

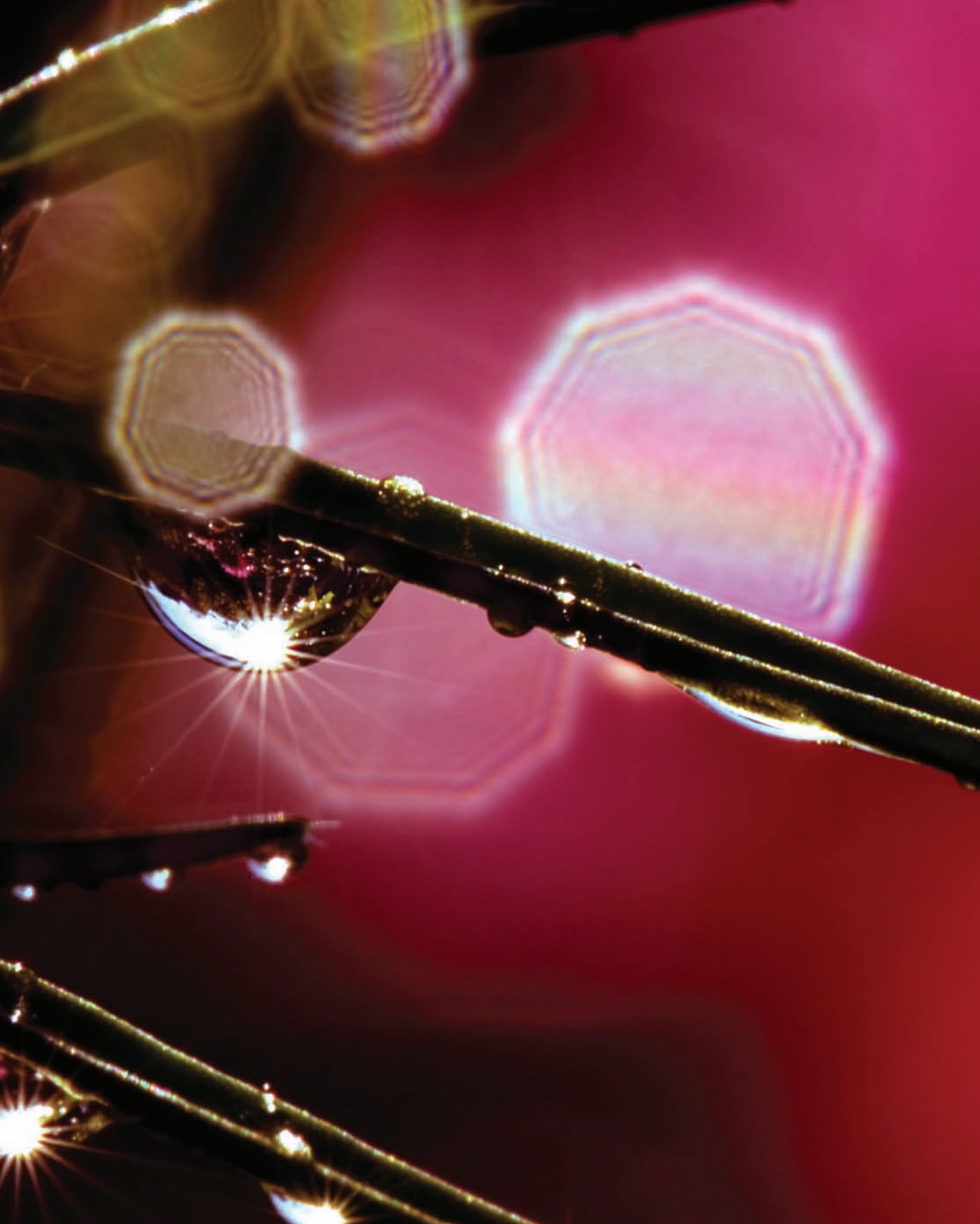
Creative Close-Ups

Digital Photography Tips & Techniques



HAROLD DAVIS

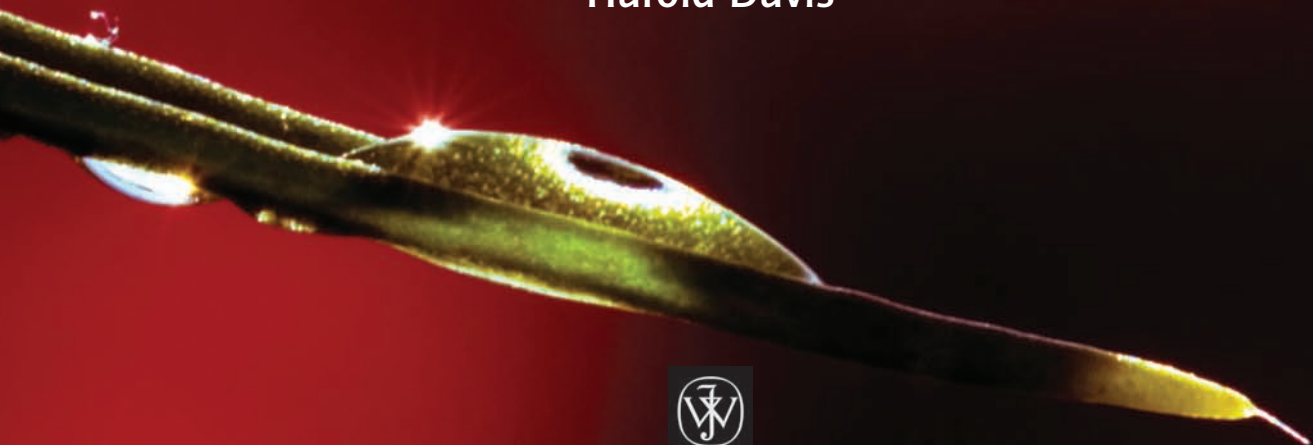




Creative Close-Ups

Digital Photography Tips & Techniques

Harold Davis





Creative Close-Ups: Digital Photography Tips & Techniques
by Harold Davis

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- ▲ Front piece: I intentionally underexposed this photo of a poppy bud to create an abstract image that reminds me a bit of a viper's head.
200mm macro, 1/400 of a second at f/11 and ISO 100, tripod mounted
- ▲ Title page: As clouds floated by, making the morning sun go in and out of shadow, I waited for the right moment to press the shutter. My patience paid off and I got this shot of sunlight on a water drop.
200mm macro, 1/15 of a second at f/40 and ISO 100, tripod mounted
- ▲ Above: I used a wide open aperture to create a watercolor-like effect with this hand-held close-up of a poppy.
100mm macro, 1/800 of a second at f/2 and ISO 200, hand held
- ▼ Page 6: Getting out early one morning, I found this dew-covered dandelion glistening in a field; many of the individual water drops can almost be seen as fractal-like representations of the whole flower.
105mm macro, 36mm extension tube, +4 close-up filter, 1/3 of a second at f/32 and ISO 100, tripod mounted



