A Deliberate Neighborhood

On Martha's Vineyard, a co-housing project sets an example of sensitive development, affordable housing and community building

BY JOHN ABRAMS

Harvey Arden, who edited the writings of Native American activist Leonard Peltier and wrote the book *Wisdomkeepers*, once visited a Lakota tribal elder who had no telephone. Arden knocked on the door, and when it opened, he said to the old man who answered, "Hi, I'm Harvey Arden." The Native elder said, "Come on in. I know why you're here. You white folks lost all your instructions, and you've come to get ours." Co-housing is a new set of ideas for making good neighborhoods in a culture that has lost its instructions and values about housing.

Like many beautiful places, Martha's Vineyard has a serious affordable-housing crisis. Our problems are not unique, but they are intensified by a wildly inflated real-estate market and by fixed boundaries. As my colleague Derrill Bazzy says, "There's no down-the-road on an island." The shortage of good housing for residents of moderate income endangers the island's diversity, charm, social health and economic prosperity. We've done well with the preservation of open space, but making progress with affordable housing is like trying to turn around an ocean liner in a sea of molasses.

Far too often, development has been an ugly word and has had unfortunate results. But that doesn't have to be the case. When you think about development, ask the following question first: Are you proposing to invent something that the community needs? If not, why bother? Martha's Vineyard needs high-quality affordable housing for working people, but other community needs are also linked to this issue:

- Open space preserved in perpetuity.
- Restoration of agricultural land.
- Areas for businesses to locate where they will not contribute to strip development.
- Community systems for converting human waste to nutrients so that it doesn't foul our one and only aquifer.
- Neighborhoods that encourage a level of social interaction.

What is co-housing?

Co-housing, a Danish housing concept developed in the 1970s, may be a way to satisfy all these needs at once. Co-housing communities are neighborhoods of 12 to 35 homes. Houses are tightly clustered, and cars are relegated to the perimeter. There are extensive community facilities, usually anchored by a common house where residents share a few meals a week, where guests can stay and where a variety of activities takes place. The common house is not only a community hub; it also provides residents with space not needed on a daily basis, thereby allowing individual homes to be smaller. Another fundamental principle of co-housing is that the residents of a new project are the developers. They make decisions—such as size, spacing and number of houses—as a group, and the process of doing so creates community bonds.

Some years ago, during a talk about Vineyard housing, I suggested the potential of co-housing. Two couples approached me afterward and said, "This is just what we need here. Why aren't we doing it?" I replied, "I've just been waiting for a few people like you. Let's go." That was the beginning of Island Cohousing, and soon after, a core group of households hired our design/build company, South Mountain, to conduct a land search, to facilitate development of the group, and then to design and build a deliberate neighborhood (photo facing page).

Working with, not against, the land-use boards was key

By the time we started shopping for land, two important things had changed: One, my family and I joined the group; and two, the employee/owners of South Mountain decided the same thing—that we would move the company there (sidebar p. 66). We found a 50-acre piece of woodland in West Tisbury, bought it, divided it into several pieces (one for the business, which shared the cost) and soon had a 30-acre parcel for the co-housing community at relatively low cost.

Unfortunately, our project violated current zoning in ten different ways. The area was

Zoning laws can change

Because the Island Cohousing project violated local zoning in many ways, we had to use a difficult, cumbersome method (a Massachusetts law known as the "anti-snob-zoning law") to get through the regulatory process. But the town boards all thought this project was precisely the type of development needed, and it caused people to ask the question, "Why won't our zoning permit this?" So the planning board hired a consultant and enlisted the help of residents to do a comprehensive rewrite of town zoning, to create a document that would encourage the kind of development and housing we need and want without opening the floodgates to overdevelopment. Tricky task. Last year, the new zoning rules, which contain a number of innovative affordable-housing initiatives and incentives, were passed at the town meeting. Today, a similar project could be built without violating zoning.
—J. A.

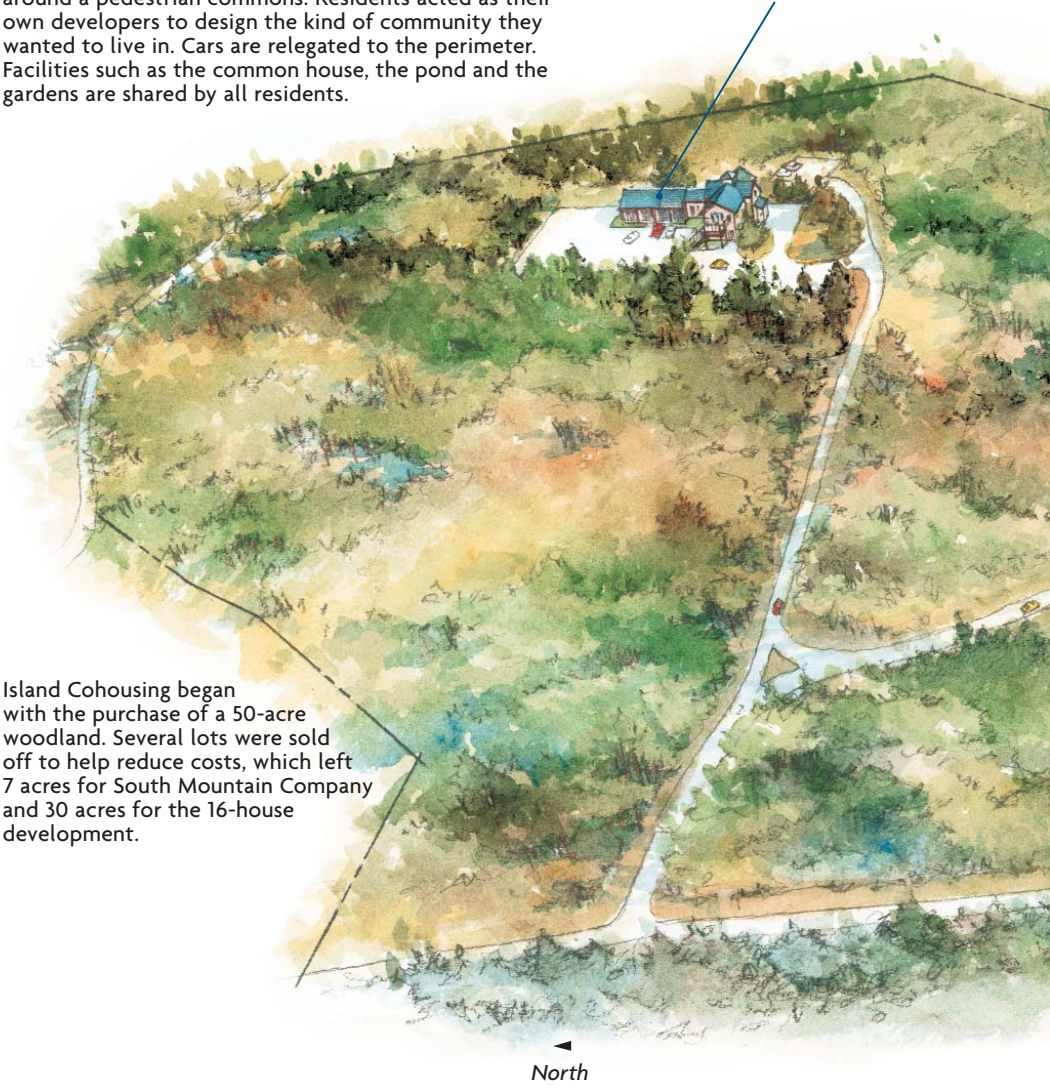
Why did we move our company to the co-housing site?

New headquarters. South Mountain Company occupies land next to the co-housing project.

After 15 years, we needed far more space for our offices, shop and especially storage. Because we build primarily with recycled lumber, we need lots of space to stockpile old beams, boards and planks (photo above). By joining forces with the co-housing development, we were able to buy a larger piece of land and develop it together, thereby saving on land and infrastructure costs. Being close to such a neighborhood allows some people who live in the co-housing community and work at South Mountain to walk to work. Mixing small neighborhoods and low-impact, responsive businesses, a common rural pattern in the past, is healthier than strip-development and industrial-park models.
—J. A.

