

where Blue meets Green

For this family, building responsibly within the Cape Cod National Seashore called for advanced “green” home design.

When architects Matt Miller and Bill Boehm first visited the Outer Cape property, situated high above the Atlantic Ocean, they knew they were facing an interesting assignment. A new client was asking their opinion: whether to remodel or replace the site's existing home. They were immediately aware of two problematic issues: construction in the fragile dune environment—the property lies within the boundaries of the Cape Cod National Seashore—would require special permission;

and the house, whose imposing presence was visible from the beach below, was both fully exposed to the harsh oceanfront elements and not situated to take ideal advantage of the spectacular view. The challenge was fitting for an architectural team that specializes in creating environmentally responsive “green” houses.

“At that point, I don't think [the clients] knew whether they could remodel the house or rebuild it, and when we explored what their needs and desires for space were, it became clear that we should probably start fresh,” says Boehm. “It's a particularly sensitive landscape, in terms of both the dunes and the vegetation being very fragile, and we sought to respect and maintain it.”

BY ELIZABETH WINSTON
PHOTOGRAPHY BY ERIC ROTH

■ Inspired by their magnificent views of the Cape Cod National Seashore, the owners wanted a house that was in tune with both their family's needs and the environment. (inset) To resist the natural elements, specific woods were chosen for their durability, like cedar for the exterior trim and shingles; and ipe, a tropical hardwood from a sustainably managed forest, for the decks.

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■ Architects Miller and Boehm designed six decks to allow the family to appreciate fully the panoramic view. The main deck is comprised of two levels, a lower level for lounging (above), and an upper level for dining and entertaining (below).



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■ By day, this sunny, screened-in porch looks out over dunes and surf and functions as the main entrance to the house. By night, the owners are content to curl up with a good book or gather around the table for an intimate dinner.

“We wanted to create a house that was much more responsive to the site,” continues Miller, “one that would orient itself much better to the views. We paid a lot of attention to where the sun is at various points in the day, and to the winds. When you’re creating a house on such an exposed site, you want to provide sheltered areas.”

Once the decision had been made to build an entirely new structure, the first dilemma was what to do with the existing house, which was still in perfect-

ly good shape; ultimately, it was moved off the site and donated to the town for affordable housing purposes. Next, Miller and Boehm reconstructed the hilltop that had been leveled for the original house, and began the work of creating a new home for their clients, who live primarily in Boston and spend summers and weekends on the Cape.

For Boehm and Miller, who founded Miller Boehm Architects in Boston in 1999, designing

■ The owners wanted an open floor plan, but one with traditional Cape features—like the living room's fireplace made from Colorado Buff, a quartzite found in upstate New York. The stairwell behind the fireplace leads to a second-floor study.



■ The home is divided into three main compartments: the entry porch, main living area (pictured here), and bedroom wing. The loft overlooking the living area is usually reserved for guests.



■ (above) While in the living room, the owners are able to open these sliding doors to take in the expansive view and ocean breeze. (left) This Red Sox/Yankees chess set was purchased at The Artful Hand in Boston.



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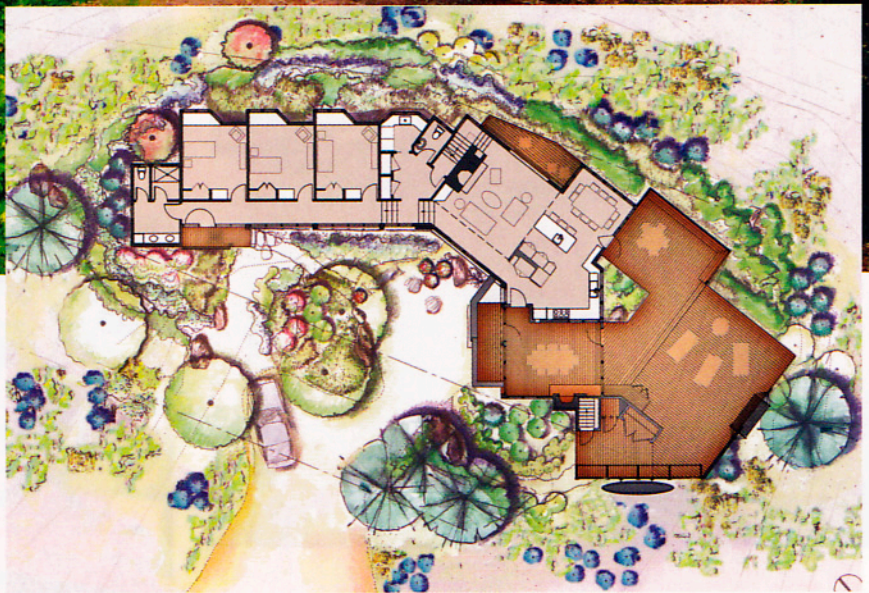
structures that are as environmentally responsible as possible is a priority, one that they feel is becoming increasingly easier to achieve as more and more homeowners understand the benefits of building green. There is a wide range of options for making a house more environmentally sound, Miller explains; some, like thoroughly insulating a structure, are relatively low-cost measures that increase comfort, reduce costs and fuel consumption, and pay for themselves over a period of years. Other cost-efficient measures include

using a material like bamboo flooring, which grows faster than hardwood trees and is equally durable and attractive. According to Miller, more elaborate green measures, like energy-producing solar panels, are not yet inexpensive enough that most homeowners are willing to incur the extra costs entailed to implement them.

