Beacon Food Forest Stewardship Series – Class 2 in a 3-Part Series

Timing: 5 hours
Location: at the Food Forest site and Classroom if needed for weather and focusing

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3 Main Themes: Community Building, Water, and Plants

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<th>Topic</th>
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<tr>
<td>1. Welcome, Housekeeping, Announcement</td>
<td>Welcome Everyone to Class 2&lt;br&gt;Review proposed schedule for the day, bathrooms locations, and any other pertinent details for our day together. Ask for announcements from community.</td>
<td>5 min.</td>
<td>Instructor B</td>
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<td>2. “Best of Yesterday” - Review 1st Class in some interactive ways</td>
<td>GOALS: Students will be prepared for the lesson by the review of past content and their homework. Participants will understand what is expected of them for service hours for taking the training. &lt;br&gt;<strong>Review last session “Best of Yesterday”</strong>. THINK – PAIR – SHARE.&lt;br&gt;Ask students to think back to/look through their binders/notes from Session/Class 1 and share important points that they learned (clear to them). Find another person with which to share your 3 important points learned. Then, ask each pair to share a point. &lt;br&gt;<strong>Review “Muddy Points” from Class 1 (refer to lesson 1 feedback forms from students and clear up these points.)</strong>&lt;br&gt;-- Soil basics and care&lt;br&gt;-- Site Analysis – methods, history of our site&lt;br&gt;-- Some students will ask many deeper level Q’s – some we’ll get to and some we won’t. Take note of interests for future education opportunities.&lt;br&gt;-- Other&lt;br&gt;<strong>Get into small groups of 3; Play Scale of Permanence Matching Game</strong> – students match terms with definitions, as a way to review the concepts [see handout material]</td>
<td>20 min. for review</td>
<td>Instructor A</td>
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<td>Review Homework – Food Forest site analysis</td>
<td>20 min. for game</td>
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<td>10 min. for sharing</td>
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2. Review Homework

→ Take two minutes and write down what comes to mind about what you observed about BFF. What were some highlights of your Site Observation Notes? What types of sectors (energies/influences) did you assess?

Reiterate the need to study a site over the course of time and through varied conditions. A site’s use by people is greatly important in the use of the land, especially public land and spaces open to the public. *We will cover some social permaculture aspects in the lesson today. Social permaculture addresses the human interactions with each other.*

→ Edible Perennial Plant Study – Do you feel more connected to a particular plant now? Have several students share a cool thing they learned about their plant.

Review service hours requirements and prompt participants to share ideas on how they will do return hours. Provide dates for work parties, and projects that need leaders. Review how to report those hours once they begin doing them. Remind deadline [consider offering 4 months after the end of the class]

3. SYNERGIZING COMMUNITY RELATIONSHIPS

| **Goal:** Participants learn about community organizing thru the case study of the beacon food forest. |
| Urban farming is all about the people. Its people who create the concept, its people who manage and give permission to use the land, and its people that the plants depend on for maintenance and protection. |
| Probably the hardest job in a volunteer organization is the persistent effort required to engage people from diverse communities. One needs to step out of personal comfort zones to speak publicly, come to grips with your social, political and economic privileges in order to relate and demonstrate respect to all people. |
| In volunteer organizations people are always coming and going. Community outreach never stops. |
| **Chronology of Synergizing Community Relations for BFF – CASE STUDY** |
| **The Map, or Drawing** = The original BFF drawing/design done in a 2009 Permaculture Design Course in Redmond, WA. The creation of the map used Permaculture (PC) principle “observe and interact” from site observations. We learned climate conditions, and we learned about who passes through and how they move through the site. We interacted with the surrounding neighbors and users. |
| **40 min:** |
| 20 min. for the BFF Story [or your own story] and tips for community organizing |
| 15 min. for activity |
3. SYNERGIZING COMMUNITY RELATIONSHIPS
Continued…

Uses and Purposes of a map/drawing of site as a vision:
+ A strong visual aid to educate the public about what food forestry entails and what a community garden could look like on the actual site.
+ Provided a road map and idea list of permaculture practices and design methods for current discussions and future design efforts.
+ a key tool to bring to all meetings especially City agency meetings.
The 13 acre dream proposal turned into a 7-acre Agreement with the City.
+ Demonstrates elements: for building biodiversity, possible food production yields, and shows much needed gathering areas.

