

# Everything is Illuminated

Every painter has heard about north light, the much-touted ideal in studio lighting. Why do artists like north light? It's not the color, which is quite blue—and too much blue can be a drawback. It's the fact that, on a clear day, north light is consistent; light that's bright one moment and dim the next can make it hard to judge color and value. North light is also soft, which for a portrait painter means that his model will be lit with a more flattering light.

For Nashville portrait painter Michael Shane Neal, who has painted such notables as Supreme Court Justice Sandra Day O'Connor and U.S. Senator Robert Byrd, all these qualities are important. Neal, who worked on the lighting for his dream studio in 2004, says, "I've always believed that north light is a very critical light to paint by. If your work pleases you in the studio, it will look reasonably good in other lighting conditions."

In keeping with this philosophy, Neal made sure his 22x28-foot studio would have an adequate amount of north light. First he put in a bank of four windows, totaling 10 feet wide by 9 feet high. "I knew from speaking with many artists," he says, "that I wanted the windows to start at about chest level." This is because, even with north light, indirect lighting is best. "You're trying to force the light upward in the room in order to work mostly in the ambient light, which helps minimize

glare. Also you want to minimize reflections from the floor surface or the bounce of the light upward from the floor." Neal likes to work standing, so having the windows start at chest level is ideal.

But can you have too much north light? As Neal's teacher, the noted portrait artist Everett Raymond Kinstler, told him it's better to have too much north light than not enough. "You can always block off what you don't want," says Neal. "Adding shades to your north windows or blinds to a 'fill' window is a nice way of having some control." Because his north windows can shed a great deal of light on the model, they also can cast a significant shadow on the model's

far side. Neal put a small window on the opposite wall about eight feet off the floor to provide a fill light for times when the shadow becomes too dark.

Too much light was one problem watercolorist Diane Palley had when she invited the popular Home & Garden TV cable channel (HGTV) to give her studio a "makeover" as part of their "Designer's Challenge" series. Her 200-square-foot loft studio has northwest-facing windows, but because of an exterior wall, a bad glare bounced through windows that otherwise would have provided soft lighting. One year and \$15,000 later, she had what she wanted. (Episode 811 aired in October 2006.) Designer Regina Kurtz of Alpha Design Group

## Studio lighting know-how for those in the dark.

■ By Michael Chesley Johnson



Rebecca Finch (below) uses her sun porch as a studio. To deal with changing shadows, she keeps three still lifes going at once and uses a clamp-on "combo" lamp (at left and bottom) or a three-light floor lamp with incan-



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Michael Shane Neal's 22x28-foot "dream studio" (above left) and his 9x10-foot north-facing windows which feature columns of supplemental fluorescent lights



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Michael Shane Neal

in San Diego solved the problem with remote-controlled translucent shades.

Sometimes the trouble isn't too much north light—sometimes it's too little or none at all. For overcast days or times when the workday stretches into the night, both Neal and Palley use supplemental lighting. Neal installed columns of fluorescent lights between the individual north windows. At 10 feet tall, each of the three columns contains two fixtures for a total of 12 bulbs (at left). Each fixture contains both Sylvania and Phillips "full spectrum" bulbs, which emit the full color spectrum of daylight. If he feels their light is too cool, he balances it with four halogen lamps, controlled by dimmer switches, that emit a warmer light. Finally, if the light on the model is too weak, he uses a 5000K light on a light stand. (See sidebar for more on color temperature.)

In her studio makeover, Palley replaced her standard incandescent floor lamp and ceiling light fixture with low-voltage, overhead halogen lamps. For decoration, the overhead lamps include a chrome-and-glass dragonfly, which repeats a motif used elsewhere in the studio (see page 66). The dragonfly lamp and the halogen lamps—a total of 10 lamps—all hang over her work table from an S-shaped track that, she says, "not only provides a great design element, but allows lighting for all ends of the table for maximum benefit." All lights (from Lightworks Architectural Lighting of San Diego) have dimmer switches, and a remote control allows her to use a number of preset lighting conditions for different work situations.

**Of course, not everyone** can have HGTV help with studio renovations. Some artists rely on their own knack for creativity.

Like Neal and Palley, landscape painter Richard McDaniel also values north light. For his 1600-square-foot studio, which incorporates both gallery and office space and sits separate from his house, he installed

## Can you do better than north light?

We artists think of reds as warm and blues as cool, but this has more to do with our collective experience with flames (that burn) and ice (that chills) and not so much with light temperature. North light from a clear sky is even hotter and bluer than direct sunlight—around 7500K.

The color of a light source is measured in degrees Kelvin. For example, the 100-watt bulb in the lamp on your nightstand emits a yellowish light with a color temperature around 2500K. A photographer's 250-watt photoflood emits a bluer light with a color temperature around 3200K. Even daylight has a color temperature, and it's even bluer, and therefore hotter.

What does all this mean for the artist looking for the ideal lighting situation? North light will throw a bluish light upon the palette, making pigments look cooler than they are. (Remember our collective experience mentioned above—bluer looks cooler.) North light accentuates blues and subdues greens and reds. To warm things up, the artist may overcompensate. If one of his paintings ends up in someone's dining room lit with 100-watt incandescent bulbs, the paintings will look warmer than the artist intended. By the same token, if the artist paints under too yellow a light, he may overcompensate in the other direction, and paint with too cool a palette. Put this painting in that same dining room, and the piece will look cold and uninviting.

The ideal color temperature for light is somewhere between warm and cool. Experts say that 5000K lighting (also called D50 lighting and a standard in the industry) has an even amount of all colors in it. It's used in the printing industry for viewing press sheets, since printed images have many colors to be evaluated.

