WELCOME TO DANCING RABBIT ECOVILLAGE
WELCOME TO Dancing Rabbit
• Replace current, outgrown, common house as primary community space
• Move the community even further along in architectural sustainability
• Provide safe and healthy live/work space
• Achieve LEED Platinum & Living Building Challenge Certifications
• Model Dancing Rabbit Covenants
• Employ the community
• Use natural and green building principles and techniques
• Be affordable
A. CLERESTOREY

An operable clerestorey running the length of the building allows for natural stack ventilation to cool the building in the summer. It also brings plenty of daylight deep into building.

All the south windows are carefully shaded to let in solar gains in the cold winter, and stay shaded in the hot humid summers.

B. EAVE

The main envelope consists of a structural steel frame within a wrap of airtight sheathing and stud framing.

The exterior stud framing is insulated with cellulose, and clad in reclaimed timber siding. The interior is lined in strawbales, for insulation and finished in lime plaster.

This design allows for the air barrier to be inspected and tested during construction to ensure it is fully airtight, and ‘breathes’ in both direction to prevent moisture build up in Missouri’s mixed-humid climate.

C. FOUNDATION

To reduce the amount of concrete uses, the foundation uses a compacted gravel trench to get below the frost line.

The foundation and slab are also super insulated, and designed so that there is non cold bridging.

The deep window reveals created by the strawbale form window seats.

Reclaimed timber exterior finish.
Standing seam roofing for rain water harvesting on main roof.
Green roofing on accessible flat roofs.
Cobble paving in reclaimed brick.
Notable Material Examples

- **Foam Insulation**: All salvaged
- **Wood**: All salvaged, local storm-felled, or from site clearance
- **Primary Structure**: Recycled steel (instead of unsustainably harvested wood or manufactured trusses)
- **Interior Glass**: All salvaged
- **Wall Insulation**: Strawbales from Memphis, MO
1. Entrance to village up Main Street.
2. Existing single storey community building and courtyard.
3. Breezeway to connect Main Street to new village green.
5. Waste water treatment lagoon.
Shared & Cooperatively Owned Resources:

- Educational spaces
- Meeting spaces
- Library
- Co-working offices
- Offices for multiple non-profits
Shared & Cooperatively Owned Resources:

- Social spaces / ‘Living rooms’
- Large Gathering/Event space
- Co-op kitchen for village and non-profit needs
- Child care and play
- Toilets, showers, and laundry
We cannot solve our problems with the same thinking we used when we created them.

-Albert Einstein
Car Sharing - 4 vehicles, 80+ users.
Dancing Rabbit's housing per capita is 1/3 the size of the US average. It is the same as the US average in 1950.
Shared Spaces
The average person at Dancing Rabbit uses 12 gallons of water per day. The average American uses 135 gallons.
Smart Microgrid

Dancing Rabbit's electricity use is 90% lower than the average American.
I LOVE THE 90's
Average American's Carbon Footprint - 20 tons

- Local Transport: 14%
- Other: 9%
- Services: 12%
- Travel: 14%
- Electricity: 14%
- Goods: 11%
- Heating/Cooking: 11%
- Food: 15%

Average Rabbit’s Carbon Footprint - 9 tons

- Local Transport: 3%
- Travel: 26%
- Electricity: 0%
- Heating/Cooking: 3%
- Food: 21%
- Goods: 10%
- Services: 18%
- Other: 19%

U.S. CO₂ Emissions by Sector

- Buildings 44.6% (2358 MMT CO₂e)
- Transportation 34.3% (1816 MMT CO₂e)
- Industry 21.1% (1116 MMT CO₂e)

THINK OUTSIDE THE BOX
Sustainable

Inspiring

Functional

Healthy and Local

Performance

Affordable

Mission Driven