

THE ECOLOGY OF
Herbal
Medicine

*A Guide to Plants and Living Landscapes
of the American Southwest*

DARA SAVILLE

University of New Mexico Press / Albuquerque

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Foreword

Like people everywhere, herbalists live and practice in a time of planetary stress, at the edge of intense challenges, at the crux of possibilities informed by the land, by the plants themselves—and by books such as this one that remind us to go out and listen, suggesting ways to look and perceive and providing encouragements to feel. Herein is a combination southwestern herbal, manual for conservation and restorative action, and song of love. It inspires us to learn the medicines of many of this region's signature healing plants while acting as agents of healing ourselves. It brings to our attention the immense joys of nature, connection, and service in the face of all that might be arrayed against us.

THE SITUATION

Humankind has forever depended upon the living land for its own existence and sustenance, and paid a high price for disrupting or overtaxing the ecosystems we have always relied upon. We created mythologies and religions to honor inspirited nature and taboos to prevent its despoilment. But as human civilizations and technologies have advanced, so too have the existential affronts that these make possible—mortal threats not only to ourselves, our food crops, and the soil they grow from but to all life forms. Exponentially increasing human population and development, induced climate change, toxic insecticides and herbicides, the destruction of natural habitat, the introduction of invasive species, and genetic manipulation are just a few of the compounding means for this self-destructive course—made possible first and foremost by a shifting of cultural values and focus, and a dangerous and disorienting estrangement.

Both effective herbal healing and our species' ultimate survival depend upon a literal and symbolic return to the roots, a cultural reset, and a deep personal refamiliarization with the plants and our purpose, with whole ecosystems as well as those specific herbs we grow and gather. A substantive and vital belonging. Strangers no more.

THE PRACTITIONER

Herbalism is literally “natural healing,” predicated upon the energetics, patterns, and effects of medicinal plants. It is informed and equipped

by the natural world and by natural processes, and obviously cannot be practiced without either the herbs themselves or the ground they sprout from. By virtue of their practice, the herbalist sees the connection between conserving or propagating herbs and the protecting and nurturing of the land, between the healing of the human body and the healing of the earth. While we might deny the fact or choose less controversial/triggering terminology to describe it, there can be no meaningful and lasting medicinal plant tradition apart from what we here call ecological herbalism: botanical treatments that both contribute to and depend upon a recovering world.

As herbalists, we need to know about human constitutions and conditions, constituents and actions, and different kinds of preparations, from tinctures and teas to decoctions and topical creams—even the rudiments of psychology and intakes, and practicalities like business and taxes. But as always, one of the things we need most is an accurate, comprehensive understanding of those herbs and trees that we work with.

THE PLANTS

My home is a remote and utterly inconvenient wilderness paradise in the San Francisco Mountains in the Gila bioregion of southwestern New Mexico, seven river crossings from pavement and hundreds of miles from opportunities for incomes and social pleasures. What makes this river-laced canyon a paradise in my estimation is its tribe of green beings and uncompromised creatures, feeding and frolicking, trying to avoid predation and deal with climatic changes in their instinctual, relational ways, unimpaired by civilized aims and controls. I arrived seeking sanctuary for my aberrational self, soon finding a biological sanctuary that I was in place to create—learning how to study, commit to, pledge to, and guard it, helping to restore the health and vitality of what is uncontestedly a rare and precious riparian treasure. A decade of livestock exclusion, removal of invasives, and the replanting of native species resulted in a vibrant willow, cottonwood, and alder forest along the river named after Saint Francis, which then became evidence in a federal court case in support of a thirty-mile-long protective riparian restoration zone that now protects far more than our private property inholding.

Study and observation of the ecosystem from season to season was essential to the successful establishment of the Anima Botanical Sanctuary, finding out what helps or hurts the various natural components and their patterns of interaction. This requires knowing what plants and animals are

native, which species are introduced, which species resided in a place prior to human presence or our personal arrival. As herbalists, it also means learning which plants have medicinal benefits for people, their properties, uses, and contraindications. And in all cases, it means figuring out what we can do to contribute to their health in turn.

Fundamental to this book are its excellent plant profiles, describing their places and purposes in their environs, as well as their places and purposes in the herbalist's apothecary. In the book's second part are concise, detailed portraits of some of the most emblematic and most medically significant southwestern species, from angelica to ocotillo and yarrow. While it draws from author Dara Saville's intimate familiarity with the three primary landscapes of her adopted region, her modeling, precepts, and insights apply to any and all bioregions and ecosystems, regardless of where one lives on this planet. By understanding how native species thrive and interact—their needs, advantages, challenges, and vulnerabilities—in one environment, we can more easily recognize such patterns and dynamics in other areas and other different conditions.

