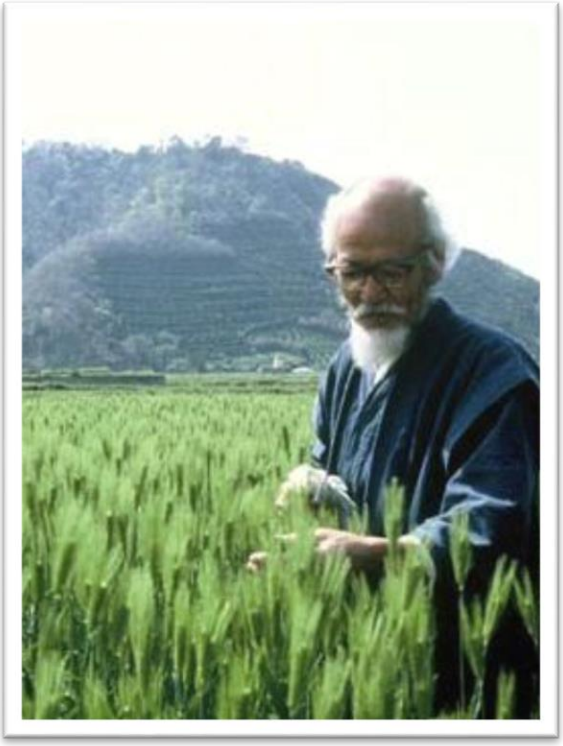
Seed Ball Workshop - Litchfield Garden Club – June 4, 2020

As far back as ancient Egypt, seed balls were used to restore farmland after the Nile's annual Spring flood. In ancient Japan, they were known as Tsuchi Dango, or earth dumplings.



In 1938, microbiologist and agriculturist Masanobu Fukuoka revived the practice incorporating it into his natural farming movement, described in his book 'One Straw Revolution', his approach to growing and living.

Using seed balls was part of his annual farming regime. He believed that Mother Nature takes care of the seeds we sow and decides which crops to provide us with, like a process of natural selection, because ultimately nature decides what will grow and when germination will occur, be that in 7 days or several seasons away.

He grew seed ball vegetables like wild plants - he called it ’semi-wild. He dispersed seed balls on riverbanks, roadsides and wasteland and allowed them to ‘grow up’ with the weeds. He believed that vegetables grown this way are stronger and more nutritious, adding clover to his vegetable seed ball mixes because it acted as a living mulch and conditioned the soil.

His idea of natural farming is based on the thinking that a sound body comes from healthy food, and a sound idea comes from a healthy body. Food is the most significant factor for human life, body and earth are inseparable. When people eat food in season and grown on the very land where they live, their bodies can be sound and in harmony with the environment.

Masanobu Fukuoka said, “The ultimate goal of farming is not the growing of crops, but the cultivation and perfection of human beings.”

The ingredients for seed balls are seed, clay and soil.

Seeds
You can prepare any combination of seeds - all of one kind of plant, two kinds, or multiple kinds. Pay attention to the sizes of your combined seeds. If you mix smaller and larger seeds in one seed ball, the larger seeds will outperform the smaller seeds and your planting may not be as successful for all the varieties in the seed ball. Try and keep seed sizes relatively the same.

Clay
The most effective kind of clay to use in creating seed balls is red volcanic clay, finely sifted. You can also use white or gray clay although they tend to make the seed balls more brittle. You can even use native clay from the ground, which will need to be dried and sifted before using. The clay not only helps bind the seed ball together, it also deters little creatures and birds from feasting upon your creation!

