straight from the Tercel to her garden, craving the dirt therapy that had helped her cope over the last year.

And especially the last two months.

She picked up right where she left off this morning, when she got the call from the hospital that Jake was out of his coma. Digging her fingers deep, she pulled out a handful of soil, dropped in a few squash seeds, refilled the hole, and moved down the row. Her garden was cranking all around her with winter vegetables finally ready to be harvested, and she'd saved this section in the middle for spring seeding. Young plants would still get plenty of sun but wouldn't get hammered by the midday heat.

That was her theory, at least. She'd started winging this gardening thing last summer, with the help of a few books and the occasional YouTube rabbit hole, and wasn't far from putting together a meal almost entirely from the garden. Not bad for a novice.

Jake wasn't on board with just spinach and beans for dinner, of course. But she couldn't force him. Can't force anybody to do anything and expect it to stick.

Hailey was here, dancing through the green rows like she always did. Jessica watched her disappear behind the small stand of corn, just now tall enough to hide her.

"So that's how you want to play, huh? Ready or not, here I come!"

She dove into the corn, grabbing for air where she thought Hailey had been crouched.

The kid was good at this.

Even when the leukemia sapped her strength, she was good.

Jessica pulled herself up and out of the corn, knowing Hailey was still around somewhere. She went back to planting the squash seeds, one small hole at a time, waiting for her daughter to materialize again.

And until then, she had a garden to grow.

AFTERWORD

I met Alex Woodard on a small island in the South Pacific, in the first few days of what would become a global pandemic. A group of ocean enthusiasts had gathered on the tiny sliver of rock and sand to commune with nature's beautiful, powerful waves, and as the first alarms began to sound from the mainland, we discussed what the coming months might look like.

The conversation soon turned toward a different kind of biological wave headed our way. My primary focus in medicine had shifted over the last decades from developing new chemotherapy drugs to developing root-cause solutions for human and planetary health. The resulting story is one that must not only be told, but acted upon.

The conclusion?

Our species and planet are at a tipping point of biology.

Over the last fifty years, agricultural practices have depleted 97 percent of our farmable soils globally. The advent of chemical fertilizers in the 1950s and '60s disrupted billions of years of microbial diversification, which up to that point had allowed for the extraordinary nutrient and energetic capacity of our soils and plants to fuel the diversity and beauty of life on earth.

Around the world, the perceived convenience and promised productivity of chemical farming has put an end to millennia of

established farming practices, such as composting, cover cropping, and crop rotation. The advent of large-scale industrial mono-crop farming has been the demise of not just the soil systems that make life possible, but also the financial, physical, and mental wellness of farmers and the communities that are served by these chemical food systems. With each passing decade, in the United States alone, we spend tens of trillions of dollars to palliate dead and eroding soils, collapsing farm economics, and the rapid decline of human health associated with our nutrient-depleted and chemical-laden food system.

After half a century of this chemical damage to soils around the world, farms are losing their biologic and economic viability. Two tons of topsoil per acre disappear every year from farms in the United States, due to runoff and silting—a direct result of chemical and mechanical farming. This equates to an annual loss of nearly $2 trillion of a critical natural resource, and the cost of artificial nutrient replacement is thrust wholly on our farmers. In the United States alone, an estimated six thousand to eight thousand family farms close every year.

While these statistics are daunting and eye-opening for any new audience, the scale of the global soil crisis cannot be understood or fully appreciated until the stories of our farm families are illuminated. To this end, I am so grateful for the creative effort that Alex has applied to humanize the numbers and bring to narrative life the farming families that suffer too silently, must not only in this nation, but around the world. Their collective exhaustion from decades of financial and psychosocial trauma is reflected in the extraordinary suicide rate endured by our farming community, addressed in *Ordinary Soil*'s opening pages.

There's hope in a regenerative future for global agriculture, rooted in indigenous practices and adapted for modern times. But as *Ordinary Soil* suggests, our country's history is a mixed bag of ingenuity, ignorance of consequence, and cultural displacement, and this burgeoning regenerative movement cannot be limited to a change in soil management.

We must innovate regenerative philosophy and healing practices to address the humanitarian abuses inherent in the current industry of food and commodities agriculture.

We can do this, and you are integral to the solution.

Sounds simple, but you can start by growing food, even on your windowsill. One of the fundamental pivot points for World War II was home-based food production within the Allied nations. By the end of the war, we were growing 40 percent of our food in backyard gardens. Today we grow only 0.1 percent of our food this way. Plant a pot, or start a garden.

You can also get to know the people who grow food in your area at local farmer's markets and co-ops, and buy minimally processed, sustainably produced foods whenever possible. Organic and non-GMO products are your best bets for avoiding dangerous chemicals while supporting producers who are doing better by the earth. Also, you can read inspiring stories of farmers creating real change, and get involved yourself, at Farmer's Footprint (farmersfootprint.us), where we work to embrace a decentralized food economy that honors the humanity of all those who grow, process, transport, and grocery the foods that end up on our dinner tables.

Today, the existential threat to our survival is not a global empire waging war against the world; it is the rise of chronic disease and nutritional collapse. In coming to terms with what we have done to engineer a possible sixth extinction, and understanding the speed of healing that is achieved when, we realign our industries of food and healthcare with nature, we can alter the course of this biological wave already crashing in front of us.

But it will require a sea change of thought and action.

Join us.

In gratitude,
Zach Bush, MD

Zach Bush is a triple board-certified physician specializing in internal medicine, endocrinology, and hospice care. He is an internationally recognized educator and thought leader on the microbiome as it relates to health, disease, and food systems, and his passion for education reaches across many disciplines, including topics such as the role of soil and water ecosystems in human genomics, immunity, and gut/brain health. His education and work have highlighted the need for a radical departure from chemical farming and pharmacy, and his ongoing efforts are providing a path for consumers, farmers, and mega-industries to work together toward a healthy future for people and the planet.

AUTHOR'S NOTE

While not intended to be an authoritative, academic textbook on the impacts of chemical and mechanical farming, this work of fiction revolves around well-documented historical fact, empirical data, and peer-reviewed science.

Faction, if you will.

Farmers have the highest suicide rate in the United States, almost double that of any other occupation according to the CDC. The Suicide and Crisis Lifeline is available 24/7 via call or text at 988 for anyone struggling with suicidal thoughts.

For a scientific dive into the deep research waters on which this narrative floats, MIT researcher Dr. Stephanie Seneff's *Toxic Legacy* offers an exhaustive array of investigative information on glyphosate, heavily footnoted and beautifully explained.

And if you're interested in what might have been tucked away in Mark's Walmart bag, please turn the page.

ABOUT THE AUTHOR

ALEX WOODARD has toured nationally behind several critically acclaimed albums, earning a few prestigious industry nods while sharing the stage with some of his heroes. His *For the Sender* book, album, and concert series has garnered praise from *Huffington Post* ("important, enlightening, and ultimately inspiring"), Deepak Chopra ("a beautiful tribute to the resilience of the human spirit"), Dr. Wayne Dyer ("an inspiring, thought-provoking, and life-changing work"), and *Billboard* magazine ("one of the year's most touching, unique releases"), among others.

Alex lives with four horses, two dogs, two chickens, and two beautiful humans on a small ranch near the California coast.