

Build a Bug Hotel SESSION PLAN DESIGN

At the end of the design process upload 4 files into your portfolio folder in Google Drive:

- The completed session plan design template
- Parent permission slip
- Risk-benefit analysis
- A video of max 5 minutes of you leading the session. [Video Link](#)

Having finalized your portfolio folder please email gaye.amus@learninginnature.com to inform her that it is ready for evaluation.

Originally the Bug Hotel class was a part of a year long series of classes for Willow Grove Park and the City of Lake Dallas to ultimately build an Outdoor Classroom for the park. Natalie with the public library and also over Willow Grove, asked me to create classes that would construct most of the components of the classroom. This class involved one large permanent bug hotel and small take home hotels for students. The grant involved with the series was not turned in on time.

A few months later, Linda, with the City of Corinth Parks and Recreation, asked if I would teach a small class for their new pollinator garden planting day. After rewriting the class to fit into the short time frame, the class was cancelled citing it would not work with the events of the day.

I offered the trial class on my own to four students simplifying it even further. There will now be three versions of this class depending on the need when it is offered.

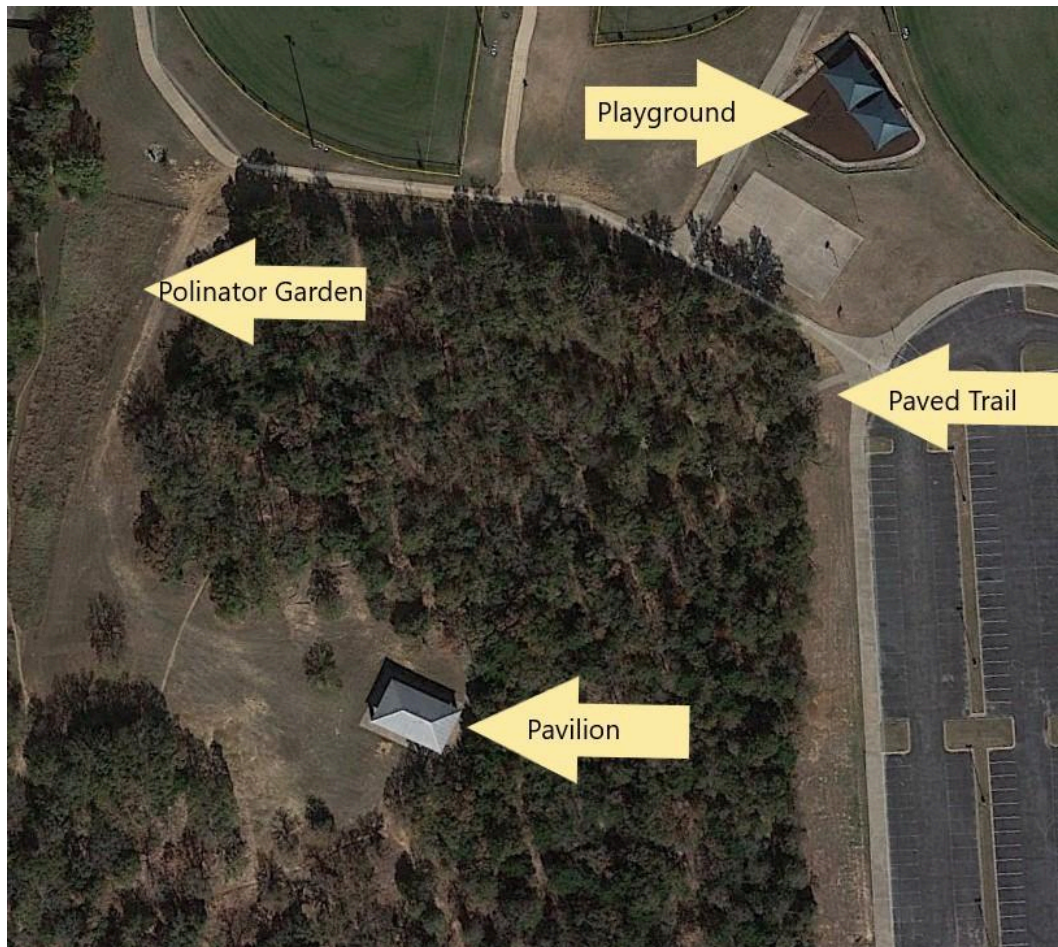
● Survey/observe

- The people,
 - Children
 - *How did you find out information about children?* I created a Google Form and sent it to each student that was interested. For this class, I invited children I already knew somewhat so I had already observed them.
 - *What did you find out? Provide a summary.* Four boys attended this class. The forms I sent were not returned so I gathered my information verbally. I created this [spreadsheet](#) for future reference.
 - Adults
 - *Who else will be present in your session?* I asked that parents of children under 8 remain to help. In this case the 6 and 9 year old were independent.
 - *What are their skills and role?*
 - Myself (Annette), Teacher (20 years), Permaculture Educator and Designer
 - Steve, Videographer, Photographer, managed Gavin

- Amanda, managed Shane

- Observation of land, the site:

- Where will the session take place? [Corinth Community Park Pavilion, Corinth, Texas](#)



- Physical elements (e.g. trees, boulders, river). [The pavilion is in a meadow at the top of a small hill surrounded by a wooded area.](#)
- Microclimate(s) (e.g. where is it windy? where is it sunny/shady?) [In the meadow near where the hill slopes downward is windy and sunny. The pavilion and woods are shady and protected from the wind.](#)
- Distance from collection/dropoff to site. [The pavilion is about a 3 minute walk from the parking lot, up the paved trail to the covered pavilion.](#)



