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A Year of Bees

Jenna Butler



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Cover and interior design: Marijke Friesen

Author portrait: Andrew Wilmot

Typeset in Caslon Book

Printed by Rapido Books, Montreal, Canada

Printed on certified 100% post-consumer Rolland Enviro Paper.

10 9 8 7 6 5 4 3 2 1







The publisher gratefully acknowledges the support of the Ontario Arts Council, the Canada Council for the Arts and the Government of Canada.

Wolsak and Wynn Publishers 280 James Street North Hamilton, ON Canada L8R 2L3

Library and Archives Canada Cataloguing in Publication

Title: Revery: a year of bees / Jenna Butler.

Names: Butler, Jenna, author.

Description: Includes bibliographical references.

Identifiers: Canadiana 20200336460 | ISBN 9781989496138 (softcover)
Subjects: LCSH: Butler, Jenna. | LCSH: Bee culture—Alberta, Northern. |
LCSH: Bee culture—Alberta. | LCSH: Organic farming—Alberta, Northern. |

LCSH: Farm life-Alberta, Northern.

Classification: LCC SF523.3 .B88 2020 | DDC 638/.10971231-dc23



To make a prairie it takes a clover and one bee,

One clover, and a bee.

And revery.

The revery alone will do,

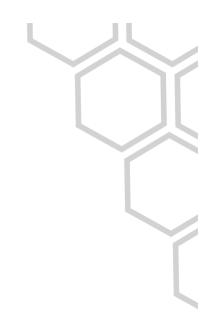
If bees are few.Emily Dickinson

Attention is the beginning of devotion.

- Mary Oliver

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### Introduction

It's almost December, the days dimming rapidly toward the turn of the year. Up here in the boreal forest of Alberta, the low sun clears the horizon and noses into our market garden around nine o'clock in the morning. It spends much of the day skimming just above the thick fringe of black spruce, willow and paper birch bordering our small farm, offering a few welcome hours of light to the house and our winter-wrapped garden. We moved the farm across the quarter section last year, after yet another county-wide flood – a Herculean task involving skid-steers, a couple of large trucks, a half-mile of new gravel driveway and plenty of impromptu rollers – but it was worth it for the gorgeous

light and air up on the old hayfield, and the precious higher ground away from an increasingly unstable muskeg. Up here, we're rebuilding our much-loved garden and hardy orchard after resuscitating the hammered-down hayfield turf through regenerative agriculture, constructing a new greenhouse and reconstituting the life of the farm that was almost lost to flooding over the past five summers.

On a day like today, the small warmth of the sun along the hayfield shelterbelt counterbalances the air temperature just enough to get the bees stirring. As the sun reaches its height in the early afternoon, they spell each other on cleaning flights from the hive, short bursts into the late November air to relieve themselves and to feel the sun for a moment, here in the heart of winter. It's a precarious dance with no margin for error: fly too far or too high, and the cold will seep into their tiny bodies in a way that the meagre warmth of the sun cannot counter. Brief freedom on a mid-winter day can have a high cost for honeybees up here in the boreal.

The colonies are active in spite of the cold – a few daring workers coming and going, a scant handful of overexuberant fliers scattered prone on the snow beyond the safe range of flight from the hive. The guard bees thrum to the upper entrance as I blow gently into the opening; they're reacting to the warmth of my breath and the stirring of the air. They buzz worriedly in response to the intrusion, then quickly calm. I don't know whether

bees have the ability to recognize faces the way the resident crows and ravens do, but we've worked with these hives through the warm months without any beekeeping gear, and the queens are used to us by now. I'd like to think that the worker bees realize I'm only checking in on them, hoping against hope that these hives will make it through the long winter. My husband, Thomas, and I can make sure that the hives are clean and safe, well-stocked with honey and bundled with insulating blankets to protect against the cold, but once the temperature dips, the bees are on their own for the worst of the dark months; we can't break the seals on a hive in the middle of winter to check how everyone is doing. I wonder if they recognize my breath at the entrance not as threat but as concern? I hope you're okay in there, lovelies. I hope you're warm.

