



# THE MAD HOUSERS

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## UPCOMING EVENTS

**Dec. 8,** Sunday 10:00am

**Hut Raising @ Law St.**

Warehouse (538 Permalume Place)

**Dec. 10,** Tuesday 7:00pm

**Fundraising Meeting**

t-QED Office (499 Moreland Ave NE)

**Dec. 18,** Wednesday 7:00pm

**Panel Build**

Warehouse (538 Permalume Place)

**Dec. 19,** Thursday 7:00pm

**General Meeting,**

Jake's Ice Cream (676 N. Highland Ave.)

**Dec. 22,** Sunday 10:00am

**Hut Build**

Warehouse (538 Permalume Place)

**Dec. 28,** Saturday 10:00am

**Site search**

Warehouse (538 Permalume Place)

**Jan. 4,** Saturday 10:00am

**Large Lumber Purchase**

(Lots of hands needed!)

Warehouse (538 Permalume Place)

**Jan. 8,** Wednesday 7:00pm

**Panel Build**

Warehouse (538 Permalume Place)

**Jan. 14,** Tuesday 7:00pm

**Fundraising Meeting**

t-QED Office (499 Moreland Ave NE)

**Jan. 19,** Sunday 10:00am

**Hut Build**

Warehouse (538 Permalume Place)

**Jan. 23,** Thursday 7:00pm

**General Meeting**

Jake's Ice Cream

(676 N. Highland Ave.)

**Jan. 29,** Wednesday 7:00pm

**Panel Build**

Warehouse (538 Permalume Place)

### Exciting News!!

Recently the Mad Housers were featured by the Atlanta Journal-Constitution in the Faith and Values section! Check out <http://madhouse.org> to read the article.

## HOWDY FROM THE BOARD OF DIRECTORS

This year has been a fun and exciting time for the Mad Housers as we have revitalized the organization with new volunteers, projects, and strategies for working to end homelessness and create a wider range of housing alternatives.

Some of our accomplishments this year include:

- Constructing 8 new huts;
- Rehabilitating and winterizing 5 existing huts;
- Manufacturing 14 stoves;
- Opening two new sites;
- Obtaining our domain name;
- Designing an entirely new website for disseminating information;
- Publishing detailed plans for our 6'x8' hut;
- Moved into new warehouse space;
- Recruiting a new generation of great volunteers; and
- Involving local schools, churches, Boy Scout troops, and civic organizations in the fight to end homelessness.

With the New Year approaching, we hope to continue focusing on our core tasks of constructing new housing, researching new ways to satisfy the needs of our clients, and documenting our experiences for use by other organizations. With our new group of volunteers extending our resources and knowledge, we're very excited about the possibilities.

Some of the challenges we're looking at this year include:

- Finding new sites and clients;
- Repairing and replacing aging huts;
- Developing relationships with other organizations to help support the diverse needs of our clients;
- Construction of a new GenCar (See page 3 for more info); and
- Continuing to provide additional documentation of alternative housing options through our website.



*Nick posing with the Boy Scout Troop 243 after successfully constructing a new Hut.*

We wish to extend our thanks to our many supporters and volunteers for helping us to achieve these goals! Please continue to check in with us at our website ([www.madhouse.org](http://www.madhouse.org)) to see what we've been doing and how you may get involved.

Have a great holiday season!

Best wishes,  
The Board

### The Mad Housers

**President** Frank Jeffers

**Vice-President** Nick Hess

**Sec/Treasurer** Kurt Haas

### Board Members

Salma Abdulrahman

William Callison

Tracy Woodard

### The Mad Housers Newsletter

Volume 1, Number 1, Fall 2002

#### Editor

Kurt Haas

#### Layout

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#### Contributors

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Kurt Haas

Nick Hess

Tracy Woodard

## CHILD'S PLAY... TWO YOUTH GROUPS SHOW HOW IT'S DONE

Troop 243 is a collection of kids on the south side, ranging from fifteen year old Boy Scouts to eight year old Cub Scouts. Paideia is an exclusive northside prep school. However, both Paideia and Troop 243 have something in common: they both have built huts with the Mad Housers.

The Mad Housers occasionally hosts outside groups who are interested in helping the homeless. Builds make excellent day projects for groups -- everyone can participate meaningfully, the



*The panels completed, the young construction workers get to see the hut go up.*

entire project can be wrapped up in one day, and the end result is plain to see: a shelter.

One late April day, at Gideons Elementary School's parking lot, Troop 243 met with Mad Houser Nick Hess to build a shelter. Hess brought a pile of lumber, a bucket of tools, nails, and blueprints. It was ten a.m.

"By 3 p.m., those kids had built the panels, erected the hut in the parking lot just to show that it would work, taken down the hut, stacked the panels neatly for transport, and cleaned the lot of all debris," said Hess. "I participated only in showing the kids what needed to be done and helping them past a couple of rough spots. The hut was all theirs."