○

- Vehicular access (if you need an ambulance, where can it arrive). *If needed, an ambulance would park in the main parking lot and walk down the sidewalk to the pavilion.*
- Is there a mobile phone signal on site? *Yes*
- Site Boundaries (where will the children be able to play) *They will be able to play at the pavilion and in the meadow. I will lead them on a short section of the trail in the woods. There is also a playground nearby that can be used prior to and after class.*
- According to the local Fox 4 Weather App, the weather forecast is Partly Cloudy with a high of 74 degrees fahrenheit/23.3 celsius and a 15% chance of rain. It should be about 60 degrees/15.5 celsius when the class begins with a slight breeze.

○ The knowledge base.

- *What books, websites etc. did you read in advance?, for example: the National curriculum, the Children in Permaculture Manual, your previous training.*
 - [The Children in Permaculture Manual](#)
 - [Bug Hotel, a Clover Robin Book of Nature](#)
 - www.brennaquinlan.com
 - www.growdoit.com/au
 - [Pinterest pictures on the table](#)

● Analysis

- *List different possible ideas for this session (brainstorming)*
 - Building frames for the hotel
 - Ordering frames for the hotel
 - Collecting trash items to use
 - Building one large hotel for the garden and taking home a tin can hotel
 - Collecting tin cans for a collage type hotel
 - Learning to use a drill for older kids to attach tin cans to leftover wood
 - Pre-build the hotels and keep it simple
- *Analyse different options, for example:*
 - *Analyse the site and do a PMI (plus, minus, interesting) (or SWOC analysis) of the place. State why you chose that place. I was asked to teach a class at the pavilion. I lived next to that park once and know it well.*

Plus	Minus	Interesting
Covered Pavilion	Bathroom are not close	Wind
Plenty of tables	Busy ball fields nearby	Too many trails
Trash available	Potential of snakes	Trees are healthy
Healthy wooded area with trails and places to hide	Poison Ivy	Narrow trails
Lots of birds		
Good sized meadow for play-running or rolling down the hill, sledding down the hill, hide and seek, capture the flag game, climbing trees or rocks, hiking, playing chase, imaging there are dinosaurs		
Roots & rocks in trails		

- *List a few possible ideas for what activity/ies you could do, and where the seed of inspiration came from.*
 - Nature journaling. I used to run a nature exchange program that used nature journaling. It encourages writing, drawing, and observational skills.
 - Walk the trails to observe insect signs. (Did and do that for homeschooling)
 - Walk the trails to gather materials for the hotel. (Observation and exploration)
 - Talk about the materials brought for the hotels.
 - Walk through the garden and talk about the plants and pollinators. (We do that frequently)

