

A Note from the Authors

In our note to the first edition of this book, we expressed our surprise at having become *professional straw bale builders*. Those are four words that would have been unthinkable together a decade ago, and yet we are now joined by many others who have the same job description. In our province alone there are numerous builders and companies specializing in straw bale structures, and around the world the number has grown so that it's no longer possible for all of us to know each other.

And yet, among the many people who now make these buildings, live in these buildings, or aspire to make and live in them, we continue to find a unique kinship and understanding. The term "straw bale movement" sometimes gets bandied about. Though it's far from an organized, cohesive movement, there is no doubt that it is growing quickly, and that many of us involved have the same goals.

Our society is heading toward a new understanding of our built environment. For centuries, people were always closely involved with, and

responsible for, the buildings they inhabited. Now we spend even more of our time in buildings, many of which are extremely unhealthy, but have lost the connection between ourselves and the places in which we live, learn, and work. As we learn ever more about how buildings work (and, just as importantly, don't work), we understand the importance of creating buildings that are healthy, unique, beautiful, and well suited to their inhabitants.

Learning about straw bales has been a motivating factor in this education, for us and for many others. But straw bales alone are not a solution; they are part of an answer that will take more than the rest of our lives to figure out. Everybody who takes a step in this direction is merely adding to a pool of knowledge that, someday, will see the widespread creation of buildings that meet high ideals of performance, aesthetics, and environmental appropriateness.

Please accept this book as part of our ongoing contribution to this wider learning.

Introduction

What to Expect from This Book

The idea of straw bale building has certainly hit a nerve in our collective thinking. An almost forgotten building style that was only ever used briefly in a small prairie region of North America has, in the past 25 years, spread to become practiced almost everywhere. Tens of thousands of people worldwide have chosen this system to build their homes, often in the face of resistance from local authorities and to the raised eyebrows of family, friends, and neighbors.

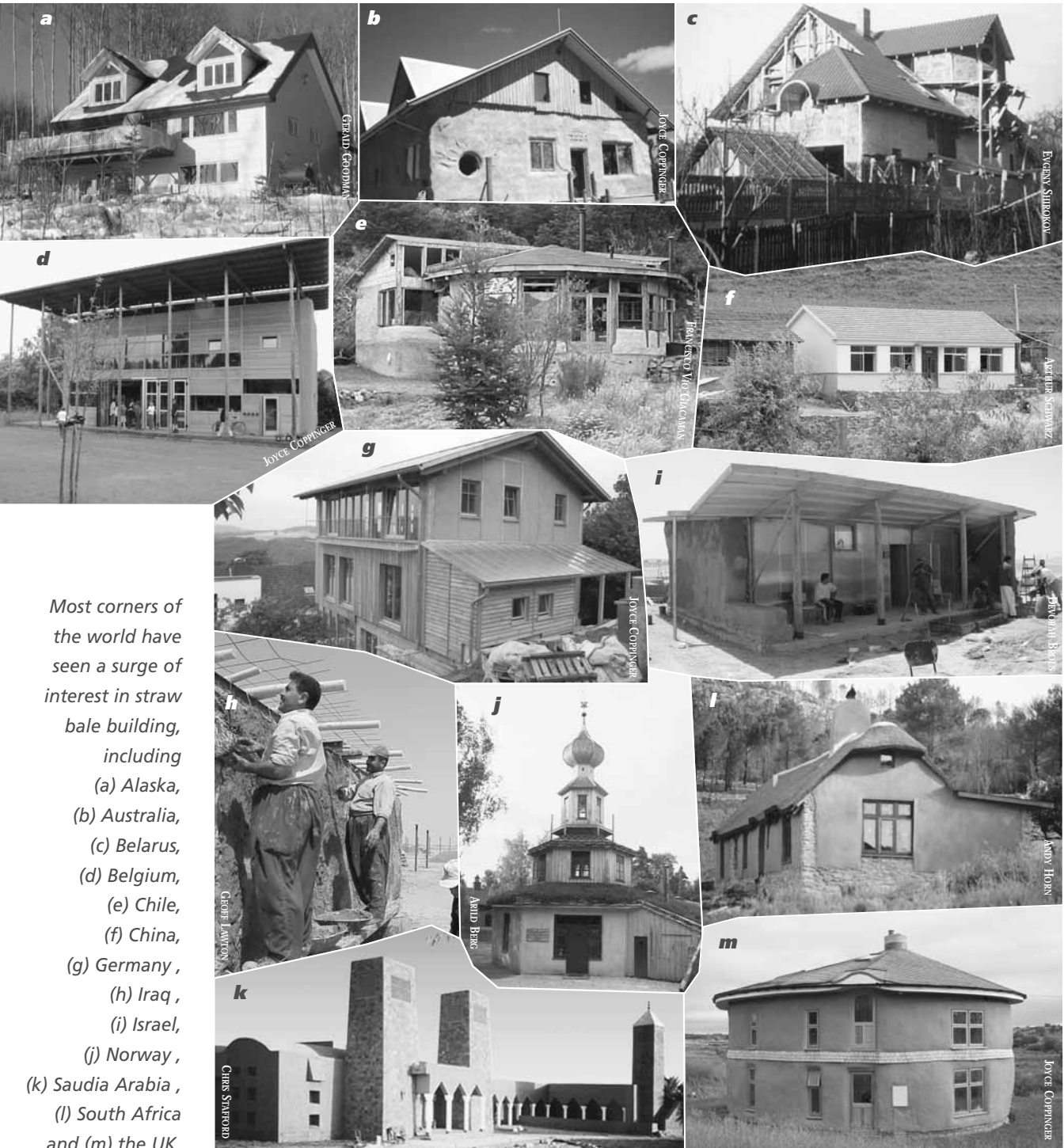
Straw bale building is certainly not the first alternative building style to be introduced and popularized, but its continuing growth and movement toward mainstream acceptance are unique among such alternatives. When we first started building with bales (nearly ten years ago!), it was a rare person indeed who knew what the heck we were talking about; today it is a rare person who hasn't at least heard of the idea; many have seen it presented on television or in print or know somebody who has worked on one.