CO-HOUSING: A BETTER KIND OF DEVELOPMENT

Modeled after a Danish concept, Island Cohousing on Martha's Vineyard features 16 houses tightly clustered around a pedestrian commons. Residents acted as their own developers to design the kind of community they wanted to live in. Cars are relegated to the perimeter. Facilities such as the common house, the pond and the gardens are shared by all residents.



zoned for a maximum density of one house per 3 acres, for instance, and it was also zoned residential. Friends in local politics said, "Nice idea. You'll never do it here."

But we carried the collaborative methods we've developed in our business into the public arena. Our regional planning agency, the Martha's Vineyard Commission, has broad regulatory powers. Our project had to go before the panel as a development of regional impact. The commission's job is to determine whether proposed projects will be more beneficial than detrimental to the community. Most developers see commission members as adversaries. We saw their purpose as being the same as ours: to shape a better community. So we came to them with a project that anticipated their concerns. Instead of regulating, they were able to work with us to create a better project (sidebar p. 65). When the commissioners finally voted approval, they issued a decision with 15 conditions. All of them began with the words, "We accept the applicant's offer to …"

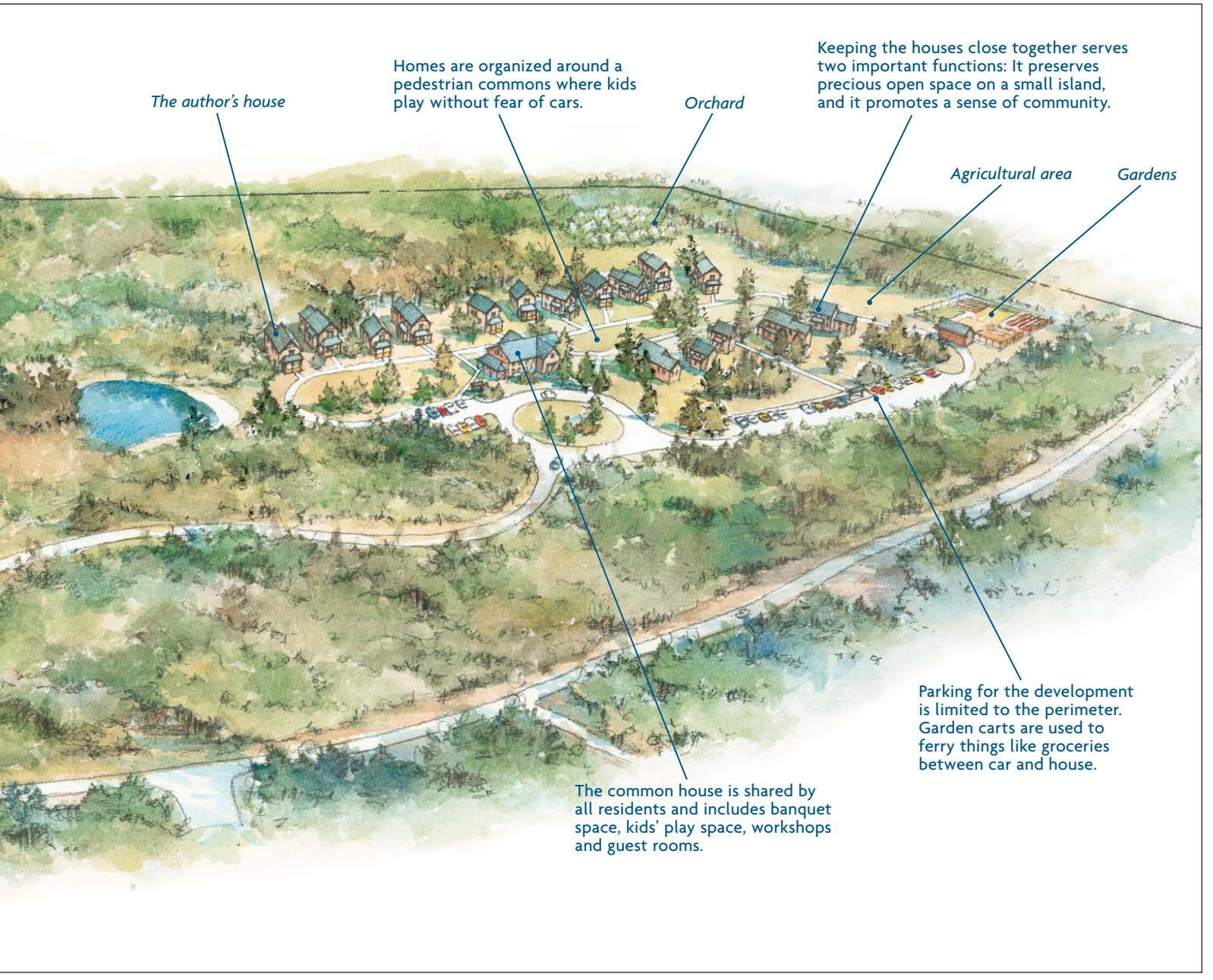
We had a green light to build 16 new houses with a variety of common facilities. Tight clustering would let us keep 85% of the 30-acre parcel in open space. A strong environmental program would influence the design and construction of both site and houses.

