

# Study on Living and Residential Environments and Coexistence at Cobb Hill Cohousing

Umekazu KAWAGISHI , Naoyuki HIROTA , Kouki KITANO  
Hirofumi SUGIMOTO , Masanori KOTANI

## 1. Introduction

Pollution and destruction of air, water and greenery and so on are progressing worldwide as a result of industrialization, population increase and other factors. In addition, consumption of these resources is increasing exponentially. In her book "Beyond the Limits," Dr. Donella H. Meadows, one of the principal proponents of the sustainability movement in the United States, warns:

*"Human use of many essential resources and generation of many kinds of pollutants have already surpassed rates that are physically sustainable.... [but] a sustainable society is technically and economically possible."*

She goes on to say:

*"The transition to a sustainable society requires a careful balance between long-term and short-term goals and an emphasis on sufficiency, equity, and quality of life rather than on quantity of output. It requires more than productivity and more than technology; it also requires maturity, compassion, and wisdom."*

Activities aimed at the creation of this type of sustainable society can be seen at "ecovillages" such as Cobb Hill Cohousing, established by the Sustainability Institute that was founded by Dr. Meadows. Such activities are beginning to appear in other places around the world as well. In order to reduce the increasing destruction of local environments and preserve and develop the natural, historical, cultural and other resources of local communities, the lifestyles of individual human beings and the natural and social environments must be in harmony with one another, resulting in the formation of healthy communities in which people coexist not only with other residents of various types but with the environment as a whole, including nature, living things, energy, resources, buildings and surroundings.

## 2. Objectives

This study focused on Cobb Hill Cohousing, an "ecovillage" <sup>Note 1)</sup> type cohousing <sup>Note 2)</sup> community administered as one of the activities of the Sustainability Institute founded in 1996 by Dr. Donella H. Meadows in the United States for the purpose of conducting research with the

goal of achieving a sustainable society. Based on an overview of Cobb Hill Cohousing and its principles, the characteristics, scale and configuration of the cohousing community were organized and basic knowledge was obtained in order to determine its present status. A comparative study was also conducted for Cobb Hill Cohousing and other ecovillage type and general type cohousing communities in the United States in order to determine the unique properties of Cobb Hill Cohousing and the role it plays in community building, as well as problems faced by the community, in order to gain an understanding of the living and residential environments and coexistence at cohousing communities.

## 3. Survey and research methods

In this study, first an overview of the characteristics of cohousing and ecovillages in the United States was conducted. Next, references and existing research papers as well as the content of the Sustainability Institute and Cobb Hill Cohousing websites were studied to gain basic knowledge. Furthermore, a site visit was conducted (August 2005), at which time interviews and an opinion survey were conducted to determine resident's attitudes, the distribution of facilities and the status of various systems and maintenance. In addition, an email opinion survey of residents was conducted (August 2006) to determine their attitudes regarding the environmental coexistence techniques and activities conducted at Cobb Hill Cohousing. In addition, a comparative study of the rooms and area of the common house was conducted, based on examples indicated in information regarding the common house (area and individual rooms) at Cobb Hill Cohousing and the other ecovillage type and general type cohousing communities introduced on its website, as well as examples cited in the responses to the email opinion survey (August 2006), in order to determine the trends and characteristics of the common house at Cobb Hill Cohousing.

Moreover, information regarding environmental coexistence techniques and activities was organized and a comparative study was conducted based on examples of

the environmental coexistence techniques and activities being actively conducted, as indicated by the environmental coexistence techniques and activities at Cobb Hill Cohousing and the other ecovillage type communities introduced on its website, as well as examples in the responses to the email opinion survey, in order to determine the trends and characteristics at Cobb Hill Cohousing.

## 7. Conclusions

This study focused on Cobb Hill Cohousing, an "ecovillage" type cohousing community administered as one of the activities of the Sustainability Institute founded by Dr. Donella H. Meadows, one of the founders of the sustainability movement in the United States, in an effort to create a sustainable society. From the attitudes of residents, the status of the facilities, the environmental coexistence techniques and activities being implemented and so on, valuable knowledge was gained regarding living and residential environments and coexistence at cohousing communities. The results of the study can be summarized as follows.

