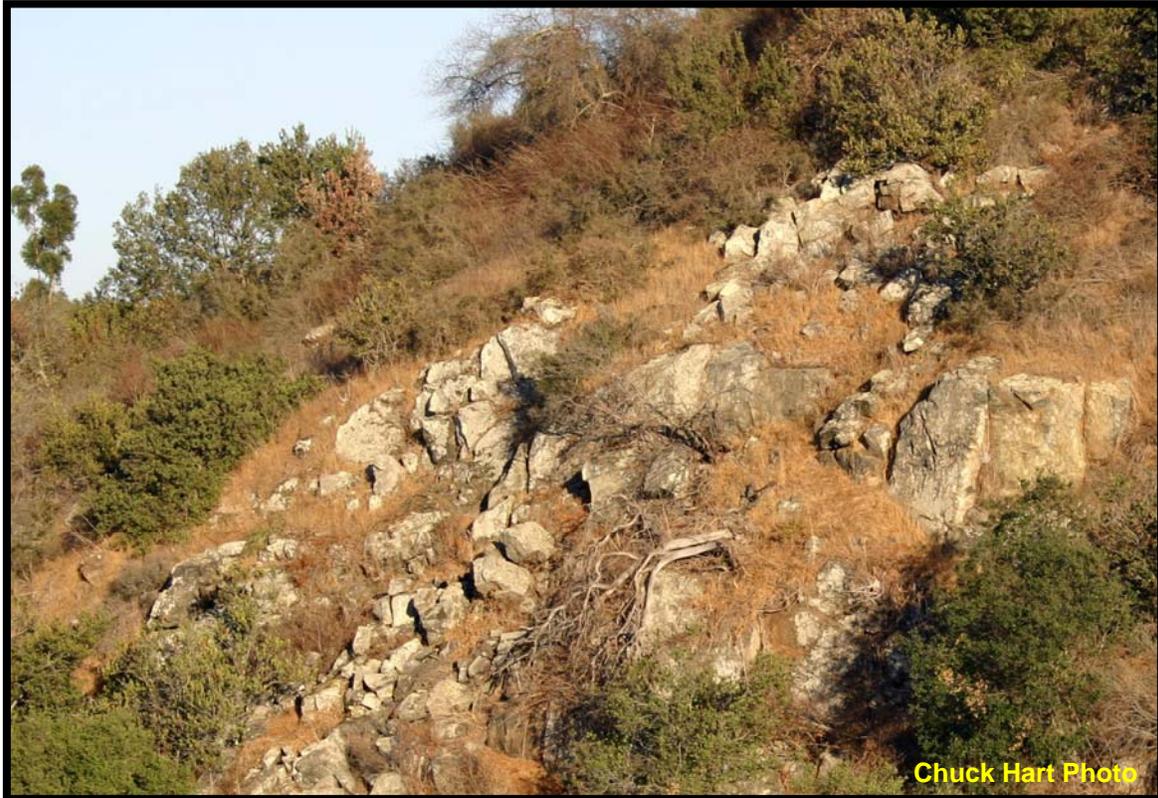


Rock Clinic



Presented by Chuck Hart of the San Diego Division, PSR, NMRA

Rock Molds

During this session you will be shown how to make, mix, pour and create your own rocks from prefabricated rubber molds. You will also learn how to make your rock molds from existing rocks you have at home or in the fields of your travels. During this session you will have the opportunity to color pre-made rocks. All of the rocks I'll show you and the rocks you will color during the clinic will be made from a plaster material called Hydrocal.

There are two basic types of Hydrocal: White and Lightweight Hydrocal.

The finished product made from standard white Hydrocal is about twice as heavy as the same size product made from Lightweight Hydrocal. However, standard white Hydrocal is about 1/10 the cost of Lightweight Hydrocal.

Mixing Hydrocal:

Mix only small amounts, which you can pour into your rock mold in three to five minutes.

Always add Hydrocal to the water; this will help to reduce lumps in the Hydrocal. The exact amount of water and plaster is not critical, but it will work best if the consistency is similar to pancake batter. As a general rule of thumb, start with two parts Hydrocal, to one part water.

Use a flexible plastic bowl to mix the Hydrocal in.

Spray wet water to dampen the rock mold before pouring the Hydrocal into it. (1-2 drops liquid soap to 6 oz. of water)

Pour a cup of cold water in your mixing bowl.

Sprinkle about two cups of Hydrocal into the water.

Allow the water to be absorbed into the plaster before you start to stir.

Stir the Hydrocal into the water until you have a smooth mixture the consistency of pancake batter. You can add more Hydrocal if the mixture is too thin, and you can add more water if the mixture is too thick.

Spray the mold with the wet water and pour the Hydrocal in to the mold.

Let the mold set up for about 30 minutes.

Turn the mold upside and peel the rubber away from the rock casting.

Note: as the Hydrocal cures it will become warm, this is normal.

Making Your Own Rubber Molds:

Seal the item to be used for the master. I use Woodland Scenics 'SCENIC CEMENT'.

Paint the latex rubber over your object and remove any air bubbles that form on the surface by blowing on it.

Let the first coat dry completely (about 4 hrs).

Apply a second coat and let dry. You should put at least 4 coats (letting it dry completely between coats) for a complete mold.

If you intend to use the mold many times then you can reinforce the 3rd coat of rubber with a gauze material before applying the 4th coat of rubber.

After the mold has completely cured and dried then peel the rubber mold from the master object and begin to use like any of the rubber mold.

Staining With Washes:

To create a wash add large amounts of water to the Liquid Pigment. The more water the lighter the wash. The more pigment the stronger (more intense) the wash. Washes are intended to be transparent coatings so even light washes on plaster can be made to look darker by applying an additional wash to the plaster after the previous wash has dried. Several coats of one color of wash will provide different intensities of color.