Keeping down the costs wasn't easy

The core group of homeowners, which by this point represented ten households, was committed to accommodating income diversity and providing desperately needed affordable housing. Therefore, we agreed that four houses would be deeply subsidized and sold to qualifying buyers who made less than 80% of median local income. Four more houses would be lightly subsidized to accommodate those for whom Vineyard housing prices are just out of reach. Here's how we subsidized the houses:

• Internal price structuring, which shifted a higher percentage of the shared costs (development and design costs, infrastructure and common facilities) to the larger houses. In other words, those of us who bought the three- and four-bedroom homes not only paid additional construction costs but also

Painting: Steven N. Patricia



paid a higher percentage of the shared costs for the project.

• Cash fund-raising (tax-deductible donations to the Island Affordable Housing Fund).

• Reduced mortgage rates from our two public-spirited banks (6% as opposed to 8%).

The four deeply subsidized houses also have limited-equity deed restrictions designed to maintain perpetual affordability by limiting appreciation and future resale prices. The two-bedroom homes appraised for about $200,000. We sold four of them for about $120,000 and wrote into their deeds that they must always sell for 60% of their appraised value. (Please remember that this is Martha's Vineyard: A new house for $120,000 is very affordable here.)

Additionally, we used a variety of means to keep down the costs of all the houses.

• Production-building methods, repetitive design and minimal customization.

• South Mountain sharing infrastructure costs such as roads and power.

• Selling several building lots from the remaining 20 acres to reduce land costs.

• Reduced rates for South Mountain's design and construction services.

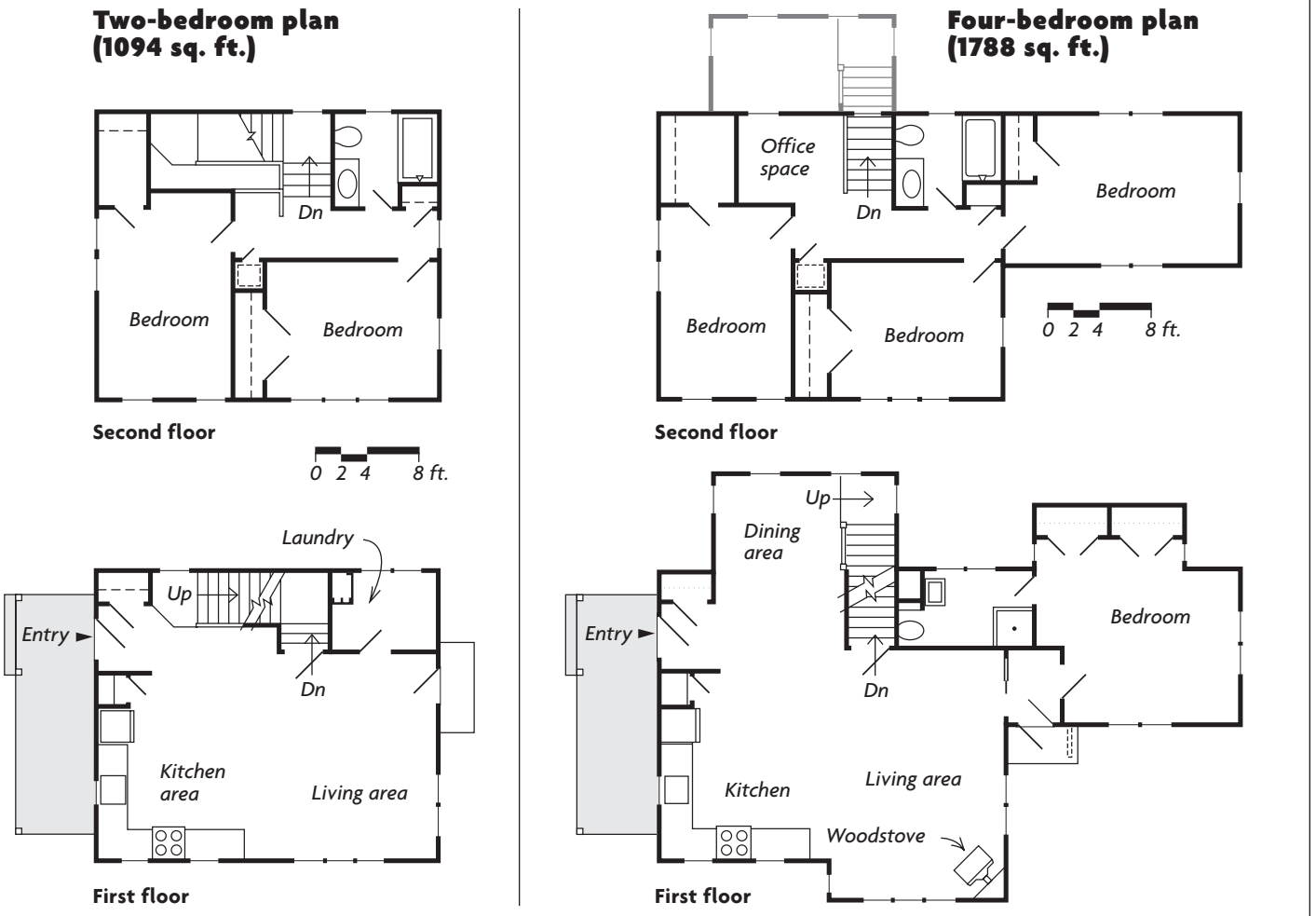
The last one needs explanation. We found a way we could reduce our rates dramatically without a detrimental effect on our company's bottom line. If we build a $1 million house and charge 20% overhead and profit (which we do), we receive $200,000. Island Cohousing was a $4 million project. If we could commit the same amount of our limited human resources to this project as to the building of a million-dollar house, we could charge 5% overhead and profit, and come out at the same place. So we planned to provide full-time construction management and supervision services, but our crews would do little of the actual work (they would be out making money on that million-dollar house). This approach was marginally successful; we had to commit more resources than we had intended.

Weighing environmental costs against pocketbook costs

We suggested to the group that some of the green-building approaches that South

ALL HOUSES START WITH THE SAME BASIC PLAN

One way to help keep down costs was to limit customization of the homes. Therefore, all 16 houses are variations on the same basic two-bedroom plan. Options included a third bedroom and a second bath, a fourth bedroom and various bump-outs. The two plans below show the range from most basic (on the left) to most complex (on the right).



Mountain uses in all its projects (like finishing our houses, inside and out, with salvaged and certified lumber, first-rate energy efficiency, extensive use of recycled materials) wouldn't be too expensive. Others would. For example, we could generate our power with wind and photovoltaics to be a net energy producer. We could do a district heating system (one heating plant supplying all the homes) fueled by the wood that grows each year on our land. We could convert our human waste into valuable nutrients by using composting toilets.

Photovoltaic and wind-generated power proved to be too expensive and could be done later (we committed to 300 sq. ft. of uninterrupted south-facing roof on each house and marked a site for a wind turbine). The second idea was not feasible because the group was unwilling to commit to tight-enough house spacing. The third had an interesting result.

Martha's Vineyard's aquifer can be easily polluted. The co-housing group took this fact to heart and decided to equip the houses with composting toilets (sidebar facing page): a large expense, a lifestyle change and a risk. Will people want these houses, will banks finance them, will appraisers value them, will the town allow them? These questions all turned out to have positive answers.

Another essential environmental commitment was to save the trees on the site. For ease of construction, most developments in wooded areas begin by clearing the site. Instead, we mapped and marked the best trees. We sited our houses based on this mapping and protected the trees during construction. This complication probably cost about $100,000, but what kind of landscape replacement could we have bought for $100,000? Very little. Today, the houses nestle comfortably in those trees (top photo, p. 70).

