



KEEP AMERICA  
BEAUTIFUL



# Seed Bombs

Making and deploying seed bombs is a fun & unique way to care for our environment.

A seed bomb is a little (golf ball sized) ball made up of a combination of compost, clay and native seed mix. Once you have a cache of seed bombs, you and your team can become guerrilla gardeners by deploying the seed bombs to create areas of beauty.

Seed bombs have been used for generations to help reseed natural plants to wild areas. First made popular by guerrilla gardeners, people who use public spaces to grow things, seed bombs have been used to help repair the soil, restore plant and wildlife populations, and bring beauty to our communities. Seed bombing has also been done on a larger scale to introduce vegetation to lands effected by wildfires to introduce new vegetation to the land by dropping seed bombs from an airplane. The plants and wildflowers that grow from seed bombs help support bees, other pollinators, and our entire ecosystem.

While you can direct sow seeds, seed bombs make things easier. The clay protects the seeds from birds, animals, and the wind from taking the seeds. Once the seed bomb gets wet, from rain or other water sources, the soil helps provide nutrients to give the seedlings a head start to grow.

Each seed bomb is a little ball of life, and that comes with a responsibility to choose the right plant seed and to make sure they are deployed responsibly. Make sure that you use plant seeds that are native to your area/**hardiness zone**. It is also recommended to use a seed mix, so it is more likely that one of the varieties will take hold. The kit provided by Keep America Beautiful will include a seed mix that is suitable for your hardiness zone.

There are a few different ways that you and your team may choose to deploy the seed bombs. You can find a partner, such as your local Keep America Beautiful affiliate, garden club, school, or similar organization; or your team can choose to deploy on their own. Some suggested areas to deploy the bombs include:

- In home gardens, window boxes
- Approved areas around your facility
- Alleyways and path networks around your community
- Roadsides, roundabouts, railways, tree pits
- Unmaintained areas, so that the seed bomb grow undisturbed

Another fun way to deploy seed bombs is to launch them using a sling shot. If deploying with a sling shot, make sure it is aimed in a safe direction away from people, animals, cars, and buildings.

Areas to avoid include:

- Don't sow in others' gardens or crops
- Never plant invasive species
- Don't disturb clean and beautiful areas or vulnerable ecosystems
- Don't throw at animals, people, cars, etc.

## Engaging Your Team

Activities can be added to the Seed Bomb project to create excitement, inspire creativity, and promote teamwork. Ideas include creating competition (either in teams or as individuals) for most creative seed bombs, race to see who can make the fastest seed bomb, and trivia (Sample trivia questions are provided by Keep America Beautiful).

## Overview of Project and Sample Script

### General Description of the project and project goal(s)

Seed Bombs: What are they?

How will they be used?

### Highlight of the Major Activities for the Day

- Group Photo (pre and post activity)
- Break into Groups and Teams
- Social Interaction & Make Seed Bombs
- Celebrate:
  - » Announce how many seed bombs made
  - » Recognize winning teams if including contest element
  - » Conduct trivia activity







### Overview of Project Sample Script (10-15 minutes):

Thank you for trusting us with your valuable time and commitment to improving our community. At Keep America Beautiful and INSERT COMPANY NAME we inspire and educate people to take-action every single day to improve and beautify their community. We will not rest until we live in a country where every community is a clean, green, and beautiful place to live.

The activity you are going to participate in will help establish native plantings throughout our community, providing not only beauty but vibrant living habitats for pollinators, birds and other wildlife. Today, we are going to make seed bombs, a little (golf ball sized) ball made up of a combination of compost, clay and native seed mix. INCLUDE INFO ON DEPLOYMENT PLAN HERE AND INSERT OTHER INFO AS NEEDED...