1st Community Meeting. BFF begins building a Core Group. Permaculture Principle: Harvest a yield in your community, a yield of interested people.
Feb 2nd, 2010, groundhog day, held first public meeting showing the PDC map. 25-30 people showed up, Parks Dept, City Fruit, Seattle Tilth, neighborhood groups represented. We were able to explain our idea but more importantly ask for help and involvement. We needed to build a core group to delegate specific tasks: 1) outreach 2) city relations 3) grants etc.

We started building the email list, and found allies.

March 20th we did a walk-through with SPU and Parks Dept leaders.
We were told we needed to have more community input and involvement, a bigger email list, a community design process and proof we engage with a diverse community especially underserved community groups.

Applied for a grant – Awarded a City of Seattle Small and Simple Department of Neighborhoods (DON) Grant for $20,000. We mailed notices in five languages, hired outreach service providers and design consultants for a community process to create a design plan/ schematic. We began community design meetings.

Tips for Outreach, Building Community Support
+ Create a Mission statement. BFF’s mission: to design, plant and grow an edible urban forest garden that inspires our community to gather together, grow our own food and rehabilitate our local ecosystem.
+ Internet Presence: Build a free webpage. Build a face book group, promote your concept, post photos, ask for donations.
+ Design and make printed materials that are timeless in explanation and give action items for involvement. Create a logo for visual consistency
3. SYNERGIZING COMMUNITY RELATIONSHIPS
Continued…

- **Translate** printed materials; make announcements in a variety of forums: digital (blogs, list serves), print (centrally-located boards). Do networking: at churches, schools, other organizations.

  + **Continuously reach out** to others to get involved. Personal invites to join a meeting or lead a task create good results.

  + **Face to Face**: Start tabling at community events, festivals, garden tours grocery stores. It’s not your stuff that will sell the idea it’s your eyes and your spoken words that will win hearts. Seed give away in handmade packets with BFF info worked well. Retired people have lots of time to be crafty and make handmade items.

  + **Create and Hold Events**: Fellowship builds personal experience and happy memories. Not only is this good for your core group to socialize but creates a fun, low-pressure platform for the community to learn about the project: movie nights, cultural performances, free dinners. Free food especially in the evening makes it easy for people to attend.

  + **Stay positive.**
  + **Stay Transparent**: be transparent to your organization and your public, and keeping everyone in the loop. Create feedback loops that allow for easy input, empowering participants.

  + **Ongoing efforts** – we now need to train leaders

    For the BFF its essential that we build maintenance capacity, to continue training leaders. We’ve always had a shortage of leaders and a plethora of volunteers but a lot our volunteers have never used a shovel or know when a blueberry is ripe on the bush

**ACTIVITY** - 15 minutes

A break– the-ice activity to get acquainted. Ask for reflections.

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Reiterate - Successful attributes of the BFF - found in other successful organizations and businesses:

- Shared and stated values (care for the earth, care for the people and fair share) and a strong commitment to them. Restate them often when sharing the story and mission of the work.

- A human-centered model for interactions and process. Human relationships are key to success, and they are cultivated and nurtured. **Make time to check in with each other and to share fellowship.**

- Participatory design - when people come together to talk about their community, relationships form and community grows.

- Respect and encouragement - people are given
responsibility for projects. **Check-ins, aka "feedback loops", help with questions and accountability.**

- Reputaon - the organization maintains a reputation for what it is good at (engaging people and focusing on rejuvenating the land, building community).
- Innovation: Assess current situation, look to the future and pay attention to issues and trends in the community.

**Outreach -**
- **Attract People** to be interested in the project - go out into the community to events and hubs of activity in real face-to-face interactions; provide good description of your vision and use visuals. **Be good listeners because we don’t know it all.** If possible, provide small gifts - i.e. seeds, photos, logo stickers.