Deciding who lives where

The group was the client; it was South Mountain's job to serve their needs, which in this case took us beyond the traditional roles of developer, architect and builder. We also needed to facilitate group development, teaching people to become an effective decision-making organization.

Floor-plan drawings: Mark Hannon

A few options on the interior. All the homes feature a kitchen that's open directly to the living area. Options included hardwood cabinets, slate counters and a first-floor bedroom at the back of the house.

This process changed perceptions in remarkable ways. Tight clustering of the houses was a goal. We used an old island neighborhood, the campgrounds at Oak Bluffs, as a model and studied it as a group, learning about the effects of house spacing, siting devices and community patterns. I recall walking back to the car after our first session there. One group member walking with me said that it's lucky we had such a large piece of property because she would never consider living in a house closer than 100 ft. to a neighboring house. My heart sank at the time, but today, she is delighted to live 20 ft. away from the neighboring house.

Along with the trees (and good solar access), the siting of the houses on the property

FEEDBACK

They don't look that different. To protect the aquifer on Martha's Vineyard, all the homes in the co-housing project have composting toilets.

Living with a composting toilet

by Paul Lazes

No, a composting toilet doesn't smell bad (photo left). You pretty much use it like a conventional toilet, except you don't have to flush, which means it's quieter. About once a week, you need to throw in some cedar shavings. Composting toilets are a bit harder to clean; there isn't a toilet bowl filled with water to make cleaning easier.

Each composting toilet (Clivus Multrum U.S.A.; 800-425-4887) sits over an 18-in. chute that leads to a fiberglass chamber in the basement. Maintenance includes opening the chamber once a month and leveling the pile, emptying liquid fertilizer every six months and emptying compost every two years. A paid community member ensures that the toilets are properly maintained.

—Paul Lazes lives with his wife, son and dog in house No. 13 at Island Cohousing.

FEEDBACK

Don't you hate not being able to park next to your house?

by Julia Kidd

When we first considered moving to Island Cohousing, I worried about the carts (photo below). Wouldn't I hate not being able to park next to my house and having to haul stuff in a silly garden cart instead? I was used to unloading things easily, including my sleeping toddler, from my driveway to the house. Proximity to the cars even influenced the house we selected. But now that I'm here, it no longer feels like an issue. Kids outgrow naps, and little ones can be carried (car seat and all) comfortably in the cart.

The carts hold more than you can carry, so you can move groceries, purse, backpacks, jackets, beach towels and chairs, empty food containers and school art projects all in one trip—way easier than back and forth from car to door with armloads of stuff.

When it rains, it's no different than going from the grocery store to your car: You move fast. And if something is especially big, heavy or fragile, we allow ourselves to drop the ropes and pull our cars up to the house to drop it off.

Ultimately, the joy of watching the kids safely run free, ride bikes and play ball is worth a soggy paper bag any day.

—Julia Kidd lives with her husband, son and dog in house No. 13 at Island Cohousing.

Carts go where cars can't. Because cars are kept on the perimeter, community-owned garden carts are used to ferry groceries from car to house.

Homes nestled in the trees. Construction would have been simpler if all the trees had been cut down, but working around them resulted in new homes that look like an old neighborhood.

considered a matrix of proximities (drawing pp. 66-67): distance from parking; distance from the common house; distance from pond setbacks; distance from the main path; end house or middle house; etc. Slightly higher values were assigned to those sites with clear benefits (end sites with direct views to the pond or the agricultural area, for instance). But how would we determine who got which housing site?

The group met around a large site map with the 5000-sq. ft. lots laid out. Each household had a blue dot (first choice) and a red dot (second choice). We placed our dots. There were enough differences that the dots were well distributed. Some people wanted to be close to parking. Some wanted automobiles to be as far away as possible. Some wanted to be close to the common house. Some wanted more privacy. Some were willing to pay for views; some were not. There were only a few conflicting interests.

The two or more households that wanted the same lot then met to see if anyone had a more serious reason for wanting a particular lot. This discussion was all it took. Within a few hours, everyone had either their first or second choice. Siting diversity was the key to this success.

