New England's Abandoned Farm

A once productive landscape capable of feeding the growing urban population of the Northeast

An eroded landscape within the 250 mile foodshed of more than 15 million urban dwellers without access to a secure food source

When America’s economy moved west (and then over seas) it left behind a rich resource of undeveloped land waiting to be revived into a new food economy.

1. ORIGINAL FARMSTEAD

2. ORIGINAL HOUSE & BARN

3. PRE-OIL TRACTION

A. LOOKING NORTH - LONG FIELD

B. LOOKING WEST FROM HOUSE

C. ENTRY APPROACH

CONTEXT

Regenerative Agriculture Infrastructure Design

PRECEDEENTS
A growing neighborhood creating community and a working landscape

Hollow's End Farm
Gilsum, NH
Approximately 225 acres

- 14.25 acres open
- 2.4 acres designated prime farmland
- 7 acres designated farmland of statewide importance

- The vast majority of the land is forest much of it on steep slopes
- 3 ponds and numerous streams which are part of the Ashuelot River watershed
- The farm is a focus area in New Hampshire's Wildlife Action Plan—largely because of its streams and because it is part of a large block of forest that has minimal human impact
- The farm is approximately 10.5 miles from downtown Keene NH

Program Analysis

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Existing Conditions

Space Conditioning
- Create simple mechanical cores with robust envelopes
- Cluster heated or cooled spaces together to maximize distribution efficiency
- Use waste heat and free solar energy to optimize systems

Natural Lighting
- Deliver direct sunlight where needed
- Utilize trees and structures to create shading
- Negotiate darkness with heat and moisture
Goal: To build structures and landscapes that will allow groups to engage in common struggles, connect to local and regional communities, and a larger/safer food system.

Goal: To use currently available resources to create and revive a durable infrastructure that will allow us to meet our basic needs through changing climate, economies, and energy access.

### Conditioned Spaces

<table>
<thead>
<tr>
<th>Building</th>
<th>Use</th>
<th>Size (sf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Center</td>
<td>Community / Processing kitchen</td>
<td>500</td>
</tr>
<tr>
<td>Farm Center</td>
<td>Multi-Purpose Room (community classroom)</td>
<td>750</td>
</tr>
<tr>
<td>Farm Center</td>
<td>Human Housing</td>
<td>1,200</td>
</tr>
<tr>
<td>Farm Center</td>
<td>Machine and Wood Shop</td>
<td>675</td>
</tr>
<tr>
<td>Farm Center</td>
<td>Food storage for humans</td>
<td>300</td>
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<tr>
<td>Farm Center</td>
<td>Mechanical Room</td>
<td>100</td>
</tr>
<tr>
<td>Farm Center</td>
<td>Milk room</td>
<td>100</td>
</tr>
<tr>
<td>Farm Center</td>
<td>Bathroom / Shower</td>
<td>70</td>
</tr>
<tr>
<td>Farm Center</td>
<td>Root Cellars</td>
<td>200</td>
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<tr>
<td>Farm Center</td>
<td>Office</td>
<td>100</td>
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<tr>
<td>Sub Total</td>
<td></td>
<td>4,295 sf</td>
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</table>

### Unconditioned Spaces

<table>
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<tr>
<th>Building</th>
<th>Use</th>
<th>Size (sf)</th>
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<tbody>
<tr>
<td>Farm Center</td>
<td>Greenhouse / Greywater</td>
<td>200</td>
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<tr>
<td>Farm Center</td>
<td>Machinery Storage</td>
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<tr>
<td>Farm Center</td>
<td>Milk parlor</td>
<td>100</td>
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<tr>
<td>Farm Center</td>
<td>Animal housing</td>
<td>750</td>
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<tr>
<td>Farm Center</td>
<td>Food storage for animals</td>
<td>750</td>
</tr>
<tr>
<td>Sub Total</td>
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<td>4,000 sf</td>
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### Building Sub Total

<table>
<thead>
<tr>
<th>Building</th>
<th>Size (sf)</th>
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<tbody>
<tr>
<td>Farm Center</td>
<td>9,954 sf</td>
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### Circulation, Etc.

<table>
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<th>Size (sf)</th>
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<tbody>
<tr>
<td>Farm Center</td>
<td>1,659 sf</td>
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</tbody>
</table>

### Outdoor Spaces

- Doyard - outdoor work area
- Processing / washing facilities for vegetables
- Firewood processing
- Bulk Materials / Compost
- Barnyard
- Pastures
- Vegetable Gardens

**Regenerative Agriculture Infrastructure Design**

**Program**

**Cleanliness**

- Food production requires both sanitary & microbially active conditions
- Food production requires the management of healthy systems of micro-organisms for fermentation, composting, cheesemaking, etc.

**Energy / Work Flows**

**Program Analysis**
GOAL: TO CREATE WORKING BUILDINGS WHOSE MATERIAL, LABOR, TECHNOLOGY, AND ENERGIES STRENGTHEN A REGIONAL ECONOMY AND CREATE CLOSED FEEDBACK LOOPS

STRATEGIES: SIMPLE BUILDINGS OF WOOD AND STONE; SHOP SPACE FOR INNOVATION AND FABRICATION TO CREATE COMMUNITY OWNERSHIP OF OPEN-SOURCED / APPROPRIATE TECHNOLOGIES; MATERIAL CHOICES THAT CAN BE REPLACED AND REPAIRED WITH REGIONAL RESOURCES; ADAPTABLE, EXPANDABLE, AND CONTRACTABLE SPACES; COMMUNITY GATHERING SPACE
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LOWER LEVEL PLAN
1/8" = 1'-0"

AERIAL LOOKING NW

BUILDING SECTION B
1/8" = 1'-0"

INFRASTRUCTURE
Create a **central core** of work & community infrastructure

Farmscapes scaled to optimize ecosystem health, economy, and humanity

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SITE PLAN & SECTION

DIAGRAMS
Energy, labor, and mass move elegantly through a durable and adaptive foodscape