

STRAWBALE
HOME PLANS



STRAWBALE HOME PLANS

WAYNE J. BINGHAM AND COLLEEN F. SMITH



Gibbs Smith, Publisher

TO ENRICH AND INSPIRE HUMANKIND

Salt Lake City | Charleston | Santa Fe | Santa Barbara

To Michelle, David, Christopher, Jon, Mary, and Michael—in gratitude for your lives.

First Edition

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We are grateful to the Colorado Straw Bale Association for their efforts in promoting strawbale building and their home tour in

conjunction with their 2005 conference in Carbondale, which gave us the opportunity to visit many, though not all, of the strawbale homes in that mecca of strawbale building, and to the Green Builders Web site and their International Strawbale Registry at www.greenbuilders.com. We encourage all strawbale owners to register their buildings with them to keep their database up to date.

We would also like to commend and thank the many craftspeople who have been involved in strawbale building. We appreciate their generosity in taking time from their busy schedules to share their excitement for their work with us. There is a great community feeling engendered through natural building and working with

homeowners who recognize the importance of building with concern for the environment and respect for our natural resources in mind.

We appreciate the invitation and encouragement from the people at Gibbs Smith, Publisher—especially CEO Christopher Robbins, editorial director Suzanne Taylor, and editor Aimee Stoddard—to work with them in preparing and producing this book.

Since the mid-1990s when the strawbale-building renaissance began, there has been a maturing body of work available to include in a book that could stimulate ideas and provide plans, photographs, and information for those wanting to design their own strawbale home.

We worked with Christopher Robbins at Gibbs Smith, Publisher, to define a broad range of building types, from small retreats and rural off-grid homes to urban houses, to explore and present along with floor plans and owner's personal experiences.

Even though you will find that we have categorized the buildings we've included in this book, we found that each building was an experiment of one. Each owner researched the available books, magazines, and periodicals, defined their needs, and then worked through a design process and construction process. What you will find here are the results of thirty-one individual, unique efforts.

We felt that you should have the story of each project by the owners and builders in their own words in addition to descriptive data, photographs, and floor plans. It seems impossible to separate the building from those who envisioned and then built it. Close reading will reveal homeowners' satisfactions, lessons learned, and recommendations. We have also added our comments at the end of each project.

Did we find trends? We did not find developers building strawbale houses speculatively on quarter-acre lots. We found individuals with different influences and constraints building in ways unique to them and their perceptions. Some used old barn timber frame structures to wrap with strawbales. Some experimented with a small studio expressing the flexible and artistic qualities of earthen plasters. Another encountered a sloping site and built with single levels on one side of the slope and multiple levels on the lower level. An Ecological Villa was built on the island of Rhodes in Greece.

We found many unique approaches to strawbale design and building based on people's needs and desires. A family of four, in which the wife and mother is confined to a wheelchair due to a climbing accident, built their single-level house with complete accessibility, from a wheel-in

Introduction

shower to level planning, to counters designed to allow full participation of an energetic individual. Additions were built onto older wooden structures. We discovered a delightful small guesthouse that brings to mind a French farmhouse that has a living roof. A small family on a modest budget built a cozy, intimate, lovingly plastered home in Nebraska.

Curves were used creatively. Susie Harrington and Kalen Jones explored the articulation of walls and roofs in several of their passive solar designs. Many other owners and builders used the inherent moldability of plastered strawbale construction to bring curvilinear walls into their environment.

Are there areas of the country where strawbale seems to flourish? Yes. One pioneer builds and sets an example; others then follow. Fairfield, Iowa, has a number of structures influenced by the Sthapatya Veda principles. Carbondale, Colorado, was the site of a strawbale home tour with sixteen different structures within a twenty-mile radius. Teton Valley, Idaho, has two dozen. Moab, Utah, has structures numbering in the twenties.

We found many more projects than could be included here. We are aware of strawbale building in China, Japan, Australia, Saudi Arabia, and many countries in Europe.

There are numerous architects, designers, and craftspeople developing skills needed to design, construct, and finish strawbale buildings, exploring the potential of earthen, lime, and other plasters. The services of these professionals are becoming available to future strawbale builders to help achieve their dreams.

Our previous strawbale learning experience was with small, owner-built structures. We again found many of these wonderful structures during our research for this book, but we also discovered a wide variety of other approaches in our travels. We encountered larger community buildings, including a dojo, a bird sanctuary, and a school. They are included to illustrate the diversity of expression available to this humble yet versatile material.

—Wayne and Colleen



We met and photographed this farmer hauling strawbales on the island of Santorini, Greece, in 1999. The image captured our imagination and served as the expression of building with strawbales: the basic building component, subject to the will of the person with the vision and the ambition to construct his or her own shelter. This book celebrates diversity in showing how vision and ambition can be manifest.