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Introduction

“The unbelievably small and the unbelievably vast eventually meet, like the closing of a gigantic circle,” observes the ever-smaller hero of the 1950s movie *The Incredible Shrinking Man*. What I love most about close-up photography is the way size, scale and orientation gets lost as you photograph things that are smaller and closer.

If your subject gets small enough, you might as well be photographing the cosmos. To photograph close-up with this in mind is to show a fractal part of the universe that is whole and complete by itself. Close-up photography allows you to reveal small worlds of wonder to those who look at your photos.

Best of all, close-up worlds are right where you are. You don't have to wander long distances through time and space to find great subjects for close-up photography. Wherever you go, there you are; and there will certainly be something to train your macro lens on.

Speaking of macro lenses, I use the term “close-up” and “macro” more or less interchangeably, although some close-ups are not true macros. All macros are close-ups, but close-ups from two or three feet away

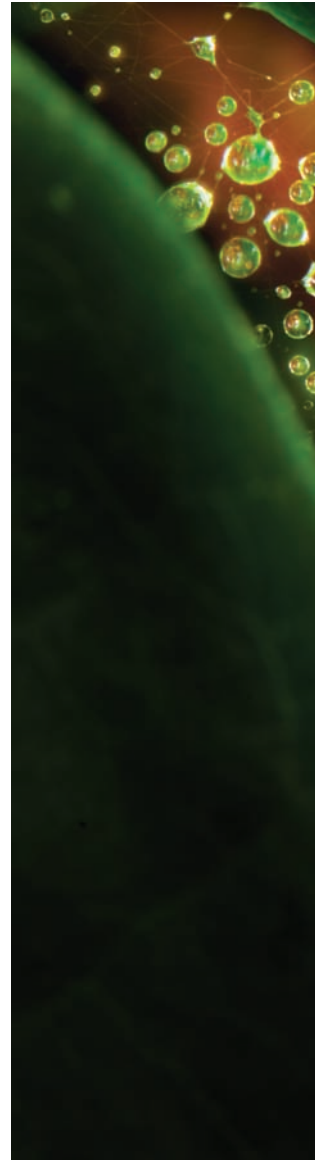
probably cannot be considered true macros, as they show more of the context of the photo.

