

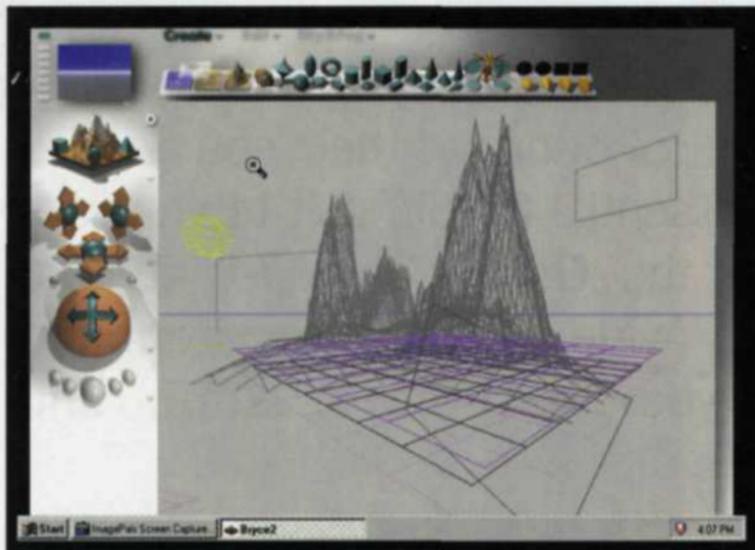
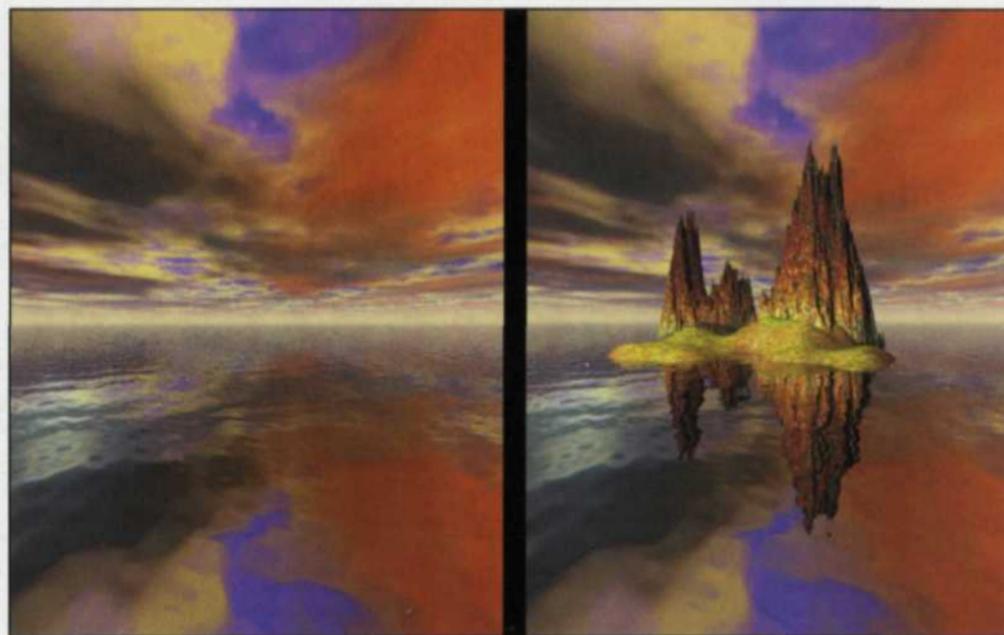
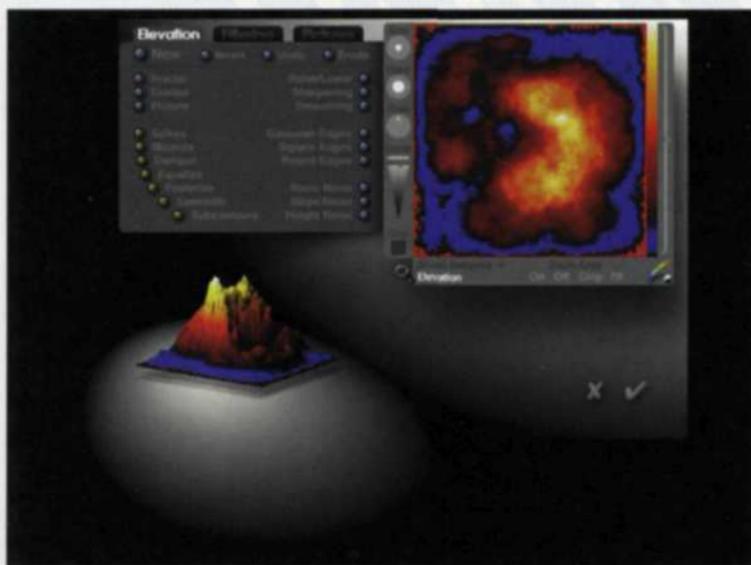
# PHOTO LAB MANAGEMENT<sup>®</sup>