Several transparent washes of two or three different colors will create new shades of color where the washes of the two or three different colors overlap. This wide range of intensities and shades of color is very natural and realistic looking.

If a wash is too dark to begin with, it will not be very transparent and the wide range of shades and intensities will not develop. Therefore, dilute the Liquid Pigments to a very light wash before beginning. More pigment can always be added if a stronger wash is desired later. Some colors are more intense and should be diluted with more water than other less intense colors.

Use the following Liquid Pigment dilutions to create a virtually foolproof light wash.

Mix these washes in a Scenic Sprayer. Stir or shake frequently when using.

2 teaspoons Pigment to 5 1/2 ounces water (or 1 part Pigment to 16 parts water) for the following

colors:

Burnt Umber
Concrete
Stone Gray
Yellow Ocher
White

1 teaspoon Pigment to 5 1/2 ounces water (or 1 part Pigment to 32 parts water) for the following colors:

Black
Raw Umber
Slate Gray

Techniques for Coloring Rock Castings:

There are many techniques available for coloring rock castings. I prefer the "leopard spot" technique where spots of various colors of washes are randomly placed on the rock castings, then blended together with an overcoat of the dominant rock color. This technique provides the most variations of color. Another technique which may be particularly appropriate for modelers who have never colored rock castings is to apply an initial light coating of the dominant rock color, then use other colors in a leopard spot pattern to add variations.

The following directions explain the "leopard spot" method of coloring rock castings:

Select a dominant rock color and as many secondary colors as desired.

Mix diluted washes of these colors as described above ("Staining with Washes").

The washes may either be squirted on with a Scenic Sprayer (adjust the setting to squirt instead of spray) or daubed on with a foam applicator or acrylic brush.

Begin with one of the secondary colors. Squirt or daub it in random spots covering approximately one third of the rock casting if you are using a total of three colors; one fourth of the casting if you are using four colors; etc. Don't try to cover all the white.

Apply the second color and squirt or daub on random spots of color in a similar amount.

Continue with this procedure using all the selected secondary colors and the dominant color. You may want to squirt or daub additional overlapping layers of one or all of the colors being used. Allow the washes to run and overlap on the casting.

Use the dominant color and spray or daub on a flood coating, which covers all areas of the casting.

Because of the porosity differences in plasters and the possibility of marring before the casting is colored, there may be areas which do not accept the washes and remain very light or white. Touch up these spots and areas that don't accept washes with more concentrated Liquid Pigment, slightly thinned with water, or pure if necessary. Daub this color on with a brush or foam applicator. If the color is too dark, dilute it or wash it off by spraying with water from the Scenic Sprayer.

Allow the rock casting to dry, then spray or brush on Scenic Cement.

When the Scenic Cement is dry, spray or daub on a more concentrated Black wash to emphasize the cracks and crevices.

Removing Liquid Pigment:

Should you decide you do not like the coloring you have done; the Liquid Pigments make it possible to remove color, which has not been sealed with Scenic Cement. Simply flood-spray the castings with hot salt water (1 tsp. salt in 6-oz. water). Wait one minute and spray again if needed to remove color. Now you are ready to begin the coloring process again.

Sealing the Color:

When you are satisfied with the color on the castings, allow them to dry. Then spray or brush on a sealing coat of Scenic Cement and allow it to dry. The color will now be permanent.

Web sources of information:

www.woodlandscenics.com

www.plastermaster.com

www.artstuf.com

<http://sculptshop.com>
www.sculpt.com
www.usg.com
www.cccrow.com/main-pages/home-list.html

Rock Color Formulas

Apply multiple layers of Earth Color Liquid Pigments to create infinite variations in rock color. These samples show some possibilities. Use excess pieces of castings and experiment to find the combinations, which look best for the area you are modeling. Use the "leopard spot" technique to create overlapping layers of transparent colors.

Sample 1-Achieve this type of coloring with leopard spots of Burnt Umber, Stone Gray, and Slate Gray repeated a couple of times. The selected dominant color is Burnt Umber so squirt on a flood spray of this wash. Allow the liquid to dry and spray or brush on Scenic Cement to set the color. Finish with an overall spray of Black washes which capillaries into the cracks and crevices to accent them. When this has dried, spray or daub on Scenic Cement to set the color.



Sample 2-This casting was squirted with leopard spots of Yellow Ocher, Burnt Umber, Raw Umber, and Slate Gray washes. The colors are then repeated with the spots falling in different areas. Apply a flood spray of the dominant rock color, which is Raw Umber. Allow the liquid to dry and spray or brush on Scenic Cement to set the color. Finish with an overall spray of Black washes which capillaries into the cracks and crevices to accent them. When this has dried, spray or daub on Scenic Cement to set the color.



Sample 3-Squirt on leopard spots of Stone Gray and Black washes. Repeat this leopard spotting with Stone Gray and Black hitting different spots with the colors. Flood spray on the dominant rock color of Stone Gray. Allow the liquid to dry and spray or brush on Scenic Cement to set the color. Finish with an overall spray of Black washes which capillaries into the cracks and crevices to accent them. When this has dried, spray or daub on Scenic Cement to set the color.



Sample 4-The coloring on this casting was all done with Black Pigment. Squirt on leopard spots of Black wash in the ratio of one part Pigment to 32 parts water. Dry slightly and then squirt on another leopard spotting of Black wash. Dry slightly then over-spray the entire casting with Black wash. Allow the liquid to dry and spray or brush on Scenic Cement to set the color. Finish with an overall spray of Black washes which capillaries into the cracks and crevices to accent them. When this has dried, spray or daub on Scenic Cement to set the color.



Photos of color samples 1-4 are provided with permission from: Woodland Scenics
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