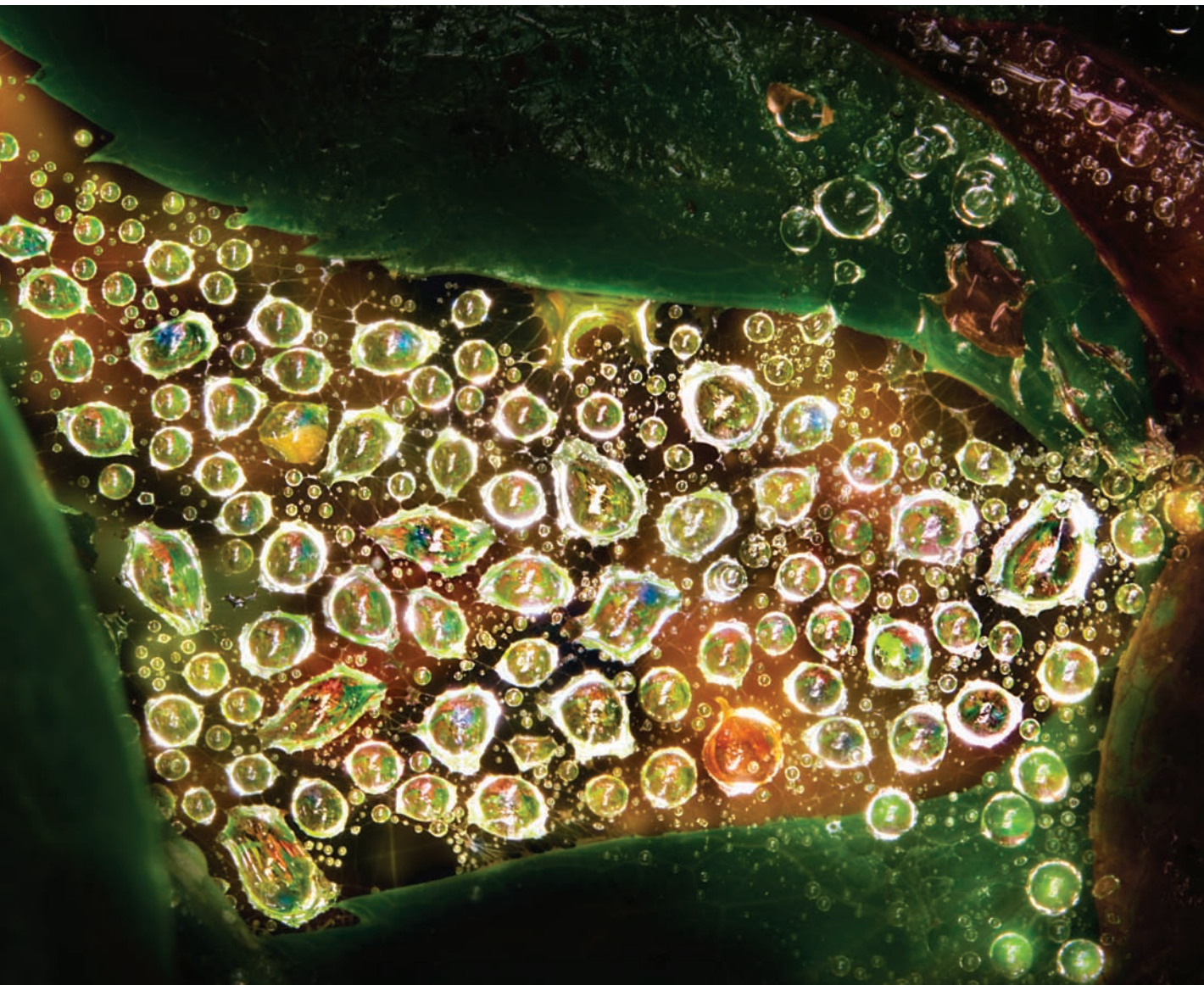
This book is primarily about how to make *creative* close-ups. You'll find all you need to know to create technically accomplished close-ups, along with the stories and exposure data behind the photos shown. I've focused on visualizing and making close-up photos, rather than on magnification charts and ratios (which are usually not helpful for actual picture-taking in the field). Taking close-up photos does not have to be complicated. I've tried to keep things simple.

Two of my own close-up loves are flowers and water drops. So it won't surprise you to find that many of the photos in this book are botanical images and photos of water drops. I hope you enjoy my photos and use the illustrated techniques to capture your favorite close-up subjects.

The more close-up photography you do, the more you'll realize that the circle does indeed close. Please enjoy!

