Sustainable Village Garden

Date: February 19th, 2013

Project Title: Sustainable Village Garden

Amount Requested: $2,565

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Sustainability theme:
Food Systems

Project Summary
Students of the Sustainable Village lack access to fresh, organic fruits and vegetables, at affordable cost. The project is to build a sustainable garden and utilize soil warming techniques to extend the season. This project is a partnership with UAF Facilities Services and OOS. This is also a research project on soil warming techniques that can be extended to other parts of campus.

Project Description
The idea for a garden came up because we wanted access to good food and to garden as a lifestyle with other community members. It is also a way of making expanding
sustainable living skill and making living in Alaska more practical. A community garden will help fill this void and will allow residents to explore running a small northern garden at an almost “personal” scale. This is in line with the “research” oriented purpose of the Village.

At this time are planning on a small scale box garden that is modular so the garden can be expanded and moved if needed as the village grows. Right now we are planning one box for each house. We have worked with Facilities Services who has agreed to bring in fill dirt for the platform. We will build 4 boxes that are 4 feet wide x 10 feet long x 12 inches tall (http://www.sunset.com/garden/perfect-raised-bed-004000000039550/) (http://tipnut.com/raised-garden-beds/). We would like to use local wood from Northern wood products. We are planning on putting weed fabric barrier below the box and use local soils from the peat bogs. Because the garden is in the Sustainable village, it is important to use both Heirloom seeds and organic fertilization practices. We have investigated several box designs. We will be utilizing rainwater collected from the roofs of the sustainable village.

One of the things we are very excited about is the research aspect of soil warming and season extension. Two of our plots will utilize greenhouse technologies to increase warming. We are also looking at planter boxes on the deck. Future project could include building a year round green house using solar hydronic for heating. This initial garden project will give us some skills for making future decision. We are also investigating an above ground root cellar. This will be essential we become good gardeners.

We have already involved other sustainable village students in this proposal idea. The 3 PI’s will construct the boxes. Once complete we will have a meeting with other residents to explain how to use the boxes. The UAF Cooperative Extension Service has gardening publications http://www.uaf.edu/ces/pubs/catalog/, which we will share with other resident.

**Project Value**
This project will cut down on food cost. Having locally sourced food is cheaper and reduces carbon footprint associated with transporting food from lower 48. All the students using the box have paid the siren fee. It trains us to produce our own food, work with our neighbors and be more ecologically responsible.

**Implementation Plan:**

<table>
<thead>
<tr>
<th>Date</th>
<th>What Will Be Done</th>
<th>Responsible Person</th>
<th>Funds Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>March</td>
<td>Purchase Equipment</td>
<td>Andrew</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>Prepare Location</td>
<td>Andrew, Daniel, and Samuel</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>Build Planter Boxes</td>
<td>Andrew, Daniel, and Samuel</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>Fill Boxes with Planting Soil</td>
<td>Andrew, Daniel, and Samuel</td>
<td></td>
</tr>
</tbody>
</table>
May | Build Hoop Huts | Andrew, Daniel, and Samuel
---|---|---
May | Plant Garden | Andrew, Daniel, and Samuel
May | Hold Groundbreaking Ceremony | Andrew, Daniel, and Samuel

**Outreach Plan:**
We would like to do a table in the Wood Center to highlight the project and during new student orientation have a tour of the garden. Below is a description of other outreach efforts.

<table>
<thead>
<tr>
<th>What Outreach</th>
<th>Venue</th>
<th>Date</th>
<th>Who Will Do It</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article About Project</td>
<td>UAF Sun Star</td>
<td>Mid March</td>
<td>Daniel</td>
</tr>
<tr>
<td>Public Service Announcement</td>
<td>KSUA Radio Station</td>
<td>Mid March</td>
<td>Andrew, Daniel, and Samuel</td>
</tr>
<tr>
<td>Information Booth</td>
<td>UAF Wood Center</td>
<td>Mid April</td>
<td>Andrew, Daniel, and Samuel</td>
</tr>
</tbody>
</table>

**Budget:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit Price</th>
<th>Quantity</th>
<th>Total ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planter Boxes 4x (4x10x1 ft)</td>
<td>$200</td>
<td>4</td>
<td>$ 800</td>
</tr>
<tr>
<td>Rainbarrels</td>
<td>100</td>
<td>4</td>
<td>$ 400</td>
</tr>
<tr>
<td>Topsoil</td>
<td></td>
<td></td>
<td>$ 400</td>
</tr>
<tr>
<td>Landscaping Fabric</td>
<td>1 Roll</td>
<td></td>
<td>$ 25</td>
</tr>
<tr>
<td>Heirlooms and organic plants</td>
<td>Various</td>
<td>Various</td>
<td>$200</td>
</tr>
<tr>
<td>Greenhouse technologies</td>
<td>$ 70/box</td>
<td>2</td>
<td>$ 140</td>
</tr>
<tr>
<td>Tools (shovels etc.)</td>
<td>$ 100</td>
<td></td>
<td>$ 100</td>
</tr>
<tr>
<td>Wheel barrow</td>
<td>$ 100</td>
<td>1</td>
<td>$ 100</td>
</tr>
<tr>
<td>Contingency</td>
<td>20%</td>
<td></td>
<td>$ 400</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$ 2565</strong></td>
</tr>
</tbody>
</table>

**Budget Justification:**
We are planning on using local supplies to minimize carbon footprint. There are no labor costs. Supplies listed are necessary to maintain the garden. Facilities Services is supplying labor and materials for the site.

**Qualification and Experience:**
We are 3 students who live in the village, who are excited about gardening. We have between us carpentry skills and one of us is a writer for the Sun Star. As an engineer Samuel is studying permafrost. Andrew was exposed to gardening as a child in Fairbanks.
Technical Advisors and Collaborators:
Bear, Darren Edson
Michele Hebert, OOS Director
Attachments: