

Fly Into the Light

Drs. Foster & Smith Educational Staff

Meeting Your Bird's Light Dependency Needs

There is no denying that birds benefit from natural light. But it is easy to be blinded by all of the available information concerning avian light dependency and how to best provide the adequate, beneficial light your bird needs. By understanding basic science, however, and using common sense you can easily keep your bird bathed in light and basking in good health.

Bringing Light Out of the Darkness (or turning the light on light)

Basically, light is emitted from the sun in three forms - ultraviolet light, visible light, and infrared light. Ultraviolet light is what tans (or burns) our skin and is also what is emitted from the black lights used on amusement park thrill rides the world over. Infrared light, on the other hand, is what motion sensors use to know when to activate the floodlights you may use for security around your home.

Visible light - which is the light we see - is really perceived by our eyes as color. But of the seven colors that make up the visible light spectrum, humans can only detect three - red, green, and blue. Because of the way we perceive light in these three primary colors, human sight is known as trichromatic vision.

Birds, however, see in tetrachromatic vision - adding a fourth light aspect to their sight capabilities. Birds see not only the red, green, and blue colors of visible light that humans see; they also see ultraviolet light. In fact, as well as for using ultraviolet light for health reasons, it is believed that a bird's ability to see ultraviolet light is what permits them to see the minutest plumage and color variations in their fellow birds, thereby allowing them to differentiate between each other.

Birds in Flight, Plight, and Light

As well as using light by which to see, birds use natural light and the angle at which it moves around the earth to drive feeding, sleeping, behavior, breeding, molting, and migration. Like humans, birds also use sunlight to synthesize Vitamin D. It is no wonder, then, that the artificial light under which we keep our birds is such a hot topic in the avian community. Though humans can get along just fine with a normal incandescent light bulb turned on whenever it is needed, birds need much more focused light care.

Edison's Medicine

Though there are many types of light bulbs in varying degrees of shape, color, and output, bird owners should be concerned with only one type of artificial light - full spectrum lighting.

Unlike common incandescent and normal fluorescent bulbs, full-spectrum lighting emits light closer in range to the light emitted by the sun. That is, as well as emitting light in the visible spectrum, full-spectrum lights also emit ultraviolet light, which a bird uses to help synthesize Vitamin D and balance its internal (circadian) clock. In fact, anything less than full spectrum lighting does nothing to benefit a bird physiologically, other than allowing her to see her surroundings. And though popular black lights do produce ultraviolet light, lighting your bird with a black light could potentially harm your bird. In its basic definition ultraviolet light on earth can be broken down into ultraviolet-A (UVA) and ultraviolet-B (UVB) components. Birds synthesize Vitamin D using UVB light, not the UVA light produced by black lights.

In fact, other than to light the room in which you keep your bird's cage, keep all types of light other than full spectrum lighting directly away from your bird. In the wild, when a bird doesn't like her surroundings, she takes flight. In the cage in your house, she does not have this ability.

Suitable Avian Lights

There are many things to consider when purchasing special lighting to benefit your bird. Initial cost, bulb life expectancy, and the cost to run your lighting are all things every consumer must consider. Bulbs specifically manufactured to best provide the essential UVB light your bird needs are not cheap. But in comparison to having undesirable bird behavior, a sick and/or dying bird, and emotional guilt, the few extra dollars initially required to purchase an avian specific bulb, combined with their fairly long bulb lives, quickly adds up to a wealth of good bird husbandry.

Bulbs such as the Slimline and Arcadia Bird Lamps are sensible, affordable choices that provide better essential light for your bird. One thing to note if purchasing a bulb for an existing fixture you have is to ensure you are purchasing the correct size. Light tube size denotations refer to the tube diameter and are not interchangeable. Consult your light fixture's manual to determine the correct size.

Creating the Best Bird Environment



Obviously, one of the best things you can do for your bird is to safely allow him [time outside](#) in acceptable weather. Simply placing your bird next to an indoor window does little to give him the beneficial sunlight he needs. In fact, as well as exposing your bird to drafts, today's windows efficiently remove almost all ultraviolet light. Therefore, the only true sunlight your bird can receive is when outside in your yard.

Another important consideration to creating the best environment for your bird is to keep full-spectrum light as natural as possible. This means placing your lighting 12"-18" away from the top of the cage to mimic the natural light your bird would receive in the wild. By a similar token, multiple full spectrum lights should be used only in extenuating circumstances. You need to allow your bird to get away from the light if she so desires. But surrounding the cage with numerous lights, you are apt to harm your bird more than help her.

Also, investing in a quality timer that turns your bird's light on at a specific time each morning and off again at night ensures your bird gets the 10-12 hours of sleep he needs each night. To best mimic natural sunlight, keep the [cage cover](#) over your bird's cage for an hour after the timer turns the lights on in the morning and place the cage cover back over the cage again about an hour before the timer is set to turn the light off at night.

By making a few monetary and time investments - and researching your specific bird's light needs - you can better ensure the artificial light your bird receives is the right kind and duration of light, especially when sunlight is unavailable or impractical to provide.