Of course, most homes don't have D50; most have yellow (cool) incandescent lighting or blue (warm) fluorescent lighting. If you don't have D50 lighting, try at least to paint under a mix of cool and warm light. And then, try to view your paintings in a variety of lighting situations to find problems and to see how they'll look to a patron or on a client's walls.

individual panels, made from sliding-glass doors that have been recycled into five 7x4-foot, north-facing windows. Like Neal's windows, his also start high, at 5 feet from the floor. "I'm interested in the light, not the view," he says. Having the windows mounted higher also gives him space for shelving.

For supplemental light, McDaniel chose a low-cost solution. He uses four clamp-on lamps with 10-inch silver reflectors and standard 100-watt incandescent lights, and bounces their light off the ceiling. (He advises against clamping a light directly onto an easel to illuminate your work. "It'll give you excessive light, and you'll focus too much on detail. And unless you use intense flat light, the painting will look too dark.") If he wants a warmer or cooler light, he simply paints the ceiling the appropriate temperature. "You can also take a white sheet and hang it over the ceiling." A pair of ceiling-mounted fixtures with household bulbs provides supplemental lighting. These are connected to a dimmer switch, so he can see how artwork looks under low light.

One painter who considers himself a "make-do"

Ron Elstad's studio (below) gets little natural light, so he depends almost entirely on artificial light. For a good balance, he uses both warm and cool 40-watt bulbs.



Diane Palley's lighting plan (at left) and one of her decorative overhead dragonfly lights (above), which contain halogen bulbs

## Color temperatures of common light sources:

- candle flame—1200K-1500K
- sunrise/sunset—2000K-3000K
- household incandescent bulbs—2500K
- halogen lamps—2900K-3100K
- studio lamps, photofloods—3200K-3400K
- household fluorescent bulbs—5000K
- noon sun through light cloud cover—6000K-6500K
- lightly overcast sky—7000K
- north light from clear sky—7500K
- hazy sky—8000K

—from *The Painter's Handbook: A Complete Reference, Revised and Expanded* by Mark Gottsegen and Mark David (Watson-Guptill, 2006)

artist is Californian Ron Elstad. His 11x15-foot studio gets little natural light, so he depends almost entirely on artificial light. Two fluorescent shop-light fixtures hang over his easel, and to get a good balance of color, he uses both warm and cool 40-watt bulbs. In addition, an adjustable arm lamp with a 75-watt Chromalux bulb supplements the overhead lamps. A second, similar lamp with a 60-watt tungsten bulb sits by his office area, but he can easily rotate it, further supplementing light at his easel.

Another California painter, Betty Billups, says, "As one of the original members of *Plein Air* Painters of America, I do about 90 percent of my work *en plein air*, but I also do studio work." For this she has a small room to work in, and because her home is in the woods, what natural light she has is dim. To make up for this, she uses a "combo" desk lamp (with both fluorescent and incandescent bulbs) over her easel. "The advantage is that I can turn either bulb off and check my color balance with all warm or all cool," she says. Billups also walks her work through the house under a variety of lights to find problem spots.

Steve Barre of Virginia has a studio loft above his living room. When he paints (mostly at night), he uses a pair of GE Reveal bulbs, positioned above and behind him as he stands at his easel. "The fixtures are inexpensive, aluminum clip-on, workshop-type things. I think I paid five or six dollars each for them," he says. Barre clamps the fixtures to a 1x2-inch wood strip he hung from a roof beam, and he powers the lights with an extension cord.

New Jersey painter Rebecca Finch works in a sun porch where three of the four walls are actually windows. "This can be a blessing and also cause great frustration," she says. "I consider myself an honorary *plein air* painter because I have to deal with the sun's movements and changing shadows." Finch keeps three still lifes going at once for different kinds of light so she can always be working. She also can block out the sunlight

## Lighting suppliers

The following companies make "full-spectrum" lighting suitable for art studios. Some offer only fluorescent lamps, while others also offer incandescent lamps. Most make lights in the "averaged daylight" color temperature of around 5000K, but some go up to 7500K. Call or visit their websites for full details on products.

**Ott-Lite TrueColor Lighting**—"natural sunlight" via fluorescent  
800/842-8848  
www.ottlite.com

**Verilux Natural Spectrum**—can switch between different wattages, "full spectrum," both fluorescent and incandescent  
888/544-4865  
www.verilux.net

**Ultralux—Ultralux and BlueMax**—dimmable "full-spectrum" fluorescent  
888/845-6597  
www.ultraluxlamps.com, www.bluemaxlighting.com

**Vita-Lite, Optima, Color Matching, Daylight 65**—fluorescent  
1-800-289-3876  
www.duro-test.com

**Chromalux, Lumachrome**—incandescent and fluorescent  
800/354-1044  
www.lumiram.com

if need be, using clamp-on, "combo" bulbs, or on overcast or cloudy days, a three-light floor lamp with incandescent bulbs (see page 63).

Natural and artificial lights have their pros and cons. For Finch, the mutable quality of natural light offers benefits that differ with the time of day. "Direct sunlight is wonderful for strong paintings, defined shadows, warm light and spectacular highlights. Overcast days give me time to relax during a painting because of the consistent lighting strength and shadows. The result, however, is not always a strong painting, and one trades the sun's warm glow and striking highlights for a cooler temperature and more moderate contrast."

The goal of any lighting option should be to help you do the best work you can. Whether you choose north light or low-cost, make-do lighting or a combination of warm and cool lamps, your preference should also help you enjoy the process of making art. Finch, who likes painting after sunset by the unchanging light of her lamps, says, "I have consistent, stable lighting and any temperature or lighting angle that I desire." But perhaps most important, she notes: "There's a time to put on some soft music and enjoy the passage of slow, deliberate painting." Ⓐ