## Self Sufficient Greenhouse Gardening [Part 2]

A geodesic dome looks much like a ball cut in half. Due to its shape, the dome is durable and reliable. They are built to use maximum space while using the least amount of surface area. One benefit of the dome is that it allows the most amount of light to hit all points of the structure, unlike many other greenhouses which may have shady spots or hot spots. This structure also allows plenty of room for vertical growing.

While this is a superior type of greenhouse, there is one that is even more beneficial and it's called the biodome.

## **Biodome**

While biodomes come in the same shape as a geodesic dome, they are actually much better in a number of ways and the two shouldn't be confused.

{adinserter backyardliberty}Biodomes are self contained ecosystems which are controlled to closely resemble a natural environment. An example of this is at the Montreal Biodome in which there are four different ecosystems that visitors can explore.

One is based on the South American rainforest, one on the North American wilderness, one on an estuary, and the last one on a polar area that has been divided into an Arctic side and a Antarctic side. This is done by keeping the inside of the biodome precisely controlled.

A biodome, once established, is able to be self sufficient and regenerate its own water and nutrients. There is no need for outside intervention once it is set up and running. However, the purpose of a biodome as a garden is to create the perfect environment for growing your own food source. Biodomes, when

built large enough, can also play host to insects and animals.

The benefits of owning a biodome are many and various. Using a biodome for growing food means can have the perfect temperature and 'season' year long. <u>Unlike a traditional</u> <u>greenhouse</u>, cucumbers and lettuce in the winter are no problem, and neither is cantaloupe in the spring.



They save money when it comes to water and energy because the inside of the biodome is regenerative. When using a biodome to grow food, it is easy to determine the exact amount of growing time each different vegetable will need, giving growers the ability to plan exactly when to plant and harvest, making it easy to have enough of any given vegetable at any given time.

Seedlings that are grown in a biodome grow faster than those grown in a hot bed or by other methods. They are not only stronger, but more resilient as well. They can survive being transplanted to a garden easier, if sharing your plants with neighbors, friends, or family is something you're considering. Biodomes are also good at keeping out bugs and viruses plants can become sick with. The biodome is designed to keep these things out.

The outside of the biodome works much like the geodesic dome in that the sun will not overheat one area or be affected by shade. Plants don't dry out or even get too much or too little of any given nutrient.

For those who are interested, the biodome can be used for both aquaponics and also for <a href="hydroponics">hydroponics</a>. Biodomes are typically a little larger than other types of greenhouses, so in addition to being able to control the environment, there are many more

options of how to use the biodome, some of which aren't possible in one of the more conventional greenhouses. If space is an issue, a smaller sized biodome will work just as good as a large one.

When biodomes are built correctly, they can withstand a variety of environmental factors. Because of the way the biodome is structured, it is very strong and can withstand a lot of pressure. It is best if they are screwed in and bolted down to the ground, so they can even withstand small tornadoes and earthquakes. Many biodomes are builder friendly with simple construction and overall can be more cost effective than many greenhouses.



Biodomes, once unscrewed or unbolted from the ground, are portable and easy to move. Because of this, many cities and towns don't require building permits as they are considered temporary structures, although it is important to check local building codes.

Biodomes have superior ventilation and are energy efficient due to their shape. Since heat rises, many greenhouses will stay hotter near the top.

With a biodome, the heat rises to the top, then naturally gets pushed down as more heat keeps rising, keeping the dome the same temperature year round.

A small window inserted at the top of the biodome allows excess hot air to vent, while the vent at the base of the biodome allows cold air in. This exchange keeps the air moving and continually fresh, making the inside of the biodome the

perfect place to grow a variety of vegetables.

As people begin to realize how to get back to doing things the way they were for years, there is naturally a learning curve. Whether it's learning to hunt, can, or even sew, it all takes time. Using a biodome to grow vegetables can decrease the learning curve exponentially when it comes to gardening and a family can be up and running with fresh produce in no time. As time and money are factors for many people, the biodome may be the perfect answer for families.

Biodomes are used by many people in countries all over the world, with great success. As times become harder, money tighter, and dependency on the grid ever more frightening, doing more things for ourselves becomes even more important. Learning about using heirloom seeds in the biodome can help to keep a garden up and running for years to come. Having a garden is a big step in being self sustaining, and knowing where the food is coming from.

Gardeners determine what chemicals come in contact with the food, whether or not to use GMO seeds, and other factors. Fresh, healthy produce is readily available year round, making the biodome the best option for most people.

The only way left to survive after an EMP hits America's reset button WATCH VIDEO 🕨

This article has been written by Susan C. for Survivopedia.

Photo sources: 1, 2