- Observe the tree canopy. (CiP Manual and because we do that frequently)
- Pre-build the hotels or maybe have them attached a couple cans. (Keeping it simple, yet learn a simple skill)
- Have a large play flower and have the children pretend to be pollinators (I made a flower for our nature exchange)
- Have examples of different types of insect hotels (Good to see options)
- *Which of these activities will reflect a child-led or child-centred pedagogy?*
 - Walking the trails to observe (both)
 - Nature journaling (child centered)
 - Gathering materials (child led)
 - Observing the canopy (child centered)
 - Pretending to be a pollinator (both)
- *Use Eyes, Heart, Hand, Head as an analysis tool to choose the activity(ies) - making sure that you have a balance across all areas of holistic planning*
 - **Eyes:**
 - Observe the insects at work pollinating and flying around
 - Enjoying the colors of the flowers
 - Enjoying the fresh air and feeling the wind in the trees
 - Watching the birds as they fly and sing
 - **Heart:**
 - Learning to appreciate insects until they can imagine being one.
 - Making the connection between insects, pollination, and our food.
 - **Hands:**
 - Searching the woods for insect signs and materials.
 - Building an insect hotel and using a screwdriver
 - Walking through the garden to see insects pollinating.
 - Pretending to be a pollinator
 - Journaling their observations in a nature journal
 - **Head:** What new information will they learn?
 - Insects benefit us through pollination
 - How to encourage insects in our gardens
 - How to observe insects in their habitat
 - What an insect hotel is and how to build one
 - How to nature journal
- *Use the permaculture ethics as a checklist - do the activity ideas reflect them or could it be a better example of that ethic?*
 - **Earth care:**
 - Becoming aware of how insects benefit us and our food.
 - Observing the world around us.
 - **People care:**

- If we encourage insects, we have more food to share.
- We can encourage others to make their own observations.
- Observing how nature makes us feel.
- *Fair share:*
 - We can encourage others to observe the world.
 - Kids can help others build their hotels.
 - We can plant gardens for pollinators.
 - The hotels offer shelter for insects.
- [Risk Assessment Link](#)

- Design: The session plan

1. Your first name and surname

Annette Argabright

2. Title

Build a Bug Hotel!



What: Join Annette from Oliver's Gardens as we learn about pollinators and forage for insect hotel materials.

Who: Ages 8-12 (younger with a parent present)

When: Saturday, April 24, 2021, 10-11:30 AM

Where: Corinth Community Park - at the picnic pavilion in the meadow near the playground

Supplies Needed: A screwdriver and pencil

Picture by www.growdoit.com and www.brennaquinlan.com

3. Age

8-12 or younger with an adult. It could be altered for older or younger children by adding the building or simplifying further.

4. Group size

5-10 or up to 12 with helpers

5. Duration

1 ½ hours

6. Brief overview

Learn how insects help us and build an insect hotel to encourage them.

7. Holistic Planning

- **Eyes:**
 - Observe the insects at work pollinating and flying around
 - Seeing the colors of the flowers and smelling their scent
 - Feeling the fresh air and the wind in the trees
 - Watching the birds as they fly and sing

- **Heart:**
 - Learning to appreciate insects until they can imagine being one.
 - Making the connection between insects, pollination, and our food.

- **Hands:**
 - Searching the woods for insect signs and materials.
 - Building an insect hotel and using a screwdriver
 - Walking through the garden to see insects pollinating.
 - Pretending to be a pollinator
 - Journaling their observations in a nature journal

- **Head:** What new information will they learn?
 - Insects benefit us through pollination
 - How to encourage insects in our gardens
 - How to observe insects in their habitat
 - What an insect hotel is and how to build one
 - How to nature journal

8. Preparation of materials and resources

Required Materials and Tools:

- Insect hotels partially built from leftover wood and tin cans



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- Boards, cans, screwdrivers and screws ready to go
 - Boards should have holes predrilled
- Will need an extra adult to help with screwdrivers
- Have some filler material to use and collect more
 - On class day confirm the area is free from snakes
- Flower for pretend
- Students to bring:
 - Screwdriver
- Table materials
 - Book
 - Nature Journal examples
 - Handouts (optional)
 - Pictures of insect hotel examples
 - Bug spray-natural (in my bag)
 - First aid kit (in my bag)

How to prepare space and/or people:

- Prior to class, send a [student information form](#) to be completed and returned.
- Walk the area prior to the class to use for examples.
- Have supplies ready
- Go over boundaries for free play
- Go over risks of snakes and poison ivy

9. Content

In 3 parts, one for each of sowing, growing and harvesting, up to a maximum of 3 activities in total.

Sowing

include an inspiration, motivation or provocation such as a story, a song, or a way to capture the attention and imagination of the children. It could even be a display in the room or another interesting situation which a teacher has prepared and observes the children's reaction to it.

- Have a display table with a sign in form, pictures of Insect Hotels, pictures of insects, nature journal examples, and the book, *Bug Hotel*. This will not be a part of the class.
 - [Sign in form link](#)
 - [Pictures Link](#)

- Introduce myself and why insects are good for us. (5 minutes)
 - [Information link for bug hotels](#)
- Introduce themselves. Together we will act out being a pollinator using my flower (20 minutes)



- Free play through the meadow meeting at the garden (10 minutes)

Growing

- We will walk in the woods searching for insect signs, insects and collecting material to put in our hotels. (20 minutes)
- Building the hotel-they will screw in the last can and then fill with materials (rocks, sticks, wood chips, bamboo, leaves) (20 minutes)

Harvesting

You could gather feedback from children (about what they enjoyed, learnt) or something which they create which will remind them of the workshop.

- They will take home their insect hotel
- Let them share their favorite thing they learned. (5 minutes)

10. Permaculture ethics and principles

How does this session relate to each of:

Earth care:

- Becoming aware of how insects benefit us and our food.
- Observing the world around us.
- Learning to leave behind just our footprints and respect the earth.
- Reusing materials (wood and cans)

People care:

- If we encourage insects, we have more food to share.
- We can encourage others to make their own observations.
- Observing how nature makes us feel inside.
- Allowing the children to be creative within the context of learning about insects.
- Adults can relax, get to know each other while observing their children, and enjoy nature.
- Plenty of shade protection under the structure and trees.

Fair share:

- We can encourage others to observe the world. The children support one another in their creativeness.
- The children share ideas and thoughts as they are gathering materials and building their hotels.
- Kids can help others build their hotels.
- We can plant gardens for pollinators.
- The hotels offer shelter for insects.

Which of the following principles are used in this session plan? Delete the ones that are not relevant, and add an explanation for those you keep.

Holmgren principles

1. *Observe and interact* (walk through the woods and garden, build the hotel, observe the children as they interact)
2. *Catch and store energy* (Build the hotel to encourage insects)
3. *Obtain a yield* (By encouraging insects, we have things pollinated and more to harvest)
4. *Use and value renewable resources and services* (Valuing insects)
5. *Produce no waste* (Repurposing wood and cans)
6. *Design from patterns to details* (By using materials that insects prefer, we are observing their lifestyle patterns in hopes of having more pollinators)
7. *Integrate rather than segregate* (An insect hotel integrates several species of insects for the greater good of the garden)
8. *Use small and slow solutions* (An insect hotel is a small and simple way of bringing awareness, respect of nature, and habitat for insects)
9. *Use and value diversity* (With an insect hotel we are valuing insects and observing them. Each child has different thoughts, skills and creativeness to offer)

Attitudinal Principles (from Bill Mollison)

- *Work with nature rather than against it* (we learn to appreciate insects instead of fear them)
- *Minimum effort for maximum effect* (The small and simple act of building an insect hotel will bring maximum pollinators)
- *Work with Nature (rather than against her)* (We will encourage insects and respectfully observe them)
- *Everything Gardens (or has an effect on its environment)* (We can observe the effect insects have on our plants)

11. CiP Curriculum theme

Please mark an X in the column headed either 3-6 years or 7-12 years.

	Theme		Topic	3-6 yrs	7-12 yrs

A	Introducing permaculture	1	Permaculture ethics & principles	x	x
		2	Connections	x	x
B	Living nature	3	Soil and stone		
		4	Water		
		5	Plants and trees	x	x
		6	The animal, fungus and bacteria kingdoms	x	x
		7	Air		
C	Design	8	Designing		
D	Growing food	9	Growing food		
		10	Preparing food		
E	Built environment and resource use	11	Buildings		
		12	Using nature's gifts wisely		
F	Social permaculture	13	My body, heart and mind	x	x
		14	My community		
		15	Our human family		

12. School theme

Please delete the ones which are not relevant to this session plan:

- Language
- Science
- Art
- Physical Education

13. Season

State which season this activity is appropriate for.

Spring and Fall

14. Setting

Delete the ones which are not appropriate:

Forest

Meadow

Asphalt (tarmac)

Garden

15. References

Include here any references (names of authors, books, websites, or other resources which you have used or taken inspiration from). Make sure that if you have directly quoted anyone else's written work that it is written here and is in quotation marks in the rest of the session plan.

- [The Children in Permaculture Manual](#)
- [Bug Hotel, a Clover Robin Book of Nature](#)
- www.brennaquinlan.com
- www.growdoit.com/au
- [Pinterest pictures laminated on the table](#)
- [50 DIY bug hotels | material and instructions to attract bugs - Craftionary](#)

16. Inspiration

This is an opportunity for you to share inspiration received from children e.g. about what to do next. Some of the children requested more classes on insects as well as building more hotels to add to theirs. Two of the boys requested more nature classes. Since the classes I will be offering will be at parks, play time at the playground or class area will be suggested prior to as well as after.

● Implementation

- *Video max 5mins of you running the session (make sure you have written parental permission for the video and that somebody else is videoing you). Share the empty permission slip and video in your folder.*
- [Here is the link to a slideshow of pictures and video from this class.](#)
- *Forms were sent to parents, but were not returned. Because one other family attended, I received verbal permission for pictures, video, and other information. For a larger class, I would follow up on forms prior to class.*

● Maintenance

- *e.g. How will the energy/ learning from the session be maintained? Or what ideas do you have for extending the learning and experiences into the future? There were requests for me to offer more classes and another insect hotel class so they could enlarge the ones they built. I plan to offer a series of classes and events at*

area parks to blend 4 communities together. This plan will be presented to the city council for approval.

- At the end of class we discussed the need to clean out the materials every 3-4 months and replace it with fresh materials. Nature journaling was encouraged as they observed the insects that moved in.

● Evaluation

- *How did you evaluate the session? Who did you get feedback from? What did they say? At the end of the class I asked*
 - What did we learn? "We learned about insects, about pollinators." "We learned that they will come to the hotel." "Signs of insects"
 - What was your favorite thing we did in class? "Gathering materials in the woods." "Being a bee." "Walking in the woods." "Looking for signs of insects in the woods." "When will you have another class?"
- *What went well? Pretending to be a bee, exploring in the woods, making observations, looking for insect signs, gathering materials and filling the hotels.*
- *What was difficult or challenging?*
 - Adding the final can was difficult.
 - They did not want to sit and talk about insects, but did like looking at pictures that I had. I would like to bring magnifying glasses for everyone next time.
- *Your design brief was to lead a session which reflects the Children in Permaculture ethics, principles and holistic planning. Was it met? I believe so.*
 - They gained respect for insects and carefully constructed their hotels (Earth Care).
 - They helped each other gather, shared as pretend bees, and complemented each other's hotels (fair share and people care)

● Tweak

- *If you were to lead the session again, how would you change it? I did learn several things from the experience and the children. When I offer it again I will:*
- Bring magnifying glasses to search for insects instead of pictures of them. I seemed to lose them a bit.
- Instead of the 10 minute play time I would have them be flying insects as we make our way to the trails.
- In addition to talking about and showing pictures of poison ivy and copperhead snakes, I will show them how to poke the leaves. I did point out poison ivy.
- I will attach all the cans as it was difficult for them.
- I will keep the class at 1.5 hours, but include playtime at the end and maybe have sidewalk chalk, play insects, coloring pages or other related toys/activities for self guided play.

● Reflection

- *What you learnt personally through the full design process?* This process helped me fine tune what I wanted to share with children. Teaching the class helped me fine tune more. I will continue to offer a "trial" class to a small group in the future prior to offering the "real" class.
- I felt prepared and knowledgeable because of the process and visiting the site prior to teaching. I could adapt the class to most park locations now.