Our five-year partnership with the bees has been beneficial to both sides. The bees have been welcomed onto a farm that practises the principles of organic living, employing no pesticides, herbicides or industrial chemicals. The hives have access to twenty acres of organic cover crops and pollinator belts sown specifically for them in the garden – buckwheat, alfalfa and sweet yellow clover; borage and phacelia; dill and sunflowers – as well as 140 acres of untouched boreal forest rich in wildflowers, catkins and leaf buds. We tend our small apiary carefully, using close monitoring and organic treatments in lieu of heavy-duty sprays and powders, with the long-term goal of raising resilient,

hardy colonies and queen bees that are accustomed to our harsh climate. Five years in, we are enthusiastic novice beekeepers, learning something new during each season of our partnership with the bees. We're devoted to our work with the handful of hives that share this space with us, and even more so to the hundreds of thousands of wild bees that call this piece of the boreal home. Our goal has always been to provide and sustain the best life possible for them out here in the forest and among the plants in our garden, under the vast expanse of northern sky.

Along with our growing awareness of the bees' delicate ecosystems and the careful balance required to maintain them, both the wild and domesticated bees share so much with us. Our off-grid farmhouse is powered by a small solar array, but it's also lit at night by beeswax tapers that we dip ourselves. The raw honey from our hives, stirred into hot lemon and ginger drinks, speeds us through the many illnesses of winter, and the clean white flakes of capping wax add a healing richness to the balms and salves that I make from plants harvested in the garden and out in the forest. When Thomas and I work together each year to can, dry and freeze food for the winter, and when I hang bunches of herbs to dry for tea, we're deeply aware that very little of our food would be possible without the constant, quiet attention of the solitary bees that pollinate most of our crops. And, perhaps best of all for our morale – for sheer joy – the company of the bees is constant and welcome in our market

garden and flower beds from March through October. They are the underpinning soundtrack and life force of the farm.

Working with both honeybees and wild bees brings us a deep sense of hope and well-being. They've taught us much about calmness and contentment – both necessary emotions when working with busy hives and living an off-grid life that can be strenuous in its seasonal tasks – and about the fine balance required to keep a colony thriving into and through the depths of winter. They've instructed us in resilience, too, in the improbability of their lives in this harsh and changing climate. Mostly, though, the bees have shown us a great deal about how necessary it is to find hope under threat, and how vital it is to protect wild spaces and manage urban development to keep pollinators safe.

My own path to the bees was a journey toward healing. I turned to beekeeping as a last, desperate swipe at personal resilience and recovery. Years of harm and injury sustained as a teen had taken away my ability to trust, to feel as though I could face my fear and move past it whole. Working with the bees has given me back my sense of agency, and it has granted me entry into a community of like-minded people who, for their own deep reasons, have found solace and empowerment in beekeeping. You go into beekeeping knowing you'll be stung, but along the way, you learn that if your energy and your practice are correct, you'll be able to build a relationship with those bees over time. Yes, you'll get hurt as part of that journey, and, especially if you're a

new beekeeper, you might have to face down a fair amount of fear. Ultimately, though, the connection to the bees, to the land on which you maintain your hives and to other keepers is worth it.

Revery chronicles a year of beekeeping and off-grid life here in northern Alberta, a province known and maligned around the globe for its oil and gas industries. What's not as well known is that Alberta is also the largest honey producer in Canada, and one of the largest in the world. The honey industry is rapidly shifting, moving away from being a male-dominated space focused primarily on large-scale bee yards. Today, many beekeepers in the province are women and, increasingly, contemporary beekeepers in Alberta tend a small number of hives in a way that is integrated with the surrounding ecosystems, including an awareness of the populations of wild bees. People are turning to beekeeping for reasons beyond the financial: in the tending of their hives, they find community, connection to place and healing.

The keeping of bees is a blending of science and spirit; a passion that is, at its roots, an act of hope. As we wake each day into a world reconfigured by climate change, COVID-19 and the fallout from our own human error, we find in ourselves a deeper necessity for a craft that allows us to look at the world around us with that vanishing and vital sense of wonder.



Learning the Ecosystems of the Farm

I'm up early again this morning to stoke the wood stove. It's been a rough night, one of many: the temperature has lingered around minus-forty degrees Celsius all week. The wind across the deep snow is dry and penetrating. The cold pushes at the windows and creeps in around the edge of the door, coating the knob in frost and the glass in a rime of ice. Thomas and I have been taking turns getting up every few hours through the night and rebuilding the fire from its quick, cold ashes; in this chill, even our sturdy cookstove has been hard pressed to hold the heat in its belly.