THE WRITER

Plants and land speak to us, though not in words but through their beings, examples, and responses to what they interact with. It is thus fortunate that throughout recorded time, there have been people insightful and comprehendible enough to speak for them, as rational agents, determined champions, and wild celebrants intoxicated with their presence, energy, healing effects, and breath-stopping beauty.

When I first met Dara Saville, her gifts, herbal skills, and dedication to share them appeared powerful and pronounced. I at once felt deeply allied, something that only increased upon finding out that she was actively heading a project to protect and perpetuate the native yerba mansa struggling in the river-edge bosque alongside this state's Rio Grande. Her brilliance and knowledge proved grounded in direct, hands-on action, sprouting and transplanting, watering and supporting patches of this healing plant where it had once been extirpated. She has since become an integral part of our plant healer mission, teaching at our annual events and writing a column for *Plant Healer Quarterly* called "Of Wilderness and Gardens." I foresaw and agitated for her authoring her first book and am honored to now pen this foreword to it. You will, I imagine, feel as equipped and as moved as I do after partaking of her plant-hearted words in these poignant pages.

Dara is one of the most insightful, studied, and evocative heroes of natural healing and healing nature, and this book is surely destined to be one of its revealing lights.

THE COMMUNITY

For tens of years I have dedicated myself to speaking, creating annual events, and writing and publishing plant healer books about the essentiality and inseparability of ecological, mental, and bodily health. I have attempted to illuminate the lessons provided by nature and by wilderness to explore human quandaries around healing, identity, purposes, roles, culture, expression, and satisfaction. In the course of such weavings, I have affirmed by experience and revelations, and been alerted to and surprised by, the depth and extent of patterning and phenomena. I have witnessed the coming together of herbalists and conservationists, scientist and mystics, astute students and self-empowered kitchen sink medicine makers, sharing a childlike sense of wonder and a lifetime commitment to what they study, practice, and love. Perhaps more than anything else, I have been impressed by the attractions to and cohesion of a proactive, interconnected “family.” Ecologists use terms like *biotic community* and *plant community* to refer to complex interdependent systems, to plants, animals, and microorganisms that recognize, communicate with, and somehow help sustain one another. And I understand that the intimate and accessible folk herbalism that I, my partner, and allies have helped foster and further is itself a diverse, contiguous, adaptive, reciprocating healing community, united by a love for plants and a shared desire to assist and to revel!

THE MEDICINE

As much as we collectively affect land and ecosystems, so too are we in part a product of the regions, landforms, weather, and biotic communities that we exist within, sculpted and infused, tempered and teased by a particular place. Its influence penetrates and permeates, even in the most metropolitan of cities, marking our origins or branding us with the traits and tastes, spirit and feel of an adopted home. Our “sense of place” contributes to the character and momentum of our creations and accomplishments, our pleasures, and the tireless work to help with a crucial return to health. At best, it infuses our potions, lends us its balm, supports our mending, excites our efforts, and awakens our callings and dreams.

I feel strongly that what the land and the plants are saying to us, and through us, is this: We are needed. We have medicine to make. And when it comes to living processes such as earth and healing, that medicine must without a doubt be us.

Jesse Wolf Hardin

CODIRECTOR, PLANT HEALER PUBLICATIONS AND EVENTS

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Preface

Rounding the mountain road that winds down from Albuquerque's Sandia Crest, an astounding view of the valley emerges from a break in the trees. From the passenger seat, one can see the contours of the earth, the textured landforms rising from the desert valley, and the patterns of human use of the land. The intense light of the desert sun washes almost all color away, creating a soft palette of muted earth tones undulating across the surface. The narrative of this place is on full display. Memories of field trips exploring the landscapes of the Southwest with University of New Mexico geography professor Jerry Williams begin to fill my head. Hiking the endless canyons of slickrock country, climbing volcanic mesas along the Rio Grande Rift, touring railroads and mining towns in the high mountains, driving the dirt roads of the desert grasslands, and visiting old homesteads of the eastern plains, we revisited the layers of the land and people that make up this region. Lost in this ancient and enduring story of place, I am suddenly jolted back into reality as the driver, my herb teacher Bert Norgorden, jumps on the breaks, swerves to the right, and skids onto the gravelly shoulder of the road. He slams the truck into park, jumps out, and starts walking briskly up the road without a single word. Stunned and not sure what to do, I submit to curiosity and decide to follow him up the road. When I catch up, I see him standing over a small roadside yarrow plant that is as many shades of pink as the high desert sunset. Since most yarrow plants have white flowers, this is a sweet surprise. For Bert, however, I immediately see that this is so much more. Silently observing, I witness a genuinely loving smile unfurl across his face. He crouches down and stares into the plant with a sparkle in his eye—the kind of sparkle that appears almost magically when a ray of sunlight meets a ripple of water in a trickling mountain stream. In this moment he is drawn into another world. Entranced by the spirit of the plant, his posture relaxes, an expression of pure contentedness appears on his face, and gratitude radiates from his heart. The transformation seems total, as if he really is in another place, where peace and fulfillment are all that exist. In this moment I too am changed. I understand for the first time that such an experience is possible, that deep relationships with plants can bring about altered states of consciousness that have the potency to change our perspective and even clarify the very meaning of life. All the years of rooting into the land with Jerry and now this culminating moment with Bert and yarrow set me forth on



FIGURE 1 Pink yarrow (*Achillea millefolium*).
Photo by author.

a path of discovery to my own relationship with plants and ultimately to a new way of being that is shaped by the living landscape itself. This book is the result of that journey into botanical relationships and allowing myself to be remade by the will of the land.