“There’s been sort of a rise and fall in the popularity of environmental architecture,” Miller notes. “There was a time when people weren’t paying much attention to it, and it was



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hard to push that agenda very far. But now it's a much more mainstream concern, and even corporations are constructing green buildings; it's not just the kind of thing where some guy is making a house out of tires. It's not just about saving energy; it's also about living a healthier lifestyle," Miller continues, "and living in a more comfortable way."

For the homeowners and their three sons, building a house from the ground up provided the perfect opportunity to create a home that would both meet their needs and be a model of energy efficiency. "The original house just wasn't working for the way we wanted to live as a family," explains one of the owners.

■ (above) Native plants, including beach grasses, beach heather, and sweet fern, were incorporated into the landscape because they require little maintenance and can endure harsh weather. (inset) This architectural drawing shows how the house curves from the three boys' bedrooms, left, to the main living areas, center, to the exterior decks, right.

"We decided to build a new house, and we wanted to be respectful of the natural context."

Having spent summers on the Cape for the past 11 years, the clients had a firm sense of the kind of lifestyle they like to enjoy. They knew, for example, that they wanted their second home to reflect a casual, informal pace of life, and that they wanted to avoid re-creating a suburban-style house in the rugged Cape environment. But their ideas about the actual design of the house were less specific.



■ The highest living space on the house, this roof deck faces west in order to permit full sunset views. The glass door leads to a small observation tower with windows on three sides and a spiral staircase going down to the study.

“This place is very dear to them in terms of such rituals as going to the beach and the store,” says Boehm, “but the house itself was not working for them, so they were looking to us to try and divine what would fit their needs. We went through a very extensive getting-to-know-each-other process, which involved creating initial drawings and models and letting our clients react to them. Sometimes there were long gestation periods where we wouldn’t hear much [response]. It takes a while, I think, for clients to begin to understand themselves through this process, and we had many variations on this design. At times it was a little difficult, but we know now that we got it right because they’re very happy, and we’re happy, too.”

The home, which took about two years from design phase to finished product to complete, curves in a C shape around the hilltop on which it sits, with the left wing of the structure stepping down the hillside—partly, says Boehm, to minimize the house’s visibility from the road and beach below. Covered in cedar shingles and surrounded with a simple, natural landscape of native plants like beach grasses, *Rosa rugosa*, and bearberry designed by landscape architect Heather Heimarck, the house has a natural unobtrusiveness that keeps with its breathtaking dune and ocean surroundings.

One of several nontraditional design aspects, the main entrance to the house isn’t directly accessible from outside; visitors step first into a screened porch area, paneled with cedar and housing a large stone fireplace. Inside the house itself, a small entrance hallway leads into the airy living area, where the most commanding feature is the ocean view outside, framed by a large, custom-made sliding window. In the center

ARCHITECTURE

of the room, a high-efficiency combustion stone fireplace climbs upwards past an open staircase that leads to two small alcove areas overlooking the living room, one of which functions as a study.

Keeping the atmosphere of their Cape house open and informal was important to their clients, the architects explain; the living room flows seamlessly into a large, bright kitchen and casual dining area, all with views of the dunes and sea. Several steps lead down from the central living space to a wing where three separate bedrooms and a large bathroom belong to the owners' three young teenage sons. Down another level, a finished basement functions as a recreation room and sitting area. Upstairs, the master bedroom wing accesses a small, winding staircase that leads to a rooftop deck; indeed, throughout the house, rooms open out onto decks of various sizes, all with spectacular ocean views.

The decor throughout the house, which Miller and



■ The master bedroom faces the ocean, with three doors leading out to a small deck. The "café-style" doors fold like an accordion for greater enjoyment of the view.

ARCHITECTURE

Boehm assisted the owners in choosing, is natural and muted, with added “little bits of whimsy,” Miller says, like two tiny windows that occupy one corner of the master bedroom.

“They have very strong aesthetic points of view, whereas our needs were more about the way we wanted to live together as a family,” the husband says of the two architects. “And it really is a place that feels like family. Everybody loves it. We wanted it both to offer enough privacy that the kids would have some space for themselves, and yet also to be about being together.”

Influenced strongly by a colleague who feels passionately about environmental stewardship and sustainability, the owner was enthusiastic about taking every possible step to create a green house. On the simpler end of the spectrum, builder John Dwyer of Thoughtforms Corporation con-

■ **Designed to be in character with the spacious feel of the home, the master bathroom includes a shower that is both door and curtain free.**



structed the house using a wide variety of environmentally responsible materials, like bamboo flooring, and added extra layers of insulation to increase fuel efficiency. A more elaborate measure involved installing photovoltaic solar panels that produce more energy each year than the house actually uses, half the cost of which was subsidized by the Commonwealth of Massachusetts.

“You’re not going to look at one of our projects and say, ‘Oh, that’s a green house,’ but once you look inside it and see how it was built, you’ll notice that every decision we make has to pass several levels of scrutiny,” Boehm says.

“Building green isn’t just about the environment; it’s about social issues, too,” Miller adds. “We don’t want to use woods that come from areas of the world where they use forced labor, and we look at materials for both their recycled content and their ability to be recycled. We try to use local materials when we can, but the point of being green is not to

be too dogmatic about it. We just want people to be more conscious of the choices they make about materials that impact the environment and society.”

For the owners, their Cape home is the ideal blend of function, form, and sustainability, one that the husband hopes will set an example for their children and inspire other homeowners as well. “I learned so much about this topic from people who knew more about it than me, and I hope other people might look at the house and think about these issues, too,” he says. “That’s how ideas get passed along—from friend to friend.”

**FOR MORE INFORMATION,
SEE MARKETPLACE ON PAGE 148.**

Elizabeth Winston, a writer who lives in Provincetown, is a frequent contributor to Cape Cod Life Publications.