

# DIG ART!

CULTIVATING CREATIVITY  
IN THE GARDEN



## Photography in the Garden: Grass Photographs

**Overview** Students collaboratively create a large-scale photographic print on a canvas of growing grass.

**Objectives** Students will:

- explore the principles of photosynthetic art
- create a large-scale photographic print on a living canvas
- work collaboratively on a large-scale project over time

**Time** 2 hours to gather and prepare materials  
12 hours per day for 1-2 weeks to produce the image

**Materials**

- a dark room
- burlap sacks - to use as a base canvas to grow grass seed on
- four 2x4s nailed together - to act as basic square frame
- staple gun
- peat moss
- perennial rye grass seed
- watering system - mist room or drip irrigation works best
- projector with 400w bulb
- image materials - computer with Photoshop, transparency paper, printer

**Background** When grass is exposed to plenty of sunlight, it produces chlorophyll and turns green. The less light it receives, the more yellow it becomes. Based on this phenomenon, British artists Heather Ackroyd and Dan Harvey discovered that by projecting a bright black-and-white negative image onto a patch of grass as it grows in a darkroom, they can use the natural photosensitive properties of the grass to reproduce photographs.

They also discovered, through a partnership with the Institute of Grassland and Environmental Research (IGER), that using a genetically modified strain of grass called “stay-green” increases the longevity of their images. Stay-green grass doesn’t break down chlorophyll easily and thus retains most of its green color, even after it’s dead. Ackroyd and Harvey’s grass art installations have been grown all over the world and serve as inspiration for this activity.

**Instructions**

1. Begin by discussing concepts of chlorophyll and photosynthesis with your group and make predictions about what will happen to the grass when light is included or excluded through the film negative.

**Instructions  
(continued)**

2. Choose a black and white photo negative that you think would reproduce well on grass. You can make a photo negative by choosing a digital image and converting it to its negative form in Photoshop. You can enhance the dark-light contrast more in Photoshop as well. Print your image on transparency paper.
3. Select a room that can be left alone for about 2 weeks and that can be made completely dark.
4. Create a canvas for the grass to grow on by stretching two layers of burlap over a wooden frame with a thin layer of peat moss stuffed in between.
5. Seed the canvas with the grass seed.
6. Ensure constant uniform moisture as grass seed establishes. This means that all the grass seed should be continuously watered as the seed grows on the canvas. This is most easily accomplished in a greenhouse equipped with a mist system. Seek out a community partner that may be able to offer greenhouse space and access to equipment.
7. Once grass roots have established, hang the burlap canvas vertically in the dark room.
8. Set up a drip irrigation system.
9. Set up a projector with the photo negative in front. Magnify the photograph to the size of the canvas, while still maintaining a clear projection.
10. Turn on the projector for 12 hours a day, everyday for a week or two, until the grass has grown and matured enough that the photo is clearly reproduced.
11. Enjoy your grass photo while it lasts. Watching it dry up and fade is an interesting process as well.