### Concluding Remarks/Charge

As you can see, we have a big day ahead of us. Thank you for being here today, please HAVE FUN and whether posting photos you take during the activity on social media, or telling friends about your experience at the event, make sure you share your efforts! We encourage you to use the following hashtags when posting about today's activities INSERT COMPANY HASHTAG, #DoBeautifulThings, INSERT PARTNER HASHTAG. And if you are interested in volunteering for other similar events, please check out our website: kab.org

Now before we get started, please join us for a group photo!



# Seed Bombs: What are they?

## General Description/Project Overview



Seeds bombs are easy, transportable balls of seeds that can be planted or thrown on a patch of dirt to grow native plants that will beautify an area and create a diverse ecosystem for other plants and wildlife to flourish. Seed bombing on a larger scale is done by introducing new vegetation to land by throwing or dropping (usually from an airplane) compressed bundles of soil containing live vegetation. This aerial revegetation dates to the 1930s and is still used today to treat areas burned extensively by wildfires. Seed bombs are a fun and easy way to help an eco-system thrive. While the seed bombs you make today will not be dropped from an airplane, they are being made with native plant seeds and will be dispersed throughout the community.

### Provided by Keep America Beautiful

- ☐ Air-dry clay (4-parts)
- ☐ Compost, potting or topsoil (4-parts)
- ☐ Tablespoon and seeds native to your area (1-tbs)
- ☐ Printed Seed Bomb Making Guides (Instructions, Placemat, and Poster) (1 or 2 copies per workstation)

### Collect on-site for activity

- ☐ Water (spray or regular bottle/bowl) if mixture is too dry to mold into balls/shapes
- ☐ Measuring cups or scale (kitchen or other small scale) (Optional)
- ☐ Table(s)
- ☐ Table covering (optional)
- ☐ Packing or duct tape · Egg cartons or crates or reused take-out food containers (optional for organizing and storing before dispersing)
- ☐ Refreshments – Snacks & Beverages
- ☐ Hand wipes/sanitizer
- ☐ Trash Receptacles







### Staging for Group Activity

- Space workstation tables far enough apart for the work teams to gather around them
- Layout or tape the one-page seed bomb making guides at each workstation
- Using a suitable container (bowl or gallon plastic storage bags), divide the supplies and ingredients to make the seed bombs
- Using a scale (kitchen or luggage) weigh out the proper portions for each seed bomb component and on a blank sheet of paper place the materials in three piles to visually demonstrate the proportions
- Make a couple of seed bombs and display finished bomb alongside the “material” piles

### Making Seed Bombs: (5-7 minutes/seed bomb)

1. Gather supplies to make seed bombs using the following measurements: (this is enough to make four 2 oz seed bombs.  
4 oz or  $\frac{1}{4}$  cup of packed air-dry clay  
4 oz or  $\frac{3}{4}$  cup of compost  
1 tablespoon of seed mix
2. Mold and kneed the clay and moist compost. Add a little water if your mixture is dry. The mixture should be moist but not dripping
3. Add the seed to the clay and compost mixture. Thoroughly work the materials together with your hands disbursing the seeds throughout the mixture.
4. Divide the mixture into 4 equal sized balls (about the size of a ping pong ball) or get creative and mold into various shapes and mini “sculptures”. There should be enough of the mixture to make four 2 oz. seed bombs.
5. If the seed bombs are going to be stored before being dispersed, consider using egg cartons to keep them dry and separated, allowing them to be stored in a cool, dark, and dry place for a couple of weeks. It is best to use them while they are fresh, as the seeds might begin to germinate prior to dispersing them.
6. Plant or disperse your seed bomb while it’s still moist or allow it to dry. If dispersed after drying, the clay will breakdown when watered or during the next rain event, causing the seeds to germinate and grow.

