





THE HEALTHY HOUSE

Biophilic design, which incorporates the natural world into spaces, might make you healthier.

By Geraldine Stal

Photography courtesy of Ward + Blake Architects

For weeks, the owners of a newish home on the edge of the Jackson Hole Mountain Resort and the Bridger-Teton National Forest were puzzled by shoulder-height smudges on many of their windows overlooking a patio, part of which was a green roof planted with native grasses. The puzzle was solved when they spotted a moose walking on the patio; the animal's nose was at the exact height of the window smudges. "They literally had wildlife looking in their windows," says Tom Ward, a principal at Ward + Blake Architects and the architect of the home. It wasn't just moose that came visiting. Before the oil applied as a sealant to the back deck had cured, a black bear walked across it and left footprints behind. The contractor asked the owners if they wanted to reseal the deck and cover up the footprints, and they said, "no." Ward says, "Those footprints are now preserved forever."

Wildlife in the yard is not unusual for a Jackson Hole home, but did you know seeing wildlife out your windows could make you happier and healthier? Meet "biophilic design," which comes from "biophilia," defined as the inherent human inclination to affiliate with nature. Biophilic design is a recent term in the architecture world and describes connecting a living/working space to the natural world with the goal of increasing the well being of the people inside it.

"Humans have an intrinsic need to feel a part of the natural environment, but we are so far removed from it as a society," Ward says. Americans now spend an average of 90 percent of their time indoors. Wildlife is just one aspect of biophilic design. Others are the use of natural materials and incorporating natural light, views of nature, vegetation, and experiences of the natural world—all with the idea of

making inside feel more like outside. And biophilic design isn't solely for the benefit of people. "It can make your stewardship of the land better," Ward says. "The promise of a biophilic design philosophy is that you heighten the sense of connectivity to what's around you. You're more likely to protect and care for a landscape when you feel a part of it."

These Teton Village homeowners didn't use the term "biophilic design" during the design process, but, Ward says, "from the beginning all the key components ... were part of their program. They had spent significant time on the site after they bought it and had a good sense of its natural topography, vegetation, and wildlife. They wanted a real discernable connection to the land—which is where biophilic design comes in strongly."

The end result is more than abundant wildlife wandering around the 0.63 acre yard, which abuts the national forest and trails leading into Grand Teton National Park. "This house is more a pavilion than a house," Ward says. "So much of it opens completely that the connection between what is going on outside and what's going on inside starts to fuse. The line between outdoor and indoor is blurry." It is possible to wander through the house from back to front and be inside for only a few seconds. Virtually every room opens to the outside some way or other. "Wherever in the house you are, you are aware of what is going on outside," Ward says.

The homeowners tell Ward they love how this connection feels. "They've been in the house for several years now, and [its connection to the landscape] hasn't worn off for them. We get a steady stream of comments and observations from them about how alive the house and site feel and how the house makes them feel: happy." ▲



Materials play an important role in biophilic design. Here, Western hemlock, a deciduous fir tree that annually loses its needles and is native to the Rocky Mountains, was used for the beams, ceilings, and trim in the master bedroom and kitchen. "It is wood that grows in the forests around Jackson," Ward says. "The coloration and grain are bonuses. It has a beautiful parallel grain and doesn't go orange like Douglas fir does." The kitchen cabinetry is alder.



GERMAN-BORN AMERICAN PSYCHOANALYST ERICH FROMM COINED THE TERM "BIOPHILIA" IN HIS 1973 BOOK *THE ANATOMY OF HUMAN DESTRUCTIVENESS*. HE DESCRIBED BIOPHILIA AS "THE PASSIONATE LOVE OF LIFE AND OF ALL THAT IS ALIVE." IN 1984, NOTED AMERICAN BIOLOGIST EDWARD O. WILSON PUBLISHED *BIOPHILIA*, IN WHICH HE PROPOSED THAT THE TENDENCY OF HUMANS TO FOCUS ON AND TO AFFILIATE WITH NATURE AND OTHER LIFE FORMS HAS, IN PART, A GENETIC BASIS. THIS IS CALLED THE "BIOPHILIA HYPOTHESIS." THE BIOPHILIC DESIGN INITIATIVE WAS FOUNDED IN 2016 BY A GROUP OF ARCHITECTS, BUILDERS, AND RESEARCHERS TO HELP MAKE THE MOVEMENT MORE MAINSTREAM.



The exterior corners of the house, which is clad in custom-made Western cedar, "almost interlock like a log house," Ward says. "But this is definitely not a log house." From inside the house, as you ascend the stairway shown in this photo, "You get an incredible view to the woods outside," Ward says. A goal of the home's design was for its owners to always be aware of what's going on outside when they are inside.



WOO-WOO OR WORTHY?

While biophilic design could be disregarded as suspiciously New Age-y, the idea that a human connection to nature is important has been around for centuries. “The root of the environmental movement, whether it’s Henry David Thoreau or Ralph Waldo Emerson or Aldo Leopold, was very much a celebration of our connection to the natural world and how it’s fundamental to who we are as individuals and as a species,” wrote Stephen R. Kellert, author of *Birthright: People and Nature in the Modern World*. More recently, there is evidence suggesting that the natural world can benefit human health. Studies have shown that surgical patients go home sooner if their hospital room has a view of the outside, a walk in a park boosts the concentration of children with attention hyperactivity disorder, and spending time in a forest can boost immune function while lowering stress levels and blood pressure.

TOP: A principle tenet of biophilic design is that a space invites its occupants to be more aware of the natural world. Here windows allow in abundant natural light while balconies “serve very little purpose other than to provide a small space to view the sunrise with a good cup of coffee, smell the pine scent, and to unobtrusively spy on the occasional bear sauntering by,” says architect Tom Ward.

LEFT: “Entering this home is like walking into a really nice piece of Swedish furniture,” Ward says. “The attention to detail and the finish carpentry on this house is a marvel. I should be more cynical about that at this point in my career, but I’m not.”