"We had fun," said troop parent Lisa Woodward. "The kids had a great time."

Paideia's experience was a bit more unusual. A group of about a dozen students had volunteered for a "homelessness immersion" field trip. For a week in May, the assortment of seventh and eighth graders slept outside in the nighttime and volunteered at homeless organizations during the day. Their first day was spent with the Mad Housers.

In spite of being sleep-deprived (it had hit 50 degrees the previous night), the

## A HOUSEWARMING BENEFIT PARTY!

Saturday, 23 November 2002, we'll be hosting a night of live music and fun while showing off our Warehouse and raising funds for future projects. The party will be at 2high studios (540 Permalume Place, Atlanta GA 30301) next door to the Warehouse.

3\$ admission  
18 and older with ID  
9pm - ???  
Directions and Info:  
[www.madhouse.org](http://www.madhouse.org)  
(404) 457-5293

Features:  
DJ's and Live Bands  
Kegs and Bar available  
HipHop, Jungle, Reggae  
Hut Demonstration  
Timelapse Construction Project

Paideia kids also were able to manufacture all the panels and erect the hut as a demonstration. Total time: 4 hours. The result: one more shelter for a homeless person, and the lesson learned that homelessness is not helplessness.

Both huts are currently occupied.

## HISTORY

Mad Housers Inc. is an all volunteer organization working to create alternative housing options for homeless and under-housed populations. Our core belief is that it is difficult to achieve self-sufficiency without the basic foundation of a stable and secure living environment.

The Mad Housers started in the 1980's as an informal network of Georgia Tech architecture students. Seeing the improvised shelters erected by Atlanta's homeless, they felt they could design structures that were safer and more secure. An army of hammer-wielding volunteers began building and distributing small emergency shelters around the city, incorporating as a nonprofit in 1988.

## CONSTRUCTION

Mad Housers Inc. builds and maintains temporary housing structures for homeless or under-housed individuals. Affectionately referred to as "huts," these sturdy structures measure 6' wide, 8' deep, and 10' tall. Each hut has a gabled roof, a sleeping loft, a locking door, and a wood burning stove for both heat and cooking.

The huts are not intended to be permanent housing. Instead, they are shelters which offer privacy, security, stability, and protection from the elements. Using a panelized construction method, the hut components are easily build, stored, and transported for assembly at a remote site.

## RESEARCH

Mad Housers Inc. constantly works to improve designs and define new applications of minimal housing concepts. These improvements combine years of construction experience with suggestions and modifications supplied by our clients. Other research areas include providing for basic needs such as sanitation, local power generation, and safe water supply.

As we discover new strategies for helping our clients, we hope to spread this knowledge and engage other organizations and cities with our work. Using our web site and printed media, Mad Housers Inc. brings innovative housing solutions to the rest of the world.

[www.madhouse.org](http://www.madhouse.org)

## THE RISE AND FALL OF THE GENCAR

A Mad Housers hut equipped with a wood-burning stove is a tremendous improvement over living under a bridge or in a drafty makeshift structure. However, does this shelter adequately meet the basic needs of a homeless person? How is one to see inside at night or on a rainy day? How can you keep in touch with society without a radio or small TV? Most people consider electricity to be a necessary part of civilized existence, but how do you provide a reliable source to someone without a home on the power grid?

The first and most readily available source of electricity for a homeless person is a dry cell battery. Unfortunately, at a cost of about \$1000 per kw-hr, this is a prohibitively expensive form of energy. Compare this to the 10 cents per kw-hr paid by the average homeowner. This cost is high even for basic lighting with a flashlight.

Our next option for experimentation looked like the deep discharge lead-acid batteries used in automobiles. We found that one of these batteries could provide the lighting we needed as well as run small 12-volt electrical appliances, so the only issue became how to keep the battery charged.

The most obvious solution was to take the battery to a local garage and pay for a charge. Unfortunately, hauling 40-pound batteries on MARTA and then only getting a partial charge from the garage made this a less than ideal proposition.



*A closer of view of what makes the GenCar tick.*

Coincidentally, about this time a volunteer's Mercury Capri lost its transmission. We parked it at one of our sites and began running the motor to charge car batteries for people to use in their huts. Then we replaced the alternator with a larger one to get more charge for our gas money. We also added a bank of used backhoe batteries and ran wires to the individual huts to increase charging efficiency and minimize the need to haul the batteries around. Finally, we added a second alternator, increasing charging capacity yet again.

While running and optimizing the charging capacity of the Capri, Frank Jeffers, the volunteer overseeing the research project, began brainstorming about productive ways to use waste heat produced the engine while charging the batteries. In addition to shelter and electricity for lighting, homeless people also find it difficult to produce the quantity of hot water necessary for proper sanitation. It seemed to him that there must be a way to capture this waste heat and use it to satisfy this need.