## How to deploy/disperse seed bombs

Seed bombs may be dispersed immediately after they are made or may be stored and dispersed several weeks later, providing another potential volunteer opportunity. There are several options for deploying seed bombs depending upon the goals and desired landscape impact, keeping in mind seed bombs are a great way to create a diverse ecosystem for plants and wildlife to flourish. With permission from the property owner, there are several primary ways to deploy seed bombs after they have been made:

1. Plant the seed bombs. If you have a plot with rows already dug for planting, install a ball every few feet (or as recommended by the seed manufacturer), then cover over with existing soil.
2. Throw the seed bombs at random to create a more natural landscape, then bury them sufficiently to retain the moisture for the seeds within the seed bombs.
3. "Bomb" an area with seed bombs, allowing the elements to dissolve the clay and wash the seeds into the soil and establish native plants and ground cover – some have used slingshots to reach remote areas. This method is great for areas with little to no plants as there is less resource competition and plenty of sunlight for seeds to become well established.

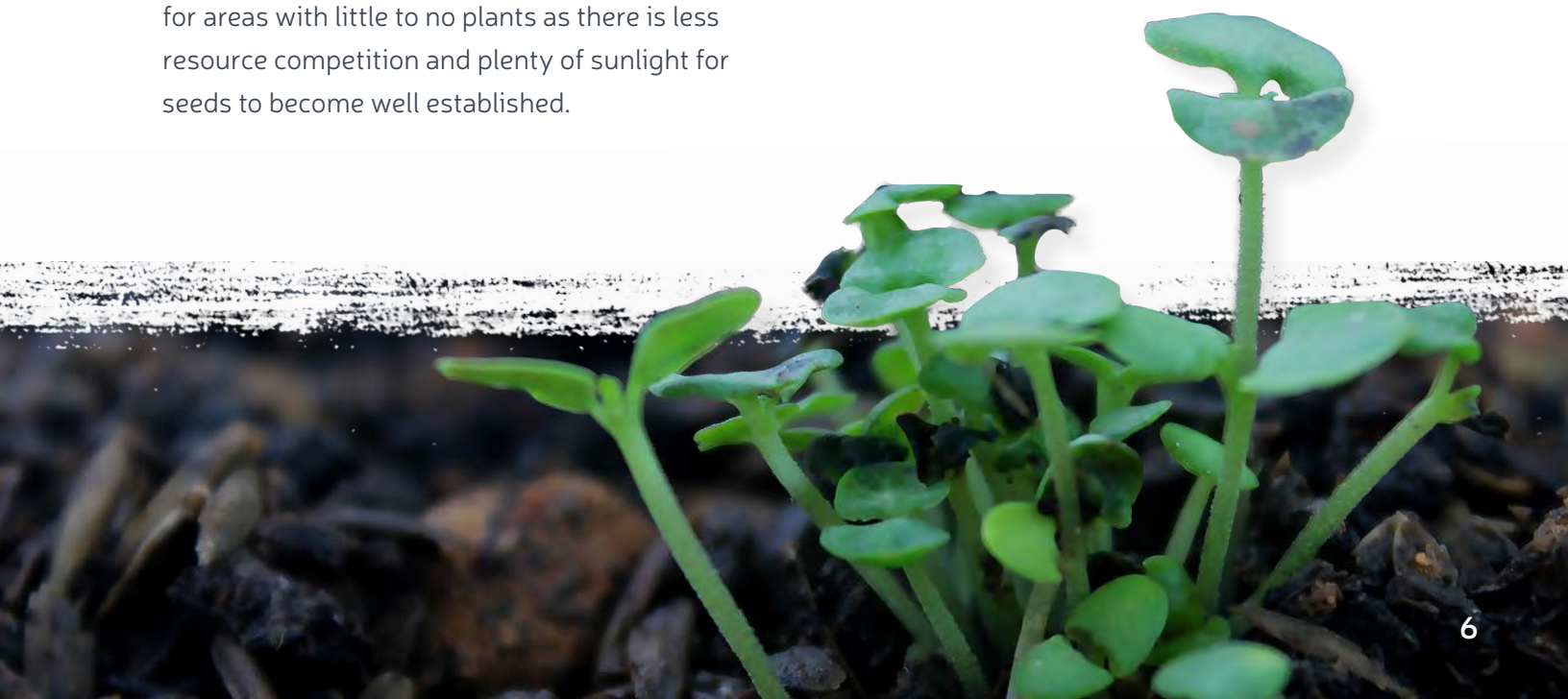
## How to select areas where seed bombs are deployed

