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Barney Underhill's Guide to Housing for the Eco-Savy Hobbits



The Return of the Hobbit-hole

Greetings and So Forth

My dear Bagginses and Boffins, Took and Brandybucks, Gubbs, Chubbs, Hornblowers, Bolgers, Bracegirdles and Proudfoots! My my how times have changed since The Third Age! Grocery stores have replaced gardens, digital media is replacing printed books, and ponies have been replaced by mini coopers. Even us hobbits, who have always been resistant to change, have become more and more like the big folk in way and manner.

Much of course has remained the same though. We hobbits still love good food and drink. The peace and quite of the familiar is still more inviting to us than the fast pace and unpredictableness of adventurous living. And of course, we still love the natural world and all its wonders- even if we do seem to spend more time at our respectable desk jobs these days than we do wandering the paths of the forest and tilling the earth.

This latest age has brought along its own set of challenges, among which is a damaged environment as a result of years of pollution. It would be easy to pin all this environmental damage on the big folk, but that simply wouldn't be true. Our carbon footprint is just as big as theirs, and way hairier with all the new-fangled kitchen gadgets that are employed in just about every residence of New Hobbiton.

This problem is being attacked in many different ways, but one often overlooked way is housing. Brick and mortar homes are simply not efficient. They take from the environment and give nothing back. Though hardly-a-one has been built since The Third Age, I suggest a return to tradition. The 21st century hobbits should return to hobbit-holes. Now I'm not suggesting we leave out electricity in favor of candles. In the late 1970's a human named Mike Reynolds. He conceived of a house called an Earthship that is largely covered in an earthen hill and is a sustainable system that is completely off the grid. These "Earthships", as you will soon see, are well suited to our hobbit sensibilities.

The Basics: Why the Earthship is a Practical Modern-Day Hobbit-Hole

Earthen homes such as the hobbit-holes of The Third Age and Earthships have a number of natural advantages. The increased insulation results in massive energy savings, and the strong design protects from strong winds and earthquakes. They also are very low impact on the landscape, allowing for more natural plant life and water absorption.

The Earthship design takes the ecological advantages to the next level by creating a self-sufficient system free from polluting energy grids. An Earthship creates its own energy, gathers its own water, treats its own, and is made from roughly half recycled materials. Not to mention they allow ample space for indoor as well as outdoor gardens, which takes care of some food needs as well as appealing to our innate green thumb.

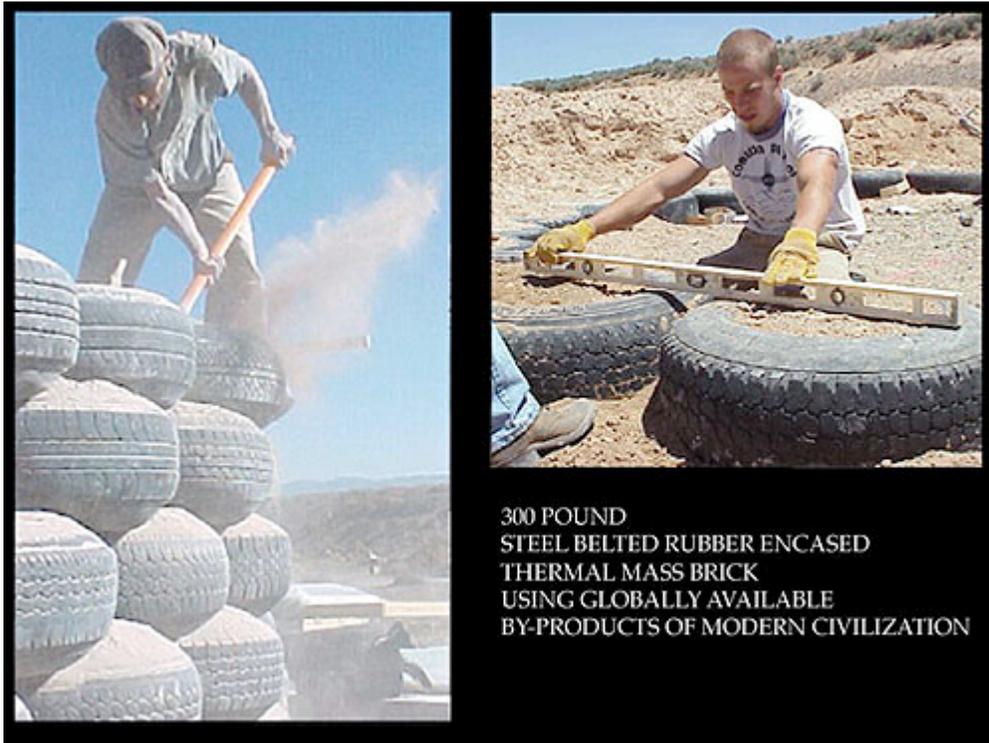
A house this practical and with so much technology seems like it should come at a high cost, but building an Earthship costs roughly the same as building a traditional house.

All of these advantages point toward using the Earthship design as a template to usher in a new era of efficient, eco-friendly hobbit-holes.