I'm quick in the pre-dawn cold, scraping ashes into the can for the compost heap, laving out a framework of kindling and shavings, lighting the rich fatwood with its scent of tamarack resin. As the fire slowly builds and the chimney warms into a decent draw. I huddle at the kitchen table with a beeswax taper and a seed catalogue. On these bitter grev late-January days, the catalogues are as much about healing winter-worn spirits as they are about preparing for the market garden season to come. I dawdle and dream in the candlelight, feeling the stove's warmth as it slowly begins to radiate. Upstairs, Thomas and the cats snooze through the early hours; down here by the fire, I am already doodling seed lists and bed layouts in my garden plan book. I set up our market garden each year with three factors in mind: food, pollinator support and beauty. With the farm's move up to the old hayfield, we've got a lot of ongoing work to do in resuscitating the packed ground into a finer tilth and the soil into a more resilient structure - a great deal is depending on this earth. We need to fill our pantry and freezer each year from the market garden, and once the soil is in better health, we'll begin to offer food boxes to our community again. With our small apiary, and with greater and greater awareness of the diverse array of wild bees on the farm, we strive to plant large pollinator belts and flowering organic cover crops, and to support and encourage native wildflowers. And with my desire to bring organic local flowers to our community, we've been thinking deeply about planting for beauty, too, with tall stands of sweet peas and beds of zinnias, gladiolas, strawflowers and dahlias for cutting. All of this makes for a joyous jumble of plans and ideas when the seed catalogues arrive in the middle of the cold months.

We've been building our farm for fourteen years now, though we've only been up on the hayfield for a short time. In the life of a family farm passed down from generation to generation, fourteen years is the blink of an eye. In the lifetime of the land on which we live, it's scarcely a ripple. Our farm is located on Treaty 6 land, the traditional territories of the Cree, Dene, Niitsitapi (Blackfoot), Saulteaux, Nakota Sioux and Métis Nations, who have lived on and stewarded this place for much, much longer than we have.

In the timeline of our small off-grid farm created from scratch, those fourteen years of working with the land have taught us more than we could ever have dreamed of at the onset, and they have made us realize how much we still have to learn. The old adage once again proves true: *The more I know, the more I know I don't know.* That's the paradox of working with the land in a sustainable way, learning its cycles and seasons, the length of time it takes to build up soil, ecosystems and resilient pollinator populations. The Earth is a constant teacher.

As students of the land, we can choose to learn through humility or hardship. Humility can be a tough path at times. It often means setting aside the things we dream of doing

with the land until such time that we learn a way to make them possible without destroying ecosystems or compromising the many untouched acres of forest. Sometimes. learning and living with humility means building a kind of life that others wouldn't want or might not understand. Our off-grid farmhouse is an example of this, especially on a frigid morning like this one. We live frugally and in a relatively small space (though we are grateful to live well and without complaint, thinking of what others must endure around the world). But we live by a principle of taking no more than we need, and so we conserve water and materials to a degree that might be uncomfortable to some. We reduce how much water we use, and turn instead to rainwater for our washing, showering and laundry. We monitor the waste we create and take responsibility for where and how we dispose of it. Although living and learning with humility can be pretty tough at times (it would be nice to have a regular flushing toilet, and, on the really hot days, air conditioning), we've come to understand that learning the hard way by taking too much can be far worse. There's only so far you can go on a piece of land - with countless chemical inputs, with large machinery, with seeing the land as a resource for the taking instead of a series of ecosystems to work with - before the land refuses to give you any more. In our own community, we've seen worn-out farms and soil that's become almost unusable because it's got so little left to put into crops. Learning with humility about fitting into an existing ecosystem might mean sacrifices and compromises, and perhaps a redefinition of what is *enough*, but at the end of the day, you're still left with something good. Learning the hard way means that, ultimately, you're not left with anything much at all. We've come to regenerative agriculture in this way, believing deeply that living with humility means living in such a way that you leave things better than when you found them. Restoring the old hayfield and transforming it into a flourishing organic market garden feels like a good way of giving back, even as we work with the land to fulfill our own needs.