Why this explosive growth? In part, it might be attributed to the media-friendly nature of the material — every journalist loves a Three Little Pigs headline! Almost every major newspaper

and television network has by now covered straw bale building. But once the media novelty wears off, many people remain intrigued and fascinated with straw bale construction. Impressed by the high energy efficiency, the lowered environmental impact, and the beautiful simplicity of building with straw bales, many people have been willing to commit their time, effort, and money to building this way.

Straw bale building now finds itself at an important crossroads. Unlike other “new” building systems, this one does not come from within the construction industry. The incredible growth in straw bale building has been fueled entirely by a grassroots desire to build more efficiently and effectively. This means there has been no central planning or designing, no industry-wide testing or standardization. And that has been a good thing. The vast amount of experimentation that has occurred provides us with numerous examples of methods that work and methods that do not work. This grassroots movement also requires that we continually learn from one another, so that important lessons are shared and the collective experience becomes collective knowledge.

2 MORE STRAW BALE BUILDING



Most corners of the world have seen a surge of interest in straw bale building, including (a) Alaska, (b) Australia, (c) Belarus, (d) Belgium, (e) Chile, (f) China, (g) Germany, (h) Iraq, (i) Israel, (j) Norway, (k) Saudia Arabia, (l) South Africa and (m) the UK.

Luckily for all bale building enthusiasts, bale builders are largely an open, honest, and communicative bunch. Through formal and informal exchanges, much information trading takes place locally and internationally. The lack of standards has allowed creative thinkers to flourish and many styles of bale building to emerge.

We see our efforts in updating this book as our contribution to this growing body of knowledge. It has been exciting, since the publication of *Straw Bale Building*, to be the recipients of news, inquiries, updates, and conversations about bale building projects from all parts of the world, and nothing would please us more than to find this revised edition playing the same role as inspiration and conversation starter. We believe that experimentation and creative thinking are essential in the growth of straw bale building, and hope to encourage such thinking in these pages. But we also believe that the style has progressed to the point where there are some basic standards that apply to all bale buildings. In this book, we are attempting to help readers find creative solutions to their own building needs while staying mindful of these basic dos and don'ts of bale building.

We hope you find that balance for yourself in these pages!

This is a Book of Options and Thinking Tools

There is no such thing as “the straw bale standard.” Instead of prescribing one particular methodology, we have set out to define the questions you will face during the exciting process of planning and building. It is incredibly complex, with so many competing considerations that sometimes a project can seem overwhelming. There are numerous critical moments of debate in

every building project. In this book, we attempt to outline a variety of potential solutions and then give an honest appraisal of each choice according to five criteria:

- cost
- energy efficiency
- environmental implications
- building code compliance
- ease of construction

We don't want this book to lead you to build *our* dream home; we want you to have the thinking tools with which to build — or commission — your own.

Although we do our best to remain objective about our assessments of the options, you will certainly notice a bias toward “environmentally friendly” options, and for this we offer no apology. Modern building practices are extraordinarily wasteful of precious resources, and we believe wholeheartedly in doing everything possible to lighten the load our buildings place on the planet. Choosing to use straw bales as building material is an important step toward more sustainable building practices, but the ideal can — and should — be pursued more vigorously in all aspects of a project.

Helpful Resources

A book of straw bale building options must address concerns beyond the actual bale walls themselves. The straw walls — about which we present step-by-step instructions — must be integrated into a complete package. Although we attempt to address all the crucial elements of designing and creating foundations, roofing, plumbing, wiring, and all the other myriad tasks of building a structure, you will need further expertise in these areas for your own project.

To this end, we've included a resource list at the end of each chapter to direct your research. These are references that we have found useful, but by no means do they represent the full depth of information available. Use these sources as a springboard and search for the resources that speak most clearly to your intentions.

In many chapters, you will find sidebars written by people with a particular straw bale building experience to share. These are individual takes on specific areas of concern, both technical and personal. As a growing movement, straw bale building is developed and passed on by so many knowledgeable, creative people that

we thought a sampling of voices from the field would prove useful to those who are just being introduced to the idea.

A Note to Experienced Builders and Straw Bale Enthusiasts

The world currently contains a disproportionate number of first-time bale builders compared to those who have experience! We've written this book principally as a guide for people who are undertaking a bale structure for the first time. For builders who have a depth of experience in straw bale building or other styles of construction, there

will inevitably be some redundant information. Hopefully, there will also be much that is either new or approached from a different angle. We hope you take the time to find what's useful to you. If you are a conventional building professional, we encourage you to try some bale work and then offer it to your future clients as an option. You might be surprised at the level of interest that's out there.

Bales Aren't Just for Houses

Throughout this book, we often use the word "house" to describe bale buildings, but by no means is the use of straw bales limited to single-family dwellings. From tiny garden sheds to large factories or warehouses, bales can be used in many ways to create many structures using the principles outlined here. If you find working with bales as addictive as we do, you'll start creating needs just to have an excuse to make another bale building!

Taking the First Step and Engaging Your Brain

Building your own home is a sprawling process of input, suggestion, passion, necessity, compromise, error, change, and refinement. We hope that this book inspires and assists those who wish to leap into that sprawl, immerse themselves, and emerge with a home to be proud of.

So, in the name of inspiration, it's onward we go



JACK SIEGEL

Come on inside!