- **Hold Meetings:**
  - Locate in publicly-known places where most people are comfortable, especially in the beginning. Try the library, schools, and garden clubs. Be aware that a host holds a certain amount of unspoken leverage, so neutral places are priority.
  - Offer food during meeting times and child care so that people can attend within their family responsibilities;
  - Hold meetings on a variety of days: weekday evenings, weekends
  - **Diversify** the decision-making team; we don’t know what we don’t know
  - **Tell your story** - accept invitations to speak with other organizations, media, and education events.
  - **Hold events on the site** and share food
  - Create activities for children
  - **Build Capacity** - share knowledge, solicit wisdom, and as Star Hawk advises in Earth-activist training - 1) build long-standing relationships to support communities with unmet needs; and 2) reinvest surplus funds into diversity scholarships
  - Acknowledge the work of each other
  - Socialize together
  - Establish effective methods of communication (list serve, web-based, or face to face forums) and check in regularly to see if it is working.
  - Evaluate your tasks and how it went
  - Evaluate your processes and adjust so that all people who want to have input feel empower
  - Celebrate and Have fun!
  - Activities - to build connections, break the ice, and create experience and memory.
  - Seattle Department of Neighborhoods offers the People’s Academy for Community Engagement (PACE). PACE is a civic leadership development program dedicated to teaching hands-on skills ranging from community engagement to navigating City government to the next wave of community
| 4. GETTING FUNDS FOR YOUR PROJECT | **Goal:** Participants understand the basics of pursuing funding and grants.  
FINDING A FISCAL SPONSOR In order to receive grants and sometimes donations, you need to have access to a non-profit [501(c)3] account or create your own non profit. You can create a group and approach an organization whose mission matches the work you do and they can become your fiscal sponsor. They usually charge 5-15% fee on funds and perform accounting services for your grant and expenditures.  
GRANTS utilized by the BFF -  
- In Seattle the Neighborhood Matching Fund at the Department of Neighborhoods has grants, ranging from $1000-$100,000. The city staff is very helpful and will want to see that there is interest in your project across your neighborhood, as well as a diversity of players that reflects your neighborhood. The 'Match' = community volunteer labor (valued at $20/hour) or other donations.  
- This curriculum is developed for an education series and is funded by the King Conservation District. An intended outcome is a 'ripple effect' which provides information and activities beyond the BFF project. We want to see many more people being affected by this project through sharing of resources, information, and labor.  
- Other small grants like Sustainable Path, Central Co-op, City People's Garden Store.  
Writing Grants - Successful Grant Writing includes:  
Becoming thoroughly familiar with grant funder and their programs.  
Making contact with someone in the organization ahead of time.  
Providing succinct answers and establishing with your team a strong set of goals and objectives, a solid budget (the budget should tell the whole grant application story”), goal measurement, and evaluation of the project.  
Get someone(s) on your team who is a good at writing and report-writing to do the work. Support each other and make feedback loops to strengthen the written material and to meet deadlines.  
Creating strong relationships with grant administrator and re apply for funds from the same source, if appropriate.  
Following up, if rejected, and ask why. Making inroads for next time. Demonstrate good communication skills and follow through.  
**DONATIONS IN-KIND** - Asking: face to face, and letters with fiscal sponsor info, call-out on list serve or social media, include how you will let others know of their donation (if you can and it is  | 15 min | Instructor A |
| Grantwriting | |  |
| KCD | |  |
| DON | |  |
desired), specific use of the donation.

If you have a website, set up a donate 'button' in coordination with your fiscal sponsor

**DONATIONS** - thank you letters with IRS tax ID of the fiscal sponsor number for tax deductions. Use a card or a letter with the logo.

5. **HOLDING & STORING WATER ON SITE**

**GOALS:** Participants understand levels of water storage in the landscape; Understand how to make the land more water-holding (swales including rain gardens and using keyline) and storing water in soil and plants.