One of the most powerful results of working with the land in a conscious way has been coming to see it as a series of interlinked ecosystems, and realizing that what we do to one ecosystem we effectively do to all. It's not enough to think to ourselves, Oh, we need some more garden space. We'll just clear another couple of acres this winter and then plant the new land in the spring. Instead, if we want to take drastic action like this, we need to be aware of all the changes we'd be inflicting on the interlinked ecosystems of our farm: reducing communities of trees by clearing some of their number, turning what was formerly deep forest into verge and reducing soil diversity because leaves will no longer be falling and decaying on forest floors that have been turned into cropland. Water will move differently across this newly cleared land when the rains come, which they've been doing with increasing regularity each summer. More fertility

will end up washing from the soil into the ditches, and from there into the dugout, where the duckweed will bloom into a thick green carpet in the over-rich water.

As we've worked with honeybees and become more observant of the wild bee populations on the farm, we've also become much more conscious of how everything around us fits together – from the native plants to our garden plants, from the shaping of the garden beds and the natural contours of the land to the movement of water and the presence of animals and birds. We've learned a great deal about the ecosystems we're a part of here in the boreal by watching the bees, both domestic and wild, and slowly coming to understand the superorganism of the hive. As I leaf through my seed catalogues on this frigid morning, I'm already thinking ahead to which plants will best support the bees and fit well with the existing range of diverse wild plants on the farm, as well as which will best nourish us and provide food and beauty for our community. The bitter cold outside might have reduced our January world to the small scope of the farmhouse, but through a developing awareness of how we fit into our larger ecosystem, my mind, as well as my practice as a farmer and beekeeper, has been hugely expanded.



Jenna Butler is the author of three critically acclaimed books of poetry, Seldom Seen Road, Wells and Aphelion; a collection of ecological essays, A Profession of Hope: Farming on the Edge of the Grizzly Trail; and the Arctic travelogue Magnetic North: Sea Voyage to Svalbard. Her newest book is Revery: A Year of Bees.

Butler's research into endangered environments has taken her from America's Deep South to Ireland's Ring of Kerry, and from volcanic Tenerife to the Arctic Circle onboard an ice-class tall ship, exploring the ways in which we impact the landscapes we call home. A professor of creative writing and eco-criticism at Red Deer College, Butler lives in northern Alberta on an off-grid organic farm.

"In these thoughtful and sensuous essays, Butler – an educator, poet, gardener, beekeeper, land steward and survivor – works an alchemy much like that of the bees and plants she nurtures. Butler's ideas and insight shift and deepen through seasons of introspection and abundance; her dedication to healing extends to cultivating community across species.

"The reader finds a literary space that resembles a carefully tended bee yard or garden, a vibrant and enlivening whole, resonant with the daily effort of transforming personal and planetary trauma 'into sustenance, into sweetness."

-BASMA KAVANAGH, author of Niche and Ruba'iyat for the Time of Apricots

"Revery took me on an emotional journey through peaceful and soul-humming reflections, relatable heartbreak, flashes of anger and fear, and, in the end, hope and inspiration. This chronicling of the endearing bond between humans, the Land and the Bees teaches us about reciprocity, interdependence and self-determination: the very teachings Indigenous peoples, who have deep connections to Mother Earth, have been trying to share with the world all along. Each one of us as human beings, regardless of each of our backgrounds, has a role to play and a responsibility to fulfill. We don't necessarily have to be farmers or beekeepers, we just have to be HUMAN. Revery shows us that to remember how to be human again, we must go back to the Land, sit and listen, and She will tell us all we need to know. It is a reminder of connecting us to our humanity once more, and not just for ourselves and our own families and communities, but for our entire planet, our Mother Earth."

 $-MANDY\ BAYHA$  sits on an ecological working group for NASA and the board of directors at Nia Tero. She works for her local Indigenous self-government, the Délįnę Got'įnę Government, as the Director of Language, Culture, and Spirituality. She is a mother, an advocate for Indigenous rights issues and the environment, and most importantly, she is the granddaughter of her Ancestors, the Sahtúot'įnę.



\$18 CDN / \$16 US