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# THIS MONTH'S COVER



## Jack & Sue Drafahl

WHEN WE STARTED our photo lab many years ago, the only “digital” we ever talked about referred to part of the human anatomy! Since then we have slowly learned how to make the transformation from traditional to digital photography. Some of it was easy, other parts were difficult. Now we have settled into a hybrid business of traditional and digital that gives us a niche in today’s photo lab marketplace.

Recently *Photo Lab Management* Magazine asked us to put together a cover image to illustrate our feelings about the change in photography. We were not sure where we wanted to go with such an image, but looking back on our past gave us the solution. We started our business with traditional photography, moved to digital, and finally incorporated both in our work. That’s what this cover image illustrates.

Bryce 2, from Meta Tools, was our choice of digital software. We had not worked with Bryce 2 before this project, and were pleasantly surprised when we started to work with the composite image. The program was very well organized and simple to use. We created a 3D background, added 3D objects like the mountains, lighted the scene, and finally added our 2D traditional images from our diving trips off the California coast.

We had our cover!

We'll slow down that process a little and explain each step in detail.

First, we looked over the large selection of backgrounds. We assumed, at first, that they were merely bitmaps that were pasted as the bottom layer. Not so. We were able to adjust the thickness of the clouds, type of clouds, and even the color of the sky. We then adjusted the angle of the sun, and previewed the scene. We then added a sandbar and a couple of jagged mountains.

As we added each object, we noticed shadows falling across different parts of the scene.

Intrigued, we moved several 3D objects to see what would happen. They were acting like it would in the real world. Perspective, shadows, and lighting were all affected when we reached into the scene and moved an object.

We were definitely working in a 3D digital world. When we put one object behind another, shadows would fall on it.

Next, we created the ocean. We had a choice of a dozen types of water, plus thousands of combinations of reflectance, water transmission, and wave action.

When we previewed it again, we found that the sky and mountains were creating distorted reflections in the water.

Our final step was to scan in three 2D, traditional flat images, and import them into Bryce 2. Although these objects were 2D, they were affected by reflections, lighting, and perspective. We could scale, rotate, and move each 2D image anywhere we wanted.

We were pleasantly surprised when we placed the 2D image of the fish in the water. In the real world, the picture would have partially disappeared in the water, and the remaining part would have a reflection. As we moved the fish down into the water, it reacted like it would in the real world.

We placed the other two images in the scene and placed them behind the mountains. We noticed that the sea gull image did not have even lighting all the way across, and then realized that the mountain was throwing a shadow on it.

We reached into the scene, moved the light a few degrees, and moved the sea gull to the right. We made a final preview of the image and started the rendering process.

Through experimenting, we found that a very high resolution rendering took a long time to complete all the necessary calculations. A typical 3000 x

4000 pixel image of 34 MB could take from 2-6 hours depending on the image complexity and the speed of the computer. Lower resolution images, like those you see on the Internet, take less than a minute to render.

The process of obtaining the final image was a great learning experience. We felt like we had just opened a new

door into digital imaging. Give Bryce 2 a try and experience the feeling that you can reach right into your computer monitor and mold images.

For further information, contact the folks at Meta Tools, (800) 472-9025 <http://www.metatools.com> or 6303 Carpenteria Ave, Carpinteria, CA 93013.

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