**Get Stewards Feedback** on “Greening the Desert” video clip – HAVE THEY WATCHED IT?

**Q: INTERACTIVE:** Ask student what are some different ways to store water in a landscape?

A's:--Hold it in the soil (our largest storage reservoir)
--Hold it in plants
--Hold it in natural site features – ponds, rain gardens (temporarily), wetlands
-- Containers (ex. tanks) depending upon cost, permanence, capacity, site.
-- Site will hold more water depending upon grade, soil composition (clay, sand, loam), organic matter content, and compaction

**STORE WATER IN THE SOIL (BUILD A SOIL SPONGE)**

Organic material is what helps the ground to act like a sponge – one of the best strategies for increasing infiltration and help the soil do a better job of harvesting water.

Each percentage point of organic material in soil can absorb 6/10” of rain during a single rain event) – 10% organic matter = 6” of rain – really decreases flooding, erosion, and sedimentation (Toby – 12” of rich topsoil holds 3” of water)

**HOLD WATER in the SOIL through various types of EARTHWORKS**

**SWALES in the Landscape**

Swales are basins placed on contour lines and capture water so that it can slowly percolate into ground over time. In some cases they can create a freshwater lens/plume (bubble of water)
suspended above the water table) below the soil surface. Swales are located over areas along a slope of land along the same elevation. The soil from these modest excavations is piled on the downslope side to make a berm. The berms and basins can be planted or used as paths. Swales will catch water running downslope (or from gutters or other sources), slow it down, and sink it into the ground where plant roots can get to it and where it won’t evaporate. [Show an example with a projected image or on site.]

**Q**: How would swales in a gentle to moderately-sloped landscape lead to decreased irrigation needs?

**A**: Swales cause water that would have run off to sink into the soil and potentially create a water plum and/or recharge the aquifer.

**Q**: Why would infiltration swales not work on steep slopes?

**A**: They are more likely to blow out the downhill berm in heavy rains. On steep slopes it’s best to make berms/wattles out of brush/logs, coconut, etc. and stake these items on-contour to slow water and erosion.

**ACTIVITY**: Have students sketch a swale, using the slope and a plant as pieces of the concept – mention on-contour and off-contour

**Rain Garden** is a garden which takes advantage of rainfall and stormwater runoff in its design and plant selection. Usually, it is a small garden which is designed to withstand the extremes of moisture and concentrations of nutrients, particularly Nitrogen and Phosphorus, that are found in stormwater runoff. rain gardens are sited ideally close to the source of the runoff and serve to slow the stormwater as it travels downhill, giving the stormwater more time to infiltrate and less opportunity to gain momentum and erosive power.

On the surface, a rain garden looks like an attractive garden. It may support habitat for birds and butterflies, it may be a formal landscape amenity or it may be incorporated into a larger garden as a border or as an entry feature. What makes it a rain garden is in how it gets its water and what happens to that water once it arrives in the garden. Below the surface of the garden, a number of processes are occurring which mimic the hydrologic action of a healthy forest.

Rain garden soils are engineered and appropriate plants selected for the rain garden. The garden is a small bioretention
cell in which stormwater is cleaned and reduced in volume once it enters the rain garden. Nitrogen and phosphorus levels and overall sediment loads in the stormwater are reduced by the action of the plants and growing media on the water. Multiple rain gardens over an area will have a positive cumulative effect on both the volume and quality of stormwater run off.

All swales need an overflow strategy, too!

Of, course PLANTS are holding water in the landscape, especially trees – and specifically conifer and evergreen trees in our region during wintertime deluges of rain! They transpire water from the soil through their roots into their leaves and then the air.

KEYLINE DESIGN is a revolutionary system of managing water and soil on site. Developed by innovative Australian mining engineer and farmer, P.A. Yeomans. His work is a major source of inspiration for Bill Mollison and David Holmgren, permaculture pioneers. It helps to improve water infiltration over time and lay out a site that uses water effectively.

KEYLINE DESIGN is applicable to most terrains. Best in broadscale landscapes with rolling hills. Knowing where the keyline falls can help you design the rest of your landscape.