The circumstances of our current era demand an herbal and ecological manual written for nature lovers and plant practitioners with a focus on the interconnectivity of people, plants, and the land. This book proposes an evolution in our philosophy and approach to herbal practice and an understanding of the land that highlights the ecological interactions of plants, awakens our empathic experience with the entire living landscape, and promotes a better understanding of the dynamic biological and cultural worlds in which we live. As we move through a twenty-first century characterized by globalization, climate change, intensified land and water use, and humanity's increasing disconnect

with the rest of the living world, this book serves as a reminder about the importance of our connection with place, provides a pathway to understanding the medicinal properties of plants through ecological relationships, and offers inspiration for working with plants in a way that restores our union with the land. In our struggle to adapt to new environmental realities, an interdisciplinary approach to herbalism and other naturalist studies is important to understanding our current problems and protecting the biological and cultural inheritance of future generations.

Through the chapters in part 1 of this book, I present different aspects of developing and experiencing relationships with the rest of the natural world. Chapter 1 introduces the concept of ecological herbalism, an approach to working with plants that is based on their interactions with other elements of the natural environment, including us. The chapter outlines why this approach is not only relevant but also necessary in the rapidly changing modern world. Chapter 2 tells the stories of three classic landscapes of the American Southwest and how characteristic medicinal plants are responding to environmental changes unfolding in these places. These stories help us share the experience of wild medicine plants and understand them more deeply. Chapter 3 discusses the need for a new paradigm in understanding human relationships with the land and how to go about creating that within ourselves and on a societal level. It outlines specific practices for making this

transformation and the importance of empathy that transcends humanity in this process. Chapter 4 describes three examples of personal relationships I have developed with some of my favorite places and plants. These stories are intended both to illustrate how appreciation for plants and love of the land can change our lives in profound ways and to serve as inspiration for anyone seeking a deeper connection with the network of life.

In part 2 of this book, I describe numerous plants and how to work with them for health and well-being. Chapter 5 is a brief discussion on the importance of long-term sustainable practice and the role that weeds, other common local plants, and cultivated garden herbs can play in enhancing our herbal experience and protecting wild plant populations now and in the future. Chapter 6 is the *materia medica*, providing an in-depth look at thirty-nine medicinal plants that feature prominently in landscapes and herbal traditions of the Southwest. This selection includes archetypal medicinal plants of the American West as well as naturalized herbs that build a cultural and biological continuum with the Old World. The final section covers a short selection of common invasive medicinal trees and includes a discussion on integrating these species into our apothecaries.

The purpose of this book is multifaceted. The information included in part 1 is intended to encourage awareness and conversation about our changing world and what it means for the plants and places we love. I hope the personal stories will help guide people into meaningful relationships with the land and plants for a better quality of life and will inspire us all to work toward more balanced and sustainable use of the land. The plant profiles in part 2 are designed to increase our understanding of plants' relationships with their environment and with us. These monographs offer a way of getting to know each plant individually and to make personalized connections with those herbs we feel most drawn to. Through plants, we may also become more deeply attuned with the places they grow. It is my hope that this book will provide information, tools, and inspiration for knowledgeable, mindful, intuitive, and passionate engagement with the land and plants through herbal practice and general lifestyle.

Although the days of explorative field trips and herbal apprenticeship with formative teachers are behind me, the legacy of those people, places, and experiences has laid the foundation for a worldview that is based on the interactions of all components of the living landscape. Looking out across the land, I see layers of the biological and cultural worlds that weave themselves together, making a place I call home and inviting me to find my role within it. While hiking in the wilds or standing in my garden, I can conjure again the

alterative experience of deep connectivity with plants and the land, returning to that place where the reciprocal exchange of life occurs. In this way, I am drawn into a world where the land becomes my teacher, plants share their life experiences, and I grow and evolve in tandem with the rest of the living world. It is in this moment of joined reality that a clear and simple picture emerges: our union with the natural world nourishes and restores our own wellness, fosters our individual and collective resiliency, and opens the door to limitless possibilities. This place of shared being is where our own vitality is rejuvenated and serves as a fountain of inspiration for actions derived from gratitude and a sincere love of life—all life.