Harold Davis





▲ The colors in these backlit water drops on a spider's web fascinated me, so I used a telephoto macro lens to get a magnified macro of this jewel-like effect.
200mm macro, 66mm combined extension tubes, 2 seconds at f/32 and ISO 100, tripod mounted





Close and Closer

How close can you go? That is the macro question. Or maybe a better question is, how close do you want to go? Close, but not quite so close, lets you show the context of your photo. *Very* close means zeroing in on individual features of your subject.

The *magnification ratio* describes the correspondence between an object and its actual size on the sensor. At 1:5, a capture renders an object as 1/5 of the corresponding dimensions of the object itself. At 1:1 the sensor rendering is exactly

life size, and at 2:1 the digital image is twice as large as life.

When photographers go beyond very close—to magnification ratios greater than 1:1—they enter a completely new universe of the microcosm.

A key issue is *depth-of-field*, the field in front of and behind a subject that is in focus. The closer you get to a subject, the shallower the depth-of-field, even with the lens stopped down to its smallest aperture. This means that as you get to a magnification ratio of 1:2 and closer,

- ▼ At a magnification ratio of 1:5, it's a close-up, but not that close. You can barely see the water drop at the edge of the dahlia petal.

50mm macro, 10 seconds at f/32 and ISO 100, tripod mounted

Ratio 1:5



- ▼ At a magnification ratio of 1:2, it's getting closer. There's not much visible outside of the context of the flower, and the water drop can be seen easily.

50mm macro, 10 seconds at f/32 and ISO 100, tripod mounted

Ratio 1:2



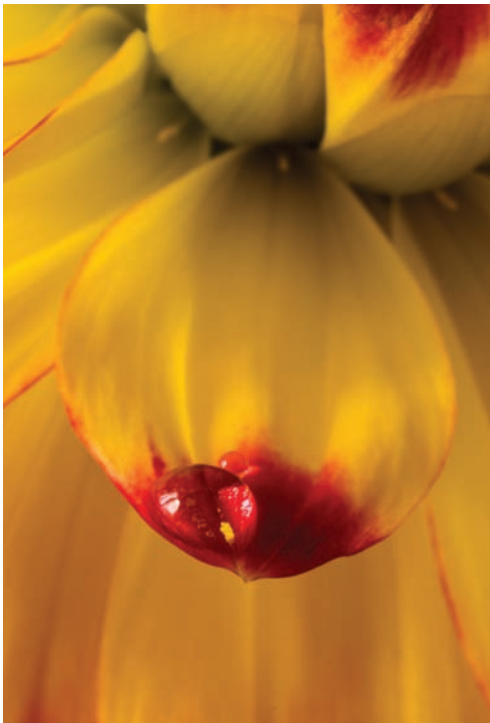
you need to use the shallow focus to your advantage by isolating particular aspects of your subject.

For more apparent sharpness, you should also attempt to position the camera so that it is as parallel as possible to the subject. This will maximize apparent focus, even though the field that is in focus is not deep. As you get very close to a subject, minute adjustments of camera position become very important because small changes in camera position have a big impact on focus.

- ▼ True macro lenses focus to a magnification ratio of 1:1. You can see the water drop...and a smaller water drop that wasn't visible before.

50mm macro, 13 seconds at f/32 and ISO 100, tripod mounted

Ratio 1:1



I shot this sequence of photos of a water drop on a Dahlia petal, starting from furthest away and moving closer, to show what the magnification ratio means in the real world.

- ▲ Pages 10–11: Using a telephoto macro lens let me snap this photo of a dragonfly without getting close enough to disturb the critter.

Usually a telephoto macro will take you out of the range that is noticed by insects. In addition, using this kind of lens allowed me to isolate the dragonfly from its background.

200mm macro, 1/320 of a second at f/9 and ISO 640, hand held

- ▼ This 2:1 magnification shows a completely different macro world, centered on the water drop and its satellite smaller drop.

200mm macro, 36mm extension tube, +4 close-up filter, 13 seconds at f/40, tripod mounted

Ratio 2:1



Worlds of Close-Up Photography

There are as many worlds of close-up photography as there are objects to get close to. Almost anything you can think of looks different at different magnifications. Getting closer is a way to investigate.

What do you want to investigate?

Besides my favorite subjects of water drops and flowers, some great things to explore with your camera and macro lens include insects, reflections, metallic surfaces, small marine animals in tide pools and much, much more.

Along with your choice of subject matter, consider the impact of magnification on your composition. At 1:2 or less magnification, you can fully capture an insect such as the wasp shown below or show the context of your subject.

