

Re-Use 101

Spring Gulch: A Tour Home Update

By McCaren Avalon



Living room has post and beams collected from property.

As green building becomes more popular, so does integrating reclaimed material into the design process. Currently, construction and demolition debris comprise 25%-30% of our landfills. Material that is transported for use in new construction is costly and pollutes our environment. To highlight your options for avoiding contributing to such problems, we paid a visit to 2005 Tour homeowners Naomi and Rick Maddux who chose to take a proactive approach by using salvaged, native and found materials in building their beautiful Spring Gulch home.

The straw bale hybrid home, consciously designed and built by Naomi and Rick themselves, is an energy efficient and salvaged material marvel. A lot of work has been completed since the home was featured on the Center for ReSource Conservation's 2005 Tour of Solar and Green Built Homes; now all but one room is complete and the 1380 square foot house is equipped with plumbing and electricity.

60% of the house is comprised of used

material; 20% of which was found by Naomi and Rick themselves either on their property on one of their many dumpster diving expeditions. The sinks, bathtub, kitchen cabinets, light fixtures, most of the hardware, all of the doors, electrical outlets, sill plates, exterior window sills, flooring, timber, and all of the interior décor is reclaimed. The house is truly inspiring.

The couple salvaged and stored material from the deconstruction of their first home (a small cabin), their previous home (a 500 square foot A-frame) and a horse barn for future reuse. The cedar roof shingles from the A-frame now serve as decoration on the wall of their bedroom. A lot of material was removed from the cabin and stored for use in the new house including the tin roof which was reused as soffit and the mosaic tile walls of the bathroom. The time and care it took to carefully salvage the items from the old home

is returned in the new home's energy; linking past memories to the present.

True salvage artists, Rick and Naomi know that Boulder is home to some of the best quality dumpster diving around. Sad but true, even in an "eco-conscious" community like Boulder, if a home is being remodeled or demolished it will most likely result in loads of expensive,

perfectly reusable material rotting in a landfill. Dumpsters situated at construction sites are often filled with everything from cherry kitchen cabinets to marble countertops to maple hardwood flooring. Alleys surrounding student housing predictably turn into aisles of free furnishings, electronics and house wares at the end and beginning of each school year. The 463 cinder blocks that the Maddux home sits on only took only two CU semesters to collect.

The best find might be the 4" x 4" tongue and groove cedar beams, discovered while perusing the inventory



The ceiling is 1"x12" cedar and pine siding from ReSource.



The stairway is lined with 2 1/4" oak flooring from their first home and has aspen handrails.

at ReSource one day. They used it to create the living roof of the garage, which is $\frac{3}{4}$ subterranean, and had enough left over to build $\frac{1}{2}$ of the second floor and two of the exterior doors. All of the wood paneled ceilings are also from ReSource, including beveled pine siding and 12" wide cedar siding.

A great deal of material came directly from the property, including the stone

used to build three large retaining wall behind the house. Naomi and Rick searched their land for dead standing ponderosa pines to use for post and beam framing. Inside, sifted tailings from a local mine color the adobe walls while aspen handrails crookedly lead you to the second floor. Instead of a doorknob, the front and side doors open by sliding a mounted elk antler horizontally. They also included their individual artistic expressions throughout the home. Rick, a woodworker, added unique touches to the ceiling beams, shaping and carving them into beautiful designs. Naomi incorporated her stained glass work into the doors and walls.

A flexible project timeline allowed Rick and Naomi to let the materials they found dictate the path of the project; ample space for storage helped too. "If you are not constricted by a construction loan" says Naomi, "take the time to source and collect materials. Design a home that is within your building abilities using materials that are at hand. Make


it creative and meaningful. It will save you money too."

To further their inspiring example, all of the construction waste from the project was either reused or recycled. Scrap wood was used in their wood burning stove and extra materials were brought to ReSource or left at the base of their driveway for the community to take and re-use. The new items (plumbing, electric, low-E windows, roofing timbers and a boiler) were purchased locally. "You have a choice: go with the cheapest material or support local business and promote sustainable building practices," explains Naomi.

The most notable aspect of the home is the feeling you get once inside. Using reclaimed goods promotes a healthy interior; it will not off-gas dangerous chemicals. The mix of organic material and creative touches has a soothing effect that envelopes you. As Rick says, "The house is so tranquil it helps you feel your human edge and reminds



Front door made out of 4"x 4" beams, stained glass window and elk antler door knob.

you to be calm". It is also a reminder that it was once common practice to build homes from local products. The sensations you feel within the house remain with you as you step outside. Trees, earth, rocks, sun- the energy is the same. It is quite the experience. 

Salvage Profile From Turkey Farm to Flooring Fame

The potential for reusing old growth lumber, after being carefully removed from a structure is immense. Its value and beauty retained, it will provide decades of enjoyment for its contemporary owner. Some prefer to leave the wood as is, enjoying its exposed rougher side as a beam or post. The skilled woodworkers at ReSource Woodworks however, prefer to invigorate the wood with a completely new function in life.

The material:

2" x 6" old growth pine used as rafters in a turkey barn.

The situation:

In the late nineties, Boulder County Open Space acquired about thirty acres of land in North Boulder where the Schooley Turkey Farm sat. The structure provided shelter for thousands of turkeys. The buildings were deconstructed by a ReSource crew during the summer of 2004. A portion of the wood was sold to delighted customers; the rest was stored in anticipation of the opening of ReSource Woodworks.

The reclamation:

A local resident asked the woodshop manager to transform the lumber into thick, rustic flooring. The lumber was sent through a planer and then hand planed to give it a rough look. "So far this is my favorite wood to work with," said Woodworks Manager Shawn Hoven. "It hand planes beautifully and has great aesthetic value; it has tight grain and is a wonderful color".

Shawn liked working with the wood so much he created a line of benches out of it. The benches are available at ReSource. See the ReSource Woodworks ad on page 29.



**Before:
Schooley Turkey Barn
North Boulder County**



**After:
Tongue and groove
flooring in a Boulder home**