Running the coolant hoses through a water barrel, Frank was able to create a heat exchanger using hardware store copper tubing. This provided hot water for clients to wash themselves, their clothes, and their dishes. Running the engine of the Capri for one hour charged the batter bank to full capacity while also heating 30 gallons of water to 160 degrees. Running the car a second hour raises the temperature to about 200 degrees. Insulating the space between a nested barrels keeps the water at effective pasteurizing temperature for a couple hours and warm enough to use for two days.

At this point the co-generation project was underway. We had found a way of providing hot water and electricity to homeless clients around the clock for about 4 or 5 gallons of gasoline per week.



*The GenCar provides an unexpected source of much needed power.*

For five years, the old Mercury Capri was used in this manner, remarkable performance when you consider that it had been driven 250,000 miles before the project started! Over time the system was tweaked and prodded, and we had quite a few more opportunities to optimize the process. Initially, switches burnt out, batteries wouldn't last long enough, and the voltage regulators limited us to charging to about half capacity. Some of our ongoing improvements included:

- Using high quality golf cart batteries. Old car batteries were already run down, plus they weren't designed for full discharge on a regular basis. The extra ruggedness and long life were definitely worth the extra cost.
- Building an extremely low resistance charging circuit allowed the car to charge the battery bank 1/3 more.
- Learning how to "lie" to the voltage regulators got us a higher charging rate throughout the charging cycle.
- Making battery cable attachments that had almost zero resistance while also being strong and reliable extended battery life and increased charging reliability.

*SEE GENCAR PG. 4*

## THE MAD HOUSERS AT THE RED LIGHT CAFE

Despite the mass hoards that vacated Atlanta during the Memorial day weekend, the Mad Housers manged to pack the Red Light Cafe at their May band benefit. Teenage groupies rubbed elbows with Gen-X do-gooders as everyone settled in to watch an eclectic evening of local music while raising hundreds of dollars for housing the homeless.

The show started with Aleph, a post-industrial DJ who warmed up the crowd with his Deutsche-sounding mix style.

On the tails of that, Red Square, an electric male trio with cocky, Orwellian lyrics and a frenetic stage presence, gave the whole evening a much needed injection of testosterone.

On a quieter note, Resonant Frequency calmed the crowd with acoustic covers of indiepoppers Kings of Convenience and The Clientele.

The evening wrapped up with Just Chris, a mellower techno DJ who provided the remaining guests with a good opportunity to dance before heading home.



*Red Square during a very brief civilized moment before their equipment went flying...*

Overall, the Mad Housers did very well on ticket sales, information distribution, making contacts, and pleasing the Red Light Cafe by bringing in a larger than usual crowd for a holiday weekend!

Our raffle was a big success, providing our lucky guests with restaurant gift certificates, full body massages (also gift certificates — not the real thing right there!), coffee, flower arrangements, and credits at the Atlanta Book Exchange.

Be sure to stop by our next benefit party on Saturday, 23 November 2002 at our Warehouse. See page 2 for details.

## GENCAR

*CONTINUED FROM PG. 3*

- Developing an inexpensive method of measuring the very large DC currents the system produced in its charging circuit.

We were finally able to get an accurate measure of the energy efficiency of the system. Counting the hot water produced from waste heat, we scored a whopping 33%. That's as good as Georgia Power scores by the time the electricity reaches your wall socket! And a gasoline engine produces the energy at a tiny fraction of the pollution produced by a coal fired electrical plant.

Ready to have one installed in your basement yet?

Unfortunately, after five years of good service, the Mercury Capri finally died this summer. Now we have the opportunity to take everything we've learned so far and build a new one. Any small-engine clunkers out there that you'd like to donate to the Mad Housers? Give us a call at 404-969-4958 or email us info@madhousers.org.

## DONATION FORM.

<input type="checkbox"/> Basic Donation	\$20
<input type="checkbox"/> Maintain a hut for a Year	\$50
<input type="checkbox"/> Help fund our research	\$100
<input type="checkbox"/> Build a new 6'x8' hut (one person)	\$400
<input type="checkbox"/> Build a new 8'x8' hut (couple)	\$700
<input type="checkbox"/> Build a new 10'x10' hut (small family)	\$1,500
<input type="checkbox"/> Any amount you'd like	_____
<input type="checkbox"/> I have materials to donate (lumber, paint, tools, roll roofing, etc.)	
<input type="checkbox"/> I am interested in volunteering.	

Name \_\_\_\_\_

Street Address \_\_\_\_\_

City, State, & Zip \_\_\_\_\_

Phone Number \_\_\_\_\_  Please Call Me

Email Address \_\_\_\_\_  Please add me to your email list

Mad Housers, Inc. is incorporated as a 501(c)(3) organization. You may send your tax deductible contribution to:

Mad Housers Inc., 449 Moreland Ave, Suite 002, Atlanta, GA 30307.