CREATING A VINE TEEPEE

MATERIALS AND TOOLS NEEDED:
Installation requires about one hour and two people to assemble

- Bamboo poles or steel rods (8)
- 14-inch plastic zipties (8-10)
- Shovel and/or pickaxe
- Mulch
- Measuring tape
- Twist ties
- Sitting rocks or logs
- Spray paint
- Hacksaw
- Step ladder
- Jute twine
- Wooden stakes

Annual, perennial or fruit vines can be planted around the teepee.

The structure of vine teepees can be constructed of 1/2-inch rebar, 1/2-inch steel bar, or sturdy giant bamboo as described here.

1. Determine location
For vines to grow vigorously on the teepee, requirements for sunlight and well-drained soil need to be taken into account when locating the teepee.

To create a space that 2-4 children can inhabit, the teepee should be approximately 8 feet across and 8 feet tall inside.

2. Harvest bamboo poles
Locate a stand of large bamboo. Cut the bamboo to length. For a teepee 8 feet in diameter, 10 feet lengths of bamboo are ideal. A hacksaw works best for cutting bamboo.

Remove leaf shoots flush to the pole using pruning shears or hacksaw.

To prevent water from entering and causing deterioration, a "chamber joint" should be left at the top of the narrow end of each pole to seal the end (Figure 2).

3. Mark center and radius of teepee (eight-sided)
Use a survey stake or survey flag to mark the center point of the teepee. Use a measuring tape and surveyors spray paint (or flags) to mark the radius of the teepee.

4. Mark locations of poles
Mark locations of poles in the sequence shown in Figure 1, following steps 5 thru 9.

Figure 1. Sequence of marking pole locations
5. **Locate the teepee entrance**  
Determine where children will enter the teepee and position the layout of the poles on that location (Figure 3). The entrance should be 24-30 inches wide (Figure 1).

6. **Mark the location of first pole**  
After locating the entrance, position the first pole on one side of the entrance.

7. **Mark location of second pole**  
Position second pole opposite the first pole. Using an 8ft jute twine, trace a straight line from the first pole through the center of the circle to locate the second pole (Figure 4). Mark intersection of the circle on the opposite side.

8. **Mark third and fourth pole locations**  
Run twine through the center at a 90 degree angle to the line of poles 1 and 2. Intersections with the circle define locations of poles 3 and 4.

9. **Mark remaining pole locations**  
Bisect the circle between the first four poles and run twine through the center to locate poles 5 to 8 (Figure 5).

10. **Dig holes for poles**  
Dig holes approximately one foot deep and six inches in diameter for each pole (Figure 6).

11. **Create quadpod**  
Select the four largest bamboo poles and lay them on the ground so that their wide ends (bottoms) are aligned. Approximately 1 foot from the top narrow end, bind the poles together using a plastic zip tie (Figure 7).

12. **Bring quadpod upright and place in holes**  
It is important to keep the poles together as you bring them upright and then place them in the holes (poles 1 to 4, Figure 1). Align pole bottoms to be flush. The tops do not need to be flush because the bamboo poles can vary in size. Adjust quadpod until junction of poles is above center of circle (Figure 9).

13. **Partially fill holes of quadpod poles**  
Partially fill the holes to hold the quadpod poles in place, but also allow for adjustments to be made. Soil supports poles while finishing construction.

14. **Add additional poles and partially fill holes**  
Place additional poles 5 to 8 (Figure 1) in their holes and lean them against the quadpod. Partially fill their holes with soil.

15. **Secure poles to quadpod**  
Using a plastic zip tie, secure the additional poles to the quadpod. A step ladder will be needed to reach the junction of the poles.
16. **Bind all poles together**

Using thick jute twine, bind all 8 poles together at the top junction (weaving in all directions). Securely tie.

17. **Completely fill holes**

Finish filling the holes and carefully compact the soil with a hand compactor or pickaxe handle (Figure 10).

18. **Add twine to vine support**

Support is needed for vines to climb and grow around the teepee (Figure 11). Securely tie the end of a ball of jute twine at the bottom of a pole at the first chamber joint (to stop twine from slipping).

Pull the twine tight and then secure it to the adjacent pole at another chamber joint. Again pull the twine tight and return to the original pole at the chamber joint above the starting point. Continue a zigzag pattern 3/4 up the teepee (Figure 13). Repeat “weaving” between each two adjacent poles, except at the entrance.

19. **Finish the teepee**

Plant vine plants at midpoints between poles and add mulch around plants and teepee floor (Figure 12). Vines should be trained on the woven twine and poles as they grow using “twist ties” to anchor them. Add sitting rocks, logs, and other decorations to the teepee interior. These final steps are open ended, guided by the builders’ imaginations.
Vine Teepee Creative Ideas

Art pieces and seat made by children
Established teepee with a gourd vine
Teepee hideaway

Alternative teepee cover of jute netting
Teepee provides a social gathering place

Creating a Vine Teepee Information Sheet

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Natural Learning Initiative | College of Design | North Carolina State University
Creating environments for healthy human development and a healthy biosphere for generations to come.

The purpose of the Natural Learning Initiative is to promote the importance of the natural environment in the daily experience of all children, through environmental design, action research, education, and dissemination of information.

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