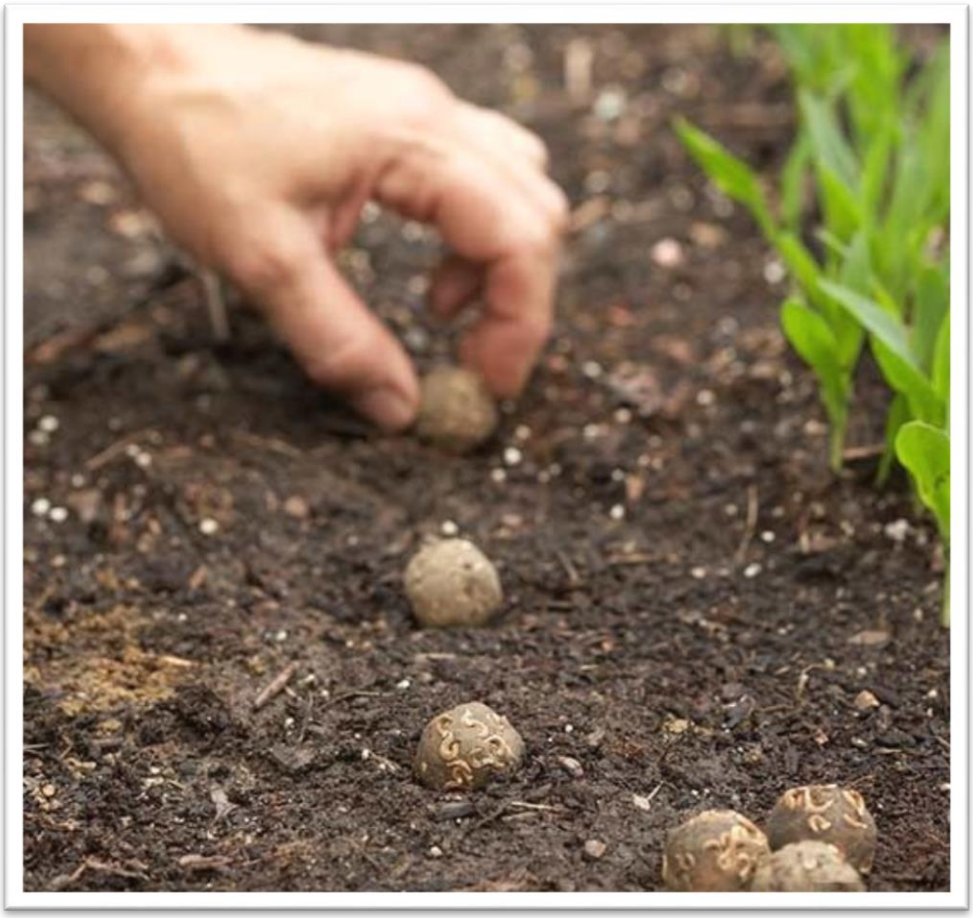
Soil
The soil or compost needs to be relatively fine and sifted. If possible, add decomposed manure to the soil. The more biologically active the compost, the greater success for growth and integrity of the seedlings as they emerge.
Begin the process by mixing dry ingredients together with a ratio of –

* 5 parts clay * 3 parts soil * 1 part seeds

The current fashion for creating seed balls is to mix many seeds into the mixture. When too many seeds exist within the seed ball, they will compete for light and space and this can result in no growth at all. Fewer seeds within the seed ball will create more seedlings. Something to think about.

Add water to the mixture until it is the sticky consistency of dough and you can work the mixture so that is adheres together. Form the seed balls to about the size of a quarter coin.

Once you have completed the batch of seed balls, lay them out to dry. Remember that seeds will start to germinate when they are wet. To avoid this instant germination within the seed ball, begin the drying process immediately after making them. Lay them out on drying screens, or canvas on the ground. Average size seed balls will be dry in 48 hours.



Once you have a bounty of dry seed balls, you are ready to disperse them!

There are several things to consider. What kinds of seeds did you use, and what is the best planting times for those plant varieties.

For example, we are planting Autumn blooming perennial native species wildflowers, to use in our Pollinator Garden, specifically to provide ‘instant’ plant material over exposed soil. Our window of planting for these Autumn blooming perennials will be over by mid-June, so we are on the edge of that planting opportunity.

There are things to consider about your environment for the seed balls. Will they have contact with the Earth? How heavy is the existing plant material at the site - will there be room for new growth?

One of the best times to disperse seed balls in almost every environment is in the Winter, around February. The seed balls will sink into the snow and lay dormant until it is time to grow. That cold winter period and contact with the Earth will acclimate them to their new environment and give them a greater chance of success.