Design which uses keyline principles begins with identifying the major keypoint of your slope. This is the point where hill goes from convex to concave.

Above keypoint = prone to erosion and poorer soils. Here you should maintain vegetative cover like a forest. Some organic matter naturally moves downhill on slopes.

Below keypoint = zone of collection and richer soils. Here is the most appropriate area for the bulk of your productive landscape. The flat land at bottom can support annual agriculture without eroding. Steeper areas below keyline can support trees, naturally where organic materials end up.

The KEYLINE is a contour line on the landscape that goes through the keypoint.

Keyline is often a good place for human settlement and access. High enough to avoid flooding and cold air damage and low enough to avoid steep, erosive sloper and greater fire danger.
Keyline is usually the highest point in the landscape where you can situate large water storage ponds without danger of instability.

**WATER COLLECTION – CISTERNS/TANKS = Last Step**

**Q’s - What future water collection projects would be beneficial for your food forest site?**

**6. POTLUCK LUNCH**

**EAT AND SOCIALIZE**
- Encourage Steward to Check Out Bio Posters Posted Up
- Wrap Up and Clean Up Room – 12:45PM-ish
- Walk to BFF – 12:45PM to 1PM

**45 min. Plus clean up & walk time**

**7. UNDERSTANDING WETLANDS and WHAT’S HAPPENING WITH local WETLANDS – site visit.**

**GOAL:** Understand wetlands’ role in the landscape and how to enhance them.

- Q: Why do we care about wetlands?
- Q: Wetlands Regulations and Permit Process for your locality.
- Q: How do we enhance wetlands to hold water for summertime?

**Share INFO SPECIFIC TO your site or local wetland site**

**30 min.**

- **Guest Teacher w/ expertise in wetlands.**

**8. EXPLORATION of WETLAND Area**

**Look at a wetland Area together**

**15 min.**

- **Guest Teacher**

**9. STATIONS:**

1. **Plant Guilds (Instructor A)**
2. **Water Exploration with Instructor C**
3. **Explore Sheet Mulching with large plants (Instructor C)**

**Goal:** on-site observations and hands-on activities expose participants to concepts. Thereby they will understand the use of plant guilds, water features, and sheet mulching on site.

**Break into three groups (~10/group).** Each group stays together through 3 different stations. Stations are about 25 minutes each with 5 minutes to switch – 1:45 – 2:15; 2:15 – 2:45; 2:45 – 3:15

1. **EXPLORING PLANT GUILDS** – Review Plant Homework by having students tell plant name (botanical/common) and its functions, etc. Review roles and structure of plants in Fruit Tree Guilds; Use examples in the food forest to teach, and have them get into pairs and use the handout to guide selection of plants in forming a guild. Share what everyone came up with.

**Guidelines include:**
- Start small and simple - choose 3 plants to complement your central plant. Choose according to:
1. Structure - find plants to fill in the vertical layers in the food forest
2. Function - choose plants to work in synergy with each other.

Create a salad bar of plants for students to choose to create guilds around 3 trees in Arboretum area. Have them work in smaller teams of 6 and relay back to the group the reasons why they choose specific plants.

2. WATER EXPLORATION – Swales, Soil-Building, and Watering System @ BFF

REMINDER: The social systems are the most important in the food forest. The people are needed to do the maintenance and creation of the food forest in the beginning years. If done well, in later years, the food forest will do a lot of work for you.

- Watering Systems for BFF - included the coordination by a team of people to engage 45 volunteers each summer. Tasks included: dividing the forest into zones with markers, mapping it, setting up hoses, hardware, and wands/nozzles; recruiting, signing up, and training volunteers; helping volunteers w/ info & problem solving.

11. WRAP UP

Class 2

EVALUATION FORM

EVERYONE COMES BACK TOGETHER at Gathering Area in the food forest.

Have Stewards reflect on day and write down their clearest and muddiest points of the day on Evaluation Form that will get turned into us. Students can finish this and bring to next class, if they need more time.

Ask Stewards to share one important learning that stood out to them from the day.


OTHER NOTES: