

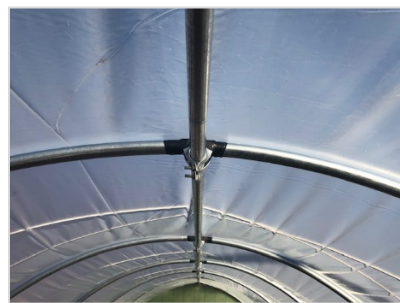
Hoop House

A half-round “hoop” shape structure is called a hoop house and is used as a passive solar greenhouse or season extender. Often constructed of PVC pipe, hoop houses can be large enough to hold many people and as little as a hoop over a small raised bed in your garden. The Discovery Garden’s hoop house is made with a galvanized steel frame and greenhouse film that is coated with ultraviolet inhibitors to slow the degradation effects from the sun.

Inside the Discovery Garden hoop house, raised beds allow for plants to grow directly in soil and are protected by the structure. Though it may be cold outside, the inside of the hoop house is usually warmer than outdoors, and it stays warmer overnight. As the hoop house warms during the day, it is also heating the soil. The soil acts as a heat reservoir, keeping the hoop house warmer overnight. Cold-tolerant vegetables such as greens, herbs, radishes, and carrots can be planted in the very early spring to have an early harvest of fresh vegetables. Later in the year, during our hot, sunny days, the sides of the hoop house can be rolled up to allow for ventilation and cooling of the interior space. Changing out the cover on the hoop house to a green shade during the most intense part of the growing season can protect sun- and heat-sensitive plants, helping them last longer, such as lettuces. By simply changing out the cover, we can invite in more heat and light or block it out, depending on the time of year and the plants’ needs.

The Discovery Garden hoop house is planned as a place to experiment with growing cold season vegetables and seed starts in the early spring. Water collection rain barrels have been placed in the hoop house so that water can be collected and used for watering inside the hoop house. This rainwater is used during times that the irrigation water is not available from late fall through winter and into early spring making it possible to water the plants when everything else outside is frozen and dormant.

With the off-grid solar power fully installed in the garden, we can add supplemental lighting to help keep the plants growing throughout the winter. There are also plans to add a pond heater to the rain barrels to keep the water from freezing.



Website Resources

Difference between High Tunnel, Greenhouse, and Hoop House:

<https://www.rimolgreenhouses.com/blog/high-tunnel-vs-greenhouse-vs-hoop-house-which-is-right-for-me>

Video Resources

How to build a small hoop house over your raised bed:

<https://www.youtube.com/watch?v=NZmPDPx6GCQ>

How to build a medium sized, hinged top hoop house:

https://www.youtube.com/watch?v=ef_TS19TRQg

General how to build a walk-in hoop house:

<https://www.youtube.com/watch?v=AF9Z3H2xUHM>