- 1) With regard to the common houses at ecovillage type cohousing communities, the area per residence and the total floor space per resident were greater than at general type cohousing communities, and the common house tended to have a greater diversity of rooms. In addition, the ratio of floor area to site area was extremely small. Judging from these results, residents in ecovillage type cohousing communities have spacious and abundant shared and common use spaces in addition to their individual exclusive residence areas, in which they are able to come in contact with other residents. This enables them to conduct a variety of activities easily, and to put in practice the fostering of good relations among residents, community-building, and the creation of living and residential environments that enable people to coexist with the natural environment.
- 2) The common house at Cobb Hill Cohousing is actively used by residents for community activities. It is also open to non-residents as well and is used effectively as a venue for harmonious coexistence between Cobb Hill Cohousing and local residents (the local community). Nevertheless, some respondents expressed the view that improvements were needed with regard to the use, management and operation of the common house. For the common house, it is important to deploy methods of context-building and system-building that are both

sustainable and flexible with regard to not only the creation of community spaces and spaces for interchange but also the various roles of the common house, as seen from perspectives ranging from the status of use to the status of management and operation.

- 3) A diverse array of environmental coexistence techniques and activities are conducted at Cobb Hill Cohousing based on the active participation and understanding of residents. These are a reflection of active efforts to build a sustainable society, and they also serve as an aid to community-building and function as a forum for environmental education for the children who will be the leaders of the next generation. With the current need to reduce environmental burden, minimize energy consumption and create living and residential environments that can coexist with the natural environment, it is essential to nurture a sense of community and environment among residents through communal living and activities, to establish a system for communal consumption and circulation of resources and energy, and to create living and residential environments based on these principles.

In collective living, future study is needed to determine how to create living and residential environments that are able to continually meet various conditions and respond flexibly to residents' need for changes in environments, facilities and functions due to changes to the community in terms of age groups and generations over time, as well as policies for environmental coexistence that can help build a sustainable society.

---

## Notes

### 1) Ecovillage

Ecovillages are communities designed to ensure that human lifestyles are in harmony with the natural and social environment. They have been developed to reverse what proponents view as the gradual disintegration of supportive social and cultural structures and the upsurge of destructive environmental practices on our planet. With environments that include pastureland, forestland and areas for wild animals, ecovillages are designed to preserve and expand a wealth of natural resources.

### 2) Cohousing

A mode of communal living. People who intend to live in a cohousing community are involved in the project from the planning stages onward and participate in the process of planning and designing the individual residences, shared facilities and other parts of the residential community. As a result, their needs are built into the design and the community as a whole is planned based on consensus-building among residents. Cohousing projects promote the building of good communities with the aim of creating a rich living environment based on personal relationships, safety and mutual support.

This system of collective living is called "Collective Housing" in Northern Europe. On the other hand, it is called "Cohousing" in the United States of America.



Table 2 Overview of environmental coexistence techniques and activities at ecovillage type cohousing

Community number	Classification Environmental coexistence techniques and activities	Soil				Water						Green	Wind	Life			Solar heat		Energy						Resources and Wastes						Environment of building and environs							Total Number of Techniques and Activities (38)			
		Organic Farming	Community Supported Agriculture (CSA) gardening	Community Garden	Private Garden	Use of Common Well	Use of Rainwater	Water Recycling	Low Flow Rate System	Sewage Purification System	Development and Use of Environmentally Friendly Detergents	Construction of Biotopes	Woodland Regeneration (Replanting)	Wind Power Generation	Engaged in Ranching	Poultry Farming	Milking and Dairy Product Manufacture	Use of Active Solar Power	Use of Passive Solar Power	Regional Heating System	Propane Backup Heating System	Energy Star	Energy Monitoring System	Ventilation System	Geothermal Energy System	High-Efficiency Heat Pump System	Composting Toilets	Garbage Sorting	Recycling	Smokeless Wood Heat	Natural Gas Boiler System	Waste Treatment System	Use of Fireplaces	Clear Choice Decking	Use of High-Density Insulation Materials	Use of Super-Insulated Openings	Use of Safe Finishing Materials		Off the Grid	Use of Systems to Separate Pedestrian and Vehicular Traffic	
1	Community																																							30	
2		Cobb Hill Cohousing																																						5	
3		Two Acre Wood																																						10	
4		Songaia Cohousing Community																																						5	
5		Bellingham Cohousing																																						13	
6		Shadow Lake Village																																						20	
7		EcoVillage at Ithaca																																						11	
8		Champlain Valley Cohousing																																						4	
9		Oak Creek Commons Cohousing																																						5	
10		Milagro																																						7	
11		Two Echo Cohousing																																						20	
12		EcoVillage of Loudoun County																																						4	
13		Manzanita Village																																						10	
13	Hundredfold Farm																																								
Total		11	5	10	4	5	1	1	2	4	1	10	6	2	5	4	1	6	9	3	1	4	1	1	1	1	1	1	13	3	1	1	2	2	1	4	3	2	5	7	