

THE DAY THE HOUSE FELL

Homeowner
soil problems
—from landslides
to expansive clays
and wet basements

Richard L. Handy, Ph.D.

with drawings by Cybermouse, pH 7

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ABSTRACT

This is a book on soils and how they support hillsides, walls, streets, and houses. Using a unique blend of humor with technical facts, the author provides the layperson with a very down-to-earth guide to what he might need to know when it comes to building, buying, or owning a house. It covers such topics as landslides, expansive soils, quicksand and collapsible soils. For additional help, each chapter ends with a useful "Summary of Important Points." Therefore, anyone involved in owning, building, or selling a home will find this book packed with useful, easy-to-understand information on all aspects of soils, quicksand and collapsible soils. For additional help, each chapter ends with a useful "Summary of Important Points." Therefore, anyone involved in owning, building, or selling a home will find this book packed with useful, easy-to-understand information on all aspects of soils.

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Preface

This is a book about soils--not soils that grow things, but soils that are intended to support hillsides, walls, streets, and houses.

The book addresses and looks for the deeper meaning in topics like landslides, earthquakes, and footing drains--topics that are of legitimate concern to homeowners, builders, architects, real-estate agents, zoning boards, attorneys, assessors, insurance adjusters, earth movers, environmentalists, engineers, and anybody else we can think of.

Included are diverse topics like soil expansion and collapse, quicksand and liquefaction, and explosions from gas leaks, about which information for the nonspecialist is scarce, scattered, complicated, and overly technical. Our goal is to be very down-to-earth about these matters, and tell it like it is. Some readers may complain that we use humor as cheap bait to draw readers through the hard parts. We deny that emphatically. On the contrary, the hard parts were put in to justify the humor. We have concern for the homeless, so isn't it appropriate to also show some concern for the homed and potentially homeless, too?

We also wish to acknowledge that all the various lies, mistakes and distortions in this treatise are the sole responsibility of the author, who was provoked by the fact that he is an orphan and his dog has died.

Acknowledgments

The author expresses a sincere thanks to Iowa State University, Ames, Iowa, U.S.A., for providing an academic home and for granting

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Years earlier, the College of Engineering at Iowa State supported a trial balloon called "Screenings from the Soil Research Lab" that still may be remembered by a few; our enduring gratitude goes to the deans and accomplices who had the courage to let that happen and pay the postage.

A special note of appreciation goes to the author's students who in spite of the academic connection remain close friends, and who in apparent reprisal keep scheming ways to keep teaching their teacher who otherwise might be sitting on the veranda with his feet up. A deep appreciation is due unique and loving forebears like the author's Uncle Louie, whose satisfaction was in laughter; and inspiring teachers like the late Chalmer Roy, who championed individualism for isolating truth from chaff; and Leonard Feinberg, who in his books and lectures keeps emphasizing that laughter not only can be fun, it can bear responsibility.

A special thanks to the many editors and reviewers whose unselfish perseverance led to more rewrites than the author cares to remember, and who made many valuable suggestions, some so valuable that the author refrained from using them because he felt that the reviewers might someday want to use them in books of their own.

Finally, the author expresses his gratitude to his late parents who supported him in every endeavor and worried all along that this might happen; and to his loving wife Kathryn, who gave up her independence to feed him grapes and diet crackers, and whom he appreciates most of all.

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