In contrast, at 2:1 or greater, viewers lose the sense of a coherent whole. In compensation, the tiny details of your subject are now huge (like the pistils in the flower shown to the right). These details are seen as never before and can be the basis for startling photos.



- ◀ The wasp shown in this photo landed near the ceiling in my living room. To photograph the insect, I propped my tripod up on some old cartons and climbed on top of a coffee table. Sometimes to get into position for a close-up shot, you just have to improvise!

105mm macro, 0.6 of a second at f/32 and ISO 200, tripod mounted

- ▶ I used a Low Pod Mount from Kirk Enterprises to get low enough to the ground to get this head-on view of the pistils of the Fuchsia bud. I think the photo makes the flower look like a jet engine!

200mm macro, 36mm extension tube, 8 seconds at f/32 and ISO 100, Low Pod mounted







◀ At a classic car show, I got out my macro lens to photograph reflections in the polished chrome.

With this kind of close-up photo, even slight movements of the camera position have a huge impact on the final composition.

I usually try to be careful to position myself so that reflected photographer, camera, and tripod don't appear as part of the composition. This can be surprisingly difficult! Witness my small self-portrait in the lower right of the photo.

Macros that involve reflections begin to become visually spectacular when the reflection is iterated: The reflection is itself and so on.

200mm macro, 1/8 of a second at f/36 and ISO 100, tripod mounted



- This is a close-up of an anemone taken in a California marine preserve at low tide. If you look closely, you can see me and my tripod reflected in the tentacles.

At a normal magnification, this anemone is a sea creature. Up close at roughly 1:1, as in this photo, the anemone becomes an abstraction like a work of blown glass. Several people have commented to me that this photo reminds them of the work of the great glass artist Dale Chihuly.

105mm macro lens, 36mm extension tube, 2.5 seconds at f/40 and ISO 100, tripod mounted



Photographing Artifacts

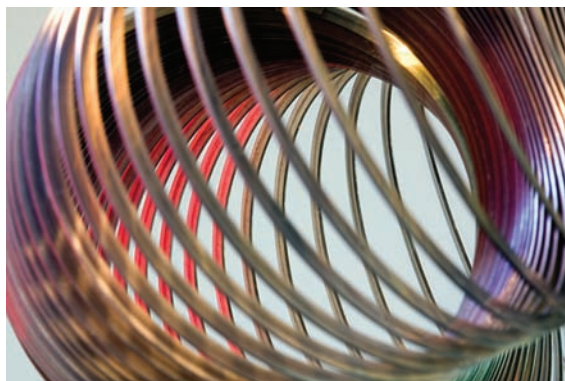
ar·ti·fact (är-ti-fakt) n. 1. Something created by humans usually for a practical purpose; especially: an object remaining from a particular period.

Close-up photographers spend most of their time taking pictures of objects, or portions of objects, in isolation. The subject that is photographed close-up needs to be mysterious, to tell the story of its context or to show something commonplace in a new way. The best close-ups do all of these. I consider these subjects in isolation *artifacts*: artifacts of culture, artifacts of time, and—despite the dictionary definition, which says that an artifact is something created by humans—artifacts of nature.

For me, an artifact is an isolated object that has been left behind.

Look for this sense of being remnant, where the thing that remains says something about the whole that it once was part of. Objects that convey this sense make great close-up subject matter.

To make the photos of a common child's toy shown to the right, I used colored board to reflect colors into the Slinkies. Had I wanted a more natural effect, I could have reflected neutral colors onto the metal. One thing is for sure: a reflective surface will reflect. To get good photos of something with reflections, you need to observe them carefully and sometimes construct the reflections yourself. (See "Close-Ups in the Studio" starting on page 166 for more information.)





▲ Slinkies: I used bits of cardboard to reflect colors into this set of photos of a common children's toy.

Page 20, top: 105mm macro, 2.5 seconds at f/40 and ISO 200, tripod mounted

Page 20, middle: 105mm macro, 4 seconds at f/40 and ISO 200, tripod mounted

Page 20, bottom: 105mm macro, 2.5 seconds at f/40 and ISO 200, tripod mounted

Above: 105mm macro, 2 seconds at f/32 and ISO 200, tripod mounted



Both: On a deserted beach, a strong prevailing wind had gradually blown seagull feathers into a wind trap. I loved the way these feathers looked as a mass, creating an overall pattern on the grassy background and conveying a sense of mystery. Closer in, the individual feathers made a great macro subject with an ethereal ambience.

Above: 105mm macro, 1/6 of a second at f/36 and ISO 100, tripod mounted

Right: 105mm macro, 1/5 of a second at f/36 and ISO 100, tripod mounted



