SUNDICATOR

A Handy Tool for Following the Sun

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It wasn't but a few months ago that we had an assignment to shoot a sunset at

the beach. It had been more than a week since we had seen the sun, so when we heard it was clear at the coast, we left early to leave plenty of time to set up for a special editorial/advertising shot, consisting of a nine-shot multiple exposure showing the path of the setting sun.

We had selected a large series of rocks about a mile offshore as a foreground for the sinking sun. We estimated where the sun would set, and correspondingly set up our tripods. After about 30 minutes, it became clear that our computations (based on a fin-



ger-in-the-air guess) were a little off. We packed up our tripods and moved down the beach, again finding our estimate faulty. Each time we positioned our tripods we found ourselves moving again. Finally, after walking more than 1¹/₂ miles down the beach, we barely had enough time to set up and make the shot. We knew there had to be a better way to determine where the sun was going to be at a certain time of day, every day of the year.

Not long after we finished that article, we received a belated solution to our problems: the Sundicator. Our first impression was that it was just another photo gadget to fill our camera bag. Not so! After reading the instructions and trying a few examples, we found that the Sundicator would have told us days in advance where and when the sun was going to set.

HOW IT WORKS

The Sundicator is so simple we wondered why we hadn't seen one before. It consists of a two-piece plastic dial and a small compass. The Sundicator presently has five different latitude dials: 25N, 32N, 40N, 45N, and 50N. If you're not sure which latitude is 1. The Sundicator kit includes five latitude dials and a compass.

2. With the Sundicator, you can determine where the sun will be at any time of the day, any day of the year. In this example, the Sundicator shows that on March 5 at 2 p.m., the sun will be at 217° on the compass at a 31° angle above the horizon.

3. From scouting the location, we knew that we wanted to shoot when the sun was directly over the rock, and our compass told us that for this to occur, the sun must be at 253°, 15° above the horizon. By using line 5 on the Sundicator (the one for the date we'd be shooting),

closest to your home, just dust off your old atlas.

After selecting the proper latitude dial, set it down next to the compass and line up north on the Sundicator with the true north of the compass. If you look closely at the dial you will notice that its outer edge is divided into the degrees on the compass. This scale will be used to show the direction of the sun at any time of day, any day of the year. Toward the center of the dial, you will find a curved grid pattern inscribed with the hours of the day. A second clear dial, featuring a single red line and degree numbers, is attached to the lower dial by means of a brass grommet.

To find the location of the sun at a given time of day, find the corresponding day-line number on the center of the lower dial. The days of the year are broken up into nine day lines. For example, March 5 would be line 6. Now, let's say you want to know where the sun will be at 2 p.m. Turn the upper sume that it is still March 5. You evaluate your situation and, using the compass, find that when the sun is at 200° the lighting should be right. Move the clear upper dial of the Sundicator until the red line points at 200°. Follow the red line until it crosses the March 5 line. Reading directly from the dial you will see that the sun will be at the correct angle at 1 p.m. at a 36° angle above the horizon. With this information, you could predict where the shad-



we were able to determine that the sun would be at this position at 4:30 p.m. on our shooting date. So we knew when we'd have to be there ready to shoot. 4. We wanted a shot of the sun reflecting in this building. Observation told us this occurred when the sun was at 150°, 60° above the horizon. Using line 2 on the Sundicator (the one applicable to our shooting date), we found that the sun would be there at 11 a.m. on that day. 5. The sun produced this tree reflection

on Cape Meares Lake when it was at 270°, and 8° above the horizon. Line 4 on the Sundicator told us to be there at 5:30 p.m. on the date of our shoot.

clear dial until the red line crosses 2 p.m. at day line 6. Reading the dial directly, you can see that the sun will be at 217° on the compass at a 31° angle above the horizon.

OTHER POSSIBILITIES

To understand just how much is possible with the Sundicator, let's take another example. Suppose you have found a unique covered bridge in the country, but the sun and shadows are all wrong. How long do you have to wait until the lighting is right? Let's asows will fall long before it is time for the shot.

How about the situation in which an architectural photographer must shoot the exterior of a building that he or she has never seen? Decisions must be made beforehand as to the best time of day to photograph this building. So, pop out the ol' Sundicator and plop it down on an extensive city map. Make sure the Sundicator's north is pointed toward the map's north, and that its imaginary extension will pass through the scene to be photographed. It makes no difference if the Sundicator covers up several city blocks as long as it is on the camera side of the scene. Turn the pointer in the general direction of where you would like the sun to be. This will give you all the possible combinations of the sun's direction and altitude for your photograph.

PURELY PRACTICAL

If you forget your watch—or choose not to wear one—you can determine the approximate time of day by pointing the red line directly at the sun, and following the scale backwards. If you forget your compass, you can still determine the direction simply by putting a stick in the center hole of the Sundicator, and then lining the shadow up with the red line. If the red line lines up with the shadow, and is set to the correct time of day, you will get a backwards compass reading. That is, N is S and E is W. Just reverse the reading and you have your true compass bearing using the Sundicator.

COLOR CORRECTION

For the perfectionist, the Sundicator can be used to set up a color-correction system for the time of day. But first, you need to run some color-filter tests for the different angles between the sun and the horizon. For example, try different filters when the sun is at 25° above the horizon, and find out which filter best corrects the warming colors that appear as the sun nears the horizon. You can then try different filters for when the sun is 20°, 15°, 10°, and 5° above the horizon. As you view your test results, note which filter corrected the color for each angle above the horizon, and write this information down on the back of the dial (or where it will be most handy when you use the Sundicator).

Now, if you want to know what filtration you're going to need at a certain time of day on a future date, you merely have to plug in the necessary information, and the Sundicator will give you both the compass angle and the angle above the horizon. You can then cross-reference this information with your new color-filter chart and select the correct filter for the shoot. Keep in mind, that other variables, such as visibility, will also have an effect on color filtration, and that you might have to make adjustments from your original filter chart.

You must remember that the Sundicator is based on real time and true north (as opposed to magnetic). If you are on daylight-saving time, you must set the time back one hour to get proper readings from the Sundicator. If you find yourself between dates listed on the chart, you can estimate the percentage and still get accurate readings. For example, if it is March 13, you could assume the readings halfway between date line 5, which is March 21, and line 6, listed as March 5, would give you accurate readings.

The Sundicator kit, which includes five latitude dials and a compass, can be purchased directly from Thomas Spencer Enterprises, 726 Chelham Way, Santa Barbara, CA 93108; (805) 969-7280, for \$32 (including shipping). For all the advantages the Sundicator affords, this compact, inexpensive photo tool is sure to some day save your shot (and maybe even your reputation). Have Sundicator, will travel!