Camera club judge

Portfolio from a Single Seashell

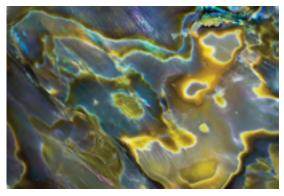*I could be bounded in a nut shell and count myself a king of infinite space* Hamlet, Act II, scene ii

Joseph Hearst
Danville, California

An abalone is a large snail, considered a delicacy by many. Its bare shell is essentially the same as a variegated form of mother-of-pearl. In the ocean, the outside is rough and dull, and covered

Shell

by other marine organisms such as barnacles. But this outside, when it is cleaned and polished, has a marvelous variety of patterns and colors. The interior surface has a completely different set of patterns. These properties make the entire shell a delightful subject for macro photography. One can spend hours working with different areas of a single shell. The images that can be made are limited only by the photographer's time, skill, and imagination. All of the pictures shown here were made from the same shell, which is about 7 inches long and 5 inches wide.

My setup is very simple: I use a Nikon D70 with a Nikkor 70-180 mm zoom macro lens, and I added a Nikon 6T close-up lens, which is 2.9 diopters. The lens mount rotates, which lets me line up the camera easily. I place the shell on top of an inverted wastebasket which is on top of a small table. For one lighting arrangement I stand the table next to my desk. My adjustable desk lamp uses two 5000° K fluorescent tubes, and I put a sheet of diffusing grid cloth over it. To get a different light I put the table in my back yard on a day with high overcast light.
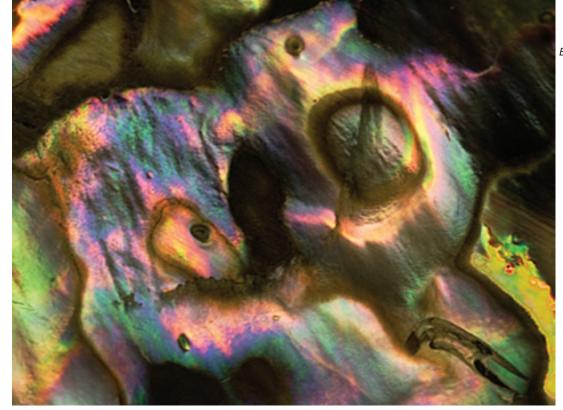
Wraith

The biggest problem is depth of field, since the shell has a lot of curvature. I can stop down to f/33, which helps, and I put a Kirk long rail plate on the head to simplify focusing, but it is also important to adjust the position of the shell to make the area of interest as parallel as possible to the film plane. Improvised wedges, made of foam, seem to be the best answer.

In *Photographing the World Around You,* Freeman Patterson said "When you aim your lens at any scene, framing all or part of it, you create shapes in your camera's viewfinder that have no counterparts in the world you are photographing." This is strikingly true when looking at an abalone shell. As I look at different parts of the shell through my rectangular viewfinder, moving and rotating the shell and moving and rotating my camera, I see a vast number of utterly different and unrelated shapes. There is nothing about them that
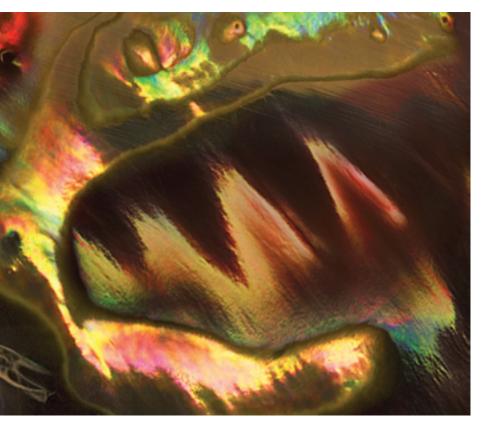

Torso

Butterfly

Joe Hearst

Photos © Joe Hearst

Chomp

Caught
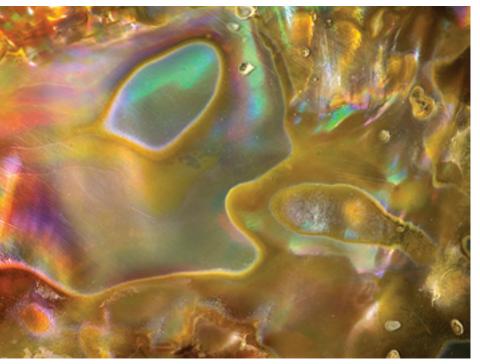

tells me that I am looking at a shell. It is my job to choose those that please me the most.

To find my compositions I move the shell slowly while looking through the viewfinder. I turn it, slide it sideways, and tilt it. When I see a possible subject I zoom in, raise or lower the center post, and rotate the lens until the image looks right in the frame. Then I focus with the manual focus on the lens and the sliding rail plate until what appears to be the middle distance of the

composition looks sharp. Sometimes I shoot with different focal points to see which will be best in the result. I make many shots with different details in the framing, magnification, and focus.

It is especially great to be able to shoot at home with a digital camera because I can pull the compact flash card out, insert it in the reader, and look at the result on the monitor without moving the camera. Then, if I'm not satisfied, I can change things a little and shoot again.

I shoot in RAW, and adjust exposure, white balance, color, contrast, and cropping in Photoshop® for the best effects. The color of a particular bit of shell can change significantly depending on the diffusion and angle of the light and the angle of view. I have one pair of pictures of the same bit of shell made from the same area, one in daylight and one in lamplight, that look very different so it sometimes pays to adjust the color (many of the colors in the pictures here are as shot, but some have been improved). Since life is not perfect, I often clone out blemishes and other distractions.

Unwanted specular reflections can make things difficult, since the shell is shiny. Many can be avoided, at the cost of some of the more brilliant colors, by careful positioning of the shell and the camera. I clone out the brightest of the ones I can't avoid. If I don't wish to remove a bright area completely, I make a new layer, in Overlay or Soft Light mode, and click the box at the bottom of the Layer popup that says "Fill with overlay-neutral color (50% gray)." Then, in that layer, I paint over the bright area with black at a convenient reduced Opacity until it is dark enough to suit me. I use the same method to draw attention to the main subject of the picture by darkening its surroundings. In some cases, I select undesirably bright areas and darken them with a Brightness/Contrast adjustment layer. Other times I use Curves to adjust contrast. Finally, I sharpen the image, using Nik Sharpener Pro®.

The last task is finding a title for each image. I use my imagination and try to guess what sort of animal, object, or concept the image brings to mind. Obviously, some of the ideas are pretty far-fetched, but I manage something for each one (a warped sense of humor is a big help).

When all is finished, I have a set of images that is different from those that anyone else in the world has ever made, and *that's* what makes photographing abalone shells fun! 📷