The Walls: Creative Recycling

The walls of the Earthship are its most innovative aspects and are what separates it from traditional housing as well as many of the other eco-sensitive housing options. The building blocks of an Earthship are “rammed earth tires”. The tire concept is relatively simple. They are cheap, abundant (a “natural resources” coming from landfills), and provided a massive load bearing wall. A sledgehammer is used to pack in roughly 300 pounds of earth per tire, a process so simple a hobbit could do it!



When the massive tire walls are combined with the earthen cover around them, the structure is extremely well insulated. The house collects heat from the sun and retains it, rather than having to create heat artificially and pay for it monetarily and with carbon emissions. The house has a massive south facing window, angled in such a way that rays from the sun are efficiently collected in the winter, while rays from the sun are partially reflected in the summer. This makes for comfortable temperatures year round with out the need of a costly air conditioner!

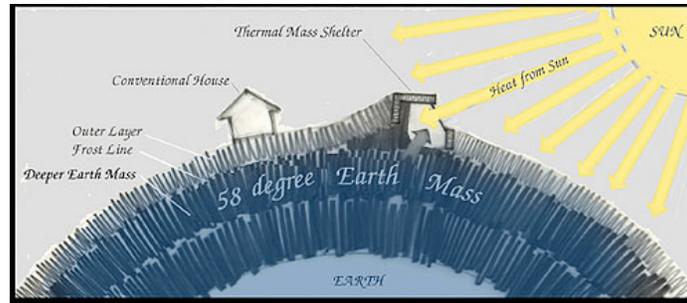
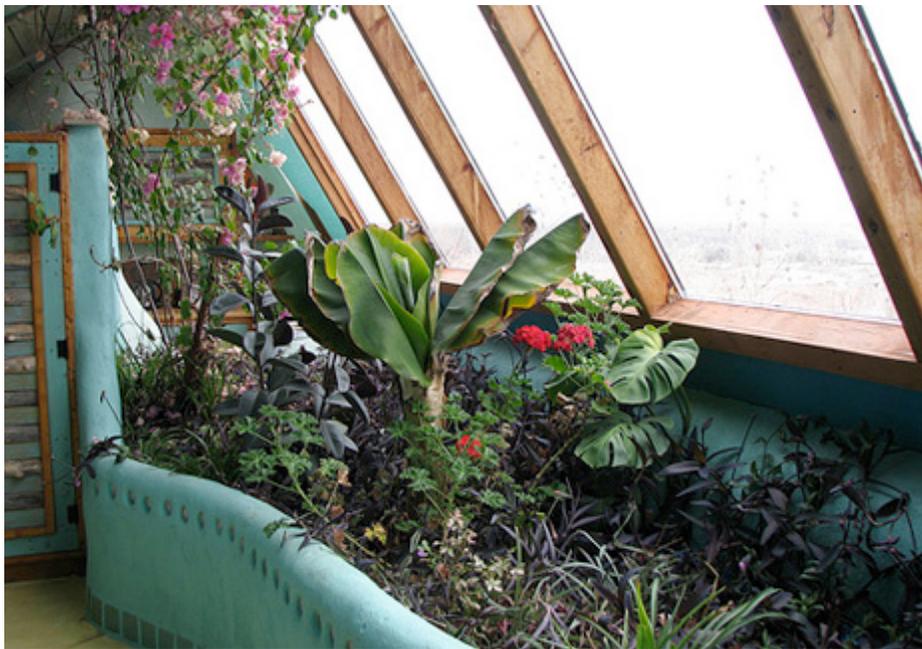


Diagram Illustrating Earthship Heating and Insulation with Conventional House Comparison
The Greenhouse Window: For Hobbits with a Green Thumb!

In the last section we touched on this, but the large South facing window is important for more than just lighting and temperature control. To be truly self-sufficient, a housing unit must be able to produce some or all of its own food. All Earthships have a long indoor garden running the length of the window. This allows for year-round gardening! I hope this feature will allow us Hobbits to return to our roots so to speak, and get back in touch with nature.





Water Capture

Water is the most important molecule for life on earth, and with an Earthship you will never be without it. An Earthship collects all the water it needs from rain water that lands on the roof. This is collected in cisterns, purified for drinking, and then further re-used through a grey water and black water treatment system. Skeptical about all the water you need coming from the sky? Earthships were pioneered in the high desert of Taos, Nm which receives only eight inches of rainfall annually.



A Rain Collection Gutter



Part of the Water Treatment System

Electrical System

The electrical system is pretty much what could be expected from an off the grid “green” home. The modernized hobbit-hole will have the choice of any renewable energy from solar to geo-thermal. Since I’m an Abilene hobbit, I went with the obvious choice of a wind turbine to power my Earthship!





For More Information

This is only a brief primer for hobbits interested in participating in this new wave of housing. For more information check out <http://www.earthship.net/>, the home of the Earthship Biotechnology Company that began the project in the 1970s. If you are interested in building one yourself, be sure to pick up the books published by Michael Reynolds as they provide a comprehensive do-it-yourself guide to Earthship building. If you are interested in sustainable architecture, but want to explore other options besides Earthships, be sure to check out <http://www.greenhomebuilding.com/>. It explores 15 different types of building methods, as well as delving into other green building topics.

Hopefully this pamphlet has peaked your interest, and shown you how Earthships are perfect homes for hobbits trying to impact our world in a positive way. Perhaps we can rebuild a new Shire in this day and age!