

Mushroom Photography: Constructing an aluminum foil reflector

Aluminum foil reflectors are constructed using old cardboard boxes that aluminum foil has been glued to. They are used primarily used redirect light to remove harsh shadows or to brighten the gills on the underside of a mushroom. A secondary use can be to block the wind so grass, plants, or fragile fungi do not move from high wind resulting in a blurred photo.

To make the illustrated 3 section reflector cut a piece of cardboard box, using a utility knife or scissors 18 inches by 7 inches. The size could be adjusted some to fit your camera bag. The cardboard is then folded into three equal sections so it can be easily stored in a camera bag when finished. I keep mine in the back zippered section of my bag. The cardboard is then unfolded and glue is then applied and thinly spread over one side of the cardboard.

Crinkle a sheet of aluminum foil so that it is covered with wrinkles. The foil must be crinkled to prevent any hot spots. Un-crinkled foil tends to redirect light in a single straight beam. The crinkled foil can create many single beams of light from the sun or flash when the reflector is used. It is then straightened and applied to the glue with the shiny side of the foil facing outwards. Then the other side if the cardboard is covered with foil in the same manner.

The cardboard is then refolded as before and the upper portion of the reflectors corners can be cut at an angle for a nice look and to make it more stable. Duct tape is then applied around the edges to keep the foil from coming loose at the edges. After a day or two of drying the reflector is ready to use.

I like to bend the 3 panel reflector around three sides of the mushroom. Having the 3 panel reflector bent in this manor allows it to stand up on its own. Sunlight, a flash, or a collapsible reflector could be used in front of the foil reflector

to provide light all around the mushroom by bouncing light off the foil reflector.

Larger reflectors can be constructed in the same manner, with the increased size they are able to provide and throw more lighting because of their size but they are difficult to transport. I prefer making the size of the reflector so that it will fit into my camera bag or backpack.

A two section reflector that has a single fold can be made and used in place of a 3 section reflector. It is made like a filing cabinet folder, with the middle fold facing upwards the sun. When it is set up it will look like an A frame tent.

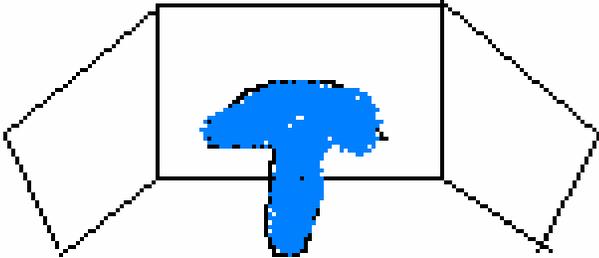
To make it, cut the cardboard to 15 $\frac{3}{4}$ X 12 inch piece. Once folded it should be about 8 X 12 inches. Crinkle and glue the foil just like making the 3 fold reflector.

Each style of reflector has its own benefits. A two panel reflector can be set up in an A shape with the fold facing up towards the sun. The bent angle allows the sun to be directed under the mushrooms cap. They can be used singly or in a set. By using a set of 2 reflectors, light can be redirected from several directions. The light will go up under the cap of a mushroom to fill in the shadow under the fungi. See photos on opposite page. They can also be set up like an open book in an L shape.

Perhaps the most important thing to remember when using reflectors is to keep them far enough away from the mushrooms so they do not show up in the photo. However, they must be close enough to the fungi to direct the light. The camera angle and positioning must also be taken into account. Keep the reflectors as close as possible to the mushrooms without them showing up in the picture.



The Piece of Cardboard is 18 X 7 inches. See how the cardboard is to be folded then trimmed.



The aluminum foil reflector can be wrapped around the mushroom.



In this photo the homemade aluminum foil reflectors substantially reduced the shadows behind the fungi, producing an acceptable image. Here flash is not used.



This foil reflector is going to be used to eliminate any shadows caused by the flash by bouncing the light from the flash back onto the other side of the mushrooms.



The natural sun has made these Jack O Lantern mushrooms act as umbrellas and shade their underside.



The natural occurring shadows in this picture make an unacceptable contrast range. They must be filled in or blocked using a reflector or other method such as fill flash or a diffuser.



This foil reflector was positioned to bounce the sunlight back under the fungi to fill in the shadows.