One floor plan, few options

Customization has often been the virus that infects the co-housing process and brings it down. It's impossible to achieve low-cost, high-quality and custom homes simultaneously for all. If this fact is not understood, costs can spiral out of control.

In this regard, we had the good fortune to benefit from the experiences of other co-housing projects. Not that our group had different inclinations; everyone wanted custom homes. But our design process limited customization while making room for individual desires. Our basic house design is a simple 22-ft. by 26-ft. two-story rectangle with a full cellar (floor plans, p. 68). The public areas are on the first level (top photo, p. 69), and there are two bedrooms and a bath on the second. Options included a third bedroom and a second bath, a fourth bedroom and several bump-outs. All the additions derive from the same basic plan, and the smaller houses are designed so that the additions can be made easily later.

The group was self-disciplined and able to agree on most choices, right down to the tile selections and interior paint colors. A critically important tool was the six-page design objectives we had compiled and adopted early on, which spelled out our commitments regarding design, environment, economy and community. We often referred to it for guidance during the design process.

Don't get me wrong; we veered from the path often. For example, there was a time when group members wanted the houses to

A community breakfast. **Four months after moving in, the neighborhood got together on the commons to serve pancakes for the 20 resident kids on the first day of school.**

be shorter, have more interesting shapes and have upstairs interior space created by dormers. This plan would have violated two of our design commitments: One, the forms should be simple, spare and straightforward; and two, we should plan for the use of solar hot water or photovoltaic panels, and therefore provide at least 300 sq. ft. of contiguous, unobstructed south-facing roof at 40° or more on each dwelling. We were rigorous about refocusing discussions so that we wouldn't wreak havoc with schedule, budget or design.

The community begins well before the construction finishes

There was a gradual shift from concern about individual interests to the interests of the community as a whole. Members realized that the basic shaping of community must happen first, whereas they can shape their own homes and adjacent landscapes by adding personal touches over time. A hinge point in this transformative process came when we considered the house exteriors.

We provided several exterior options that, along with the different sizes and configurations, would help to break up the sameness: different porch roofs, a small selection of roof and window colors, and optional gable-end wall detailing. When considering these choices, someone said, "There's no way I could ever have that dark-green color on my house." Someone else said, "To tell you the truth, I don't care that much what I've got on my house. I'm more concerned about what you've got on your house. That's what I'll be looking at." And the group quickly agreed that we, as the designers, should take personal preferences loosely into account but should plan a pattern that would make a well-designed community. At that moment, it was clear that the process had created an excellent group of decision-makers.

Architecturally, Island Cohousing is less about the houses and more about the spaces between them. In plan, it's like houses on a street facing each other, except that instead of a street, a pedestrian commons separates the buildings.

It's really about the kids

The first year of living here has been extraordinary. There are 20 kids, and they are surely the defining image and the driving force. For example, on the first day of school, all the kids gathered at 7 a.m. at the picnic tables under the oaks. A group of parents prepared a huge pancake breakfast (photo above right). The kids ate their fill and headed off for the bus stop.

The mistakes we made and the lessons we learned could fill another article. After the project was complete, we compiled a list of lessons learned in three areas: business, design and construction. Here's an example from each:

1. *Change orders and options.* There were too many judgment calls and too much jockeying. We had a good understanding with the group, but we should have created a written policy, obtained approval from the group and stuck to it rigorously. In this arena, informality brings chaos.

2. *The entry is the biggest design failure in the houses*. It's too small; there should have been a real mudroom. Minor improvement and expansion would make a big difference.

3. *Our waste program was insufficient.* Therefore, we went overbudget on waste disposal and did not meet environmental goals. We needed a better system and a clearer understanding with subcontractors about responsibility and handling of waste.

Would we do it again? We would and we will. This collaboration was first rate, with tremendously satisfying results, but I'd hate to leave it at that. After all, how could we spend three years screwing up daily and not practice what we learned by doing similar projects in the future? □

John Abrams is president of South Mountain Company, an employee-owned design/build firm in West Tisbury, Massachusetts. A version of this article first appeared in the magazine *Vineyard Style.* Photos by Kevin Ireton, except where noted.

Plans available **See page 141 for details**

Photo above right: Philippe Jordi