### Do

- Scout the area you think needs some "urban green" or improvement.
- Take note of the soil conditions, hours of daylight, shade, and moisture level, it will help you choose the best type of seeds and seed bombs.
- Deploy during spring or fall. Allow enough time for seeds to germinate and plants to grow.
- Make sure to get permission from the property owner so the act of "seed bombing" is not considered "littering". If someone questions what you're doing, let them know that you are working as a volunteer with Keep America Beautiful to restore natural plants to the area by dropping seed bombs of native seeds in this area!

### Don't

- Try seed bombing in dry and compacted soil or on totally paved areas.
- Don't deploy seed bombs when germinated seeds won't have sufficient time or growing season to become established.





## Seed Bomb Large Group Site Layout and Supplies

If working with a large group, Keep America Beautiful recommends breaking the attendees into two (2) groups (A & B); each group will be further divided into smaller teams. Group A will start with a social event and possible trivia contest and group B will start with making seed bombs. After splitting or assigning the participants into Groups and Teams from 6-10 individuals, each team introduces themselves and selects a name for their team. Attendees need to be provided name tags/markers so each person can create a name tag with their name and team name on it. (Alternatively, team names can be established, and name tags generated, then each attendee selects a name tag and is assigned to that team. Groups could be assigned by using two different colored labels.)

The site should be divided into two distinct areas, one for making seed bombs and the other for social gathering.

**Seed Bomb Area:** The seed bomb area should include: 1) a supply table for groups to get additional supplies if needed; 2) workstations for 6-10 participants per table, preferably covered with a protective cloth/newspaper to help keep it clean; and 3) a finished product table/designated area.

Each seed bomb workstation should be assigned a group leader and include:

1. Seed Bomb guide/placemat from Keep America Beautiful on how to make a seed bomb;
2. Seed bomb supplies (clay, soil, native seeds in a supply ration of 4:1:1)
3. Packing Material (Egg Cartons/Flat) for finished seed bombs
4. Hand wipes/sanitizer
5. Trash receptacles for hand wipes, spills, etc.

**Social Gathering Area:** Designate an area where half of the group can meet and socialize. Refreshments, snacks and beverages should be provided. Consider a PA system for playing music and/or hosting a Trivia Contest by the teams within the group. Encourage participants to get to know one another aside from what they do at work.

The gathering area should be casual and fun:

1. Consider having high top tables or some type of table/chair set-ups;
2. Games or activities, e.g. cornhole or other short duration games
3. Consider hosting a Trivia Contest
4. If possible, use compostable or reusable serving supplies
5. Hand wipes/sanitizer
6. Trash/Recycling/and if available Organics collection containers





## Social Gathering Trivia – Suggested Questions

(consider adding questions on your organization)

**What is the mission of Keep America Beautiful?**

To inspire and educate people to take action every day to improve and beautify their community environment

**In what year was the Paris Agreement on Climate Change reached?**

Dec. 2015, In force Nov 2016

**How many countries have joined the Paris Agreement?**

192 plus the European Union

**Through the collective reduction of Greenhouse gas emissions, what is the maximum global temperature increase limit set for this century?**

2 degrees Celsius with an ultimate goal of 1.5 degrees

**What hardiness zone do we live in?**

Look up your hardiness zone in advance

**What percentage of the Earth is water?**

71%

**What are seed bombs made of?**

4 parts - clay, 4 parts - soil, & 1 tbs - native seeds

**What percentage of the fruits, nuts, and vegetables grown in the United States area pollinated by bees?**

Approximately 75%

**Besides bees, what other creatures are considered pollinators?**

Bats, butterflies, birds, and some beetles are also pollinators





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