

## Seed Balls



*“Think about it. A whole habitat in a tiny clay ball...”* – Masanobu Fukuoka

Seed Balling – is a natural farming technique which contains plant potential for an entire ecosystem.

This method was pioneered by Mr. **Masanobu Fukuoka**, Japanese farmer/philosopher and originator of the Natural Farming agricultural system. He's method is commonly referred to as Natural or Do-nothing Farming and he is considered to be its father.

Seedballs have use in nearly any climate region in which plants can grow, for reseeding ecosystems into areas of man-made-deserts, for avoiding seed eaters, and for protecting seeds until long-duration rains fall to soak the clay ball, stimulating the seeds with the moisture, and washing away some of the clay off the top of the ball. The seeds inside then germinate in the best possible plant establishment conditions available in each climate-region.

### How to make a seed balls



5 parts red dray clay, 3 parts soil, 1 part seed, 1 - 2 parts water

1. Dry red clay powder.
2. Use dry organic compost.
3. Seed mixture of 8-10 dry native seeds (or if not native, well adjusted to the environment), best a mixture of 2-3 grasses, 2-3 flowering plants, 2-3 shrubs, , 1-2 ground covers, 1-2 bushes, 1-2 trees, that can form a plant guild ([http://lib.fo.am/plant\\_guilds](http://lib.fo.am/plant_guilds)). Keep the seeds for bushes and trees separate from the rest. Preferably look for seeds that are endangered, and/or edible by humans/animals, good for keeping the water levels appropriate for other plants, not overly invasive for other plants and buildings (the roots of larger plants should go deep rather than wide, to avoid problems with walls and foundations of houses).

Step 1. Seed mixed with dry compost

Step 2. Add red clay powder and blend everything together well

Step 3. Mist water onto the mixture while stirring. Spray just enough water to allow the mixture to stick/bind together.

Step 4. Take a pinch of the finished mixture and roll (in the palm of your hand) into penny-sized round balls

Step 5. Put seed balls in the sun to dry completely for a day or two.



The selection of seeds:

**SOILCOVERS**

- Fragaria Vesca(L) – Woodland Strawberry(en)
- Trifolium Repens(L) - White Clover(en)
- Trifolium Incarnatum(L) - Crimson Clover(en)

**HERBACEUS LAYER:**

- Achillea Millefolium(L) - Yarrow(en)
- Anethum Graveolens(L) - Dill(en)
- Anthemis Nobilis(L) - Chamomile, Common(en)
- Borago officinalis(L) -Borage(en)
- Lupinus Regalis(L) - Lupin, Russell(en)
- Viola Riviniana(L) - Common Dog Violet(en)
- Calendula Officinalis(L) - Pot Marigold(en)
- Fagopyrum Esculentum(L) - Buckwheat(en)
- Artemisia Absinthium(L) - Wormwood (en)
- Valeriana Officinalis(L) - Valerian(en)
- Taraxacum Officiale(L) - Dandelion(en)

**RHIZOSPHERE:**

- Asparagus Officinalis(L) - Asparagus(en)
- Pastinaca Sativa(L) - Parsnip(en)
- Daucus Carota(L) - Wild Carrot(en)

**VERTICAL LAYER:**

- Lonicera Caprifolium(L) - Common Honeysuckle(en)

<http://groups.google.com/group/permakulttuuritiedotus?hl=fi&pli=1>

Info to read:

<http://heavypetal.ca/archives/2007/03/how-to-make-seedballs/>  
[http://libarynth.org/guerrilla\\_gardening?s\[\]=seedballing](http://libarynth.org/guerrilla_gardening?s[]=seedballing)  
[http://libarynth.org/plant\\_guilds](http://libarynth.org/plant_guilds)

About Finnish plants:

The botanical garden of Turku  
[http://vanha.sci.utu.fi/biologia/puutarha/index\\_eng.html](http://vanha.sci.utu.fi/biologia/puutarha/index_eng.html)  
 Hyötykasviyhdistys - society for useful plants  
<http://www.hyotykasviyhdistys.fi/>  
 Maatiainen - The Finnish Landrace Institute  
<http://www.maatiainen.fi/english.htm>

Seeds of heritage and meadow plants

<http://www.kukkivaniitty.net/>  
<http://www.pratensis.fi/>  
<http://www.ahonalku.fi/>

Companion Planting Guide:

<http://www.gb0063551.pwp.blueyonder.co.uk/seeog/companion/>  
<http://botanical.com/>