



Fig. 16

Move in date:	winter 1991
Location:	4 km SW of Bergsjö 6 km S of Sundsvall
Project initiators:	future residents
Size:	5 households

BÅLARNA

The gravel road went deeper and deeper into the woods. I began to wonder if we had made a wrong turn, but soon we turned the corner to reveal the most charming red houses with decorative white trim perching on the edge of a wide vista of rolling hills and peaceful lake. The field between the lake and the houses was a lush green. The green spilled over into peoples' yards which were filled black current bushes, herbs and vegetables, and flowers. Cords and cords of wood were stacked between the entrance and the carports. Across from the carport were several horse stalls, bee hives, and a hen house. Bålarna has five households and nineteen people who live in two duplexes and a single house all in a row with a view of the lake from the breakfast table. The families knew each other years before becoming neighbors and still appear to be very happy after eight more years together. *"It is hard*

to imagine a better home," says a resident. *"Here will I live and here I will die,"* (Lanne - 7/94) says another.

I almost didn't make it to Bålarna because it presented a distinct public transportation challenge. Although a distance on foot, it makes a manageable bike ride to town. I sheepishly admit that I received a ride in an automobile, but it was well worth the sacrifice.

Bålarna - Getting There

The group of friends had been talking about living together for years. The Chernobyl nuclear accident was the final straw to convince the group to commit to living according to ecological principles. The group had chosen a site and begun to design their houses but they just could not get the necessary financing. The group was ready to throw in the towel when Leif Stegenius, president (VD??) for Stiftelsen Nordanstigs Bostäder⁴ the municipal building association, read about the group's idea in the local paper and stepped in to offer assistance with financing and finding a good builder. Leif Stegenius helped secure the bid from Skansa, a major Swedish building company. Skansa was interested testing the waters of ecological building on a small scale before committing to larger projects. Bålarna was a good candidate. Bålarna's motto has become - "Nothing is impossible - some things just take a little longer."

I was eager to visit Bålarna, even though it does not quite fit in with the size and social organization of the other ecovillages, because of the very positive feelings expressed about their planning process. All of the participants were exceptionally accommodating; the developer, the builder, the residents, and the municipality. The residents had a real opportunity to be involved and influence every stage of the planning process. The residents have been and still are active members of the

nearby Bergsjö community. Their idea received support from local officials who personally knew the residents and could trust that they would be responsible and committed to the ecovillage project. Municipal support helped to smoothly expedite the approval of zoning codes, such as approval of on site waste water treatment. The developer and builder were notably more open to communication and learning from all the actors than in any other ecovillage. The developer's, Leif Stegenius', attitude was, "You can't just sit down and plan an ecovillage yourself. There must be a group of people who are interested when you begin,⁵ which is the opposite of what we normally do."⁶ Neither residents, developer, nor builder had much experience with building "green." Skansen, made some initial attempts to muscle in their experience, but soon conceded to the importance of trying new ecological building techniques. Skansen even hired outside consultants which is unusual for them. The residents did their homework too and took field trips to look at several other ecological projects and attended a Njord conference on ecovillages in Stockholm. The resident's had an additional advantage. They had sketched very clear plans of what they wanted well before the builder and developer got involved, which left less factors open



Fig. 17 - Back faces lake and gardens

to negotiation. The results were not perfect; the paint used in the houses is not environmentally friendly, some cabinetry had particle board with formaldehyde, there are no green houses/glass verandahs, and the toilet system is not what they wanted, nonetheless the residents are very satisfied. "It may not be the best quality materials but, no way would never trade it for my old house . Living here is such a time saver after that big old house that needed constant attention and repairs."

Bålarna - Location

Bålarna is distinct from other ecovillages discussed in this report due to its location. The nearest community of Bergsjö, a small town of 5,000??, in northern central Sweden. Bålarna is only four kilometers from Bersjö, but the distance seems long because the roads to Bersjö are lined with woods. Bergsjö is located midway between two cities, Sundsvall (40 km northeast), and Hudisksvall , population 15,000 (25 km southeast) has the nearest train station and other significant amenities.

Despite their remote location, total driving time for the residents has reduced dramatically since moving in. Two men, and sometimes others part-time, have the strenuous commute of 20 meters across the path to their on site computer firm. The residents share rides and help each other out with driving the children when it is too far to bicycle. Three of the families have sold their second car.

Bålarna - Design

The houses reflect the traditional design of the region, right down to the gingerbread trim on the front porch. The solar panels on the common house are the only exterior clue of something special about these homes. The two toilets, one for liquids the other for



Fig. 18 - Rear of homes

solids, in the bathroom are, however, a dead give away. The residents had hoped to a single urine separating toilet, but they were not available in the necessary time frame. Therefore you must plan you bathroom visits according to you needs. The residents are used to it now. It has become just another part of daily life. Bålarna is the only ecovillage to spread their collected urine on site. The results have been positive. The composted toilet waste is buried out in the woods. Gray water is treated on site as well, in a gravel infiltration bed. The ecovillage is self-sufficient in heat production. They chop all of the wood they need from the 48 hectares of woods collectively owned by the group. Fortunately, they do not have to run the furnace all year round, the heat for the hot water heater is furnished by 24m² of solar panels in the spring and summer. The group raises chickens and sheep and grows some fruits and vegetables, but they do not claim to be self-sufficient.

Bålarna - Social/organization

The residents, although longtime friends, do not see Bålarna as a collective. Each family has their own home and own style of doing things. Residents expressed no sense of isolation. The adults and children are all active in local activities such as school and politics. Two men run an on-site computer firm which entails

dealings with customers on a global basis. At times other members have helped out with the business. Another man makes a living from his bee-keeping. The form of ownership in Bålarna is unique for the ecovillages. The residents own the land but rent the houses from Nordanstigs Bostäder.

The families have known each other for so long a lot of decisions are made informally. Formal meetings are held occasionally. The most time consuming maintenance task is chopping wood for heating. *“The idea of the association was that it is more fun to take care of the hard jobs when there are many people working together.”*⁷ Other tasks are performed as needed without formal workgroups.

Bålarna - Resources

Published information available on Bålarna is limited. The articles I do have were acquired second hand and without complete citations.

“Bålarnas ekoby paradiset för 20 personer,” in *Kretslopp* magazine by Lotta Lanne (7/94, pages 16-17) is the most complete publication and citation I had.

A student from the Netherlands, Maj M. Andersen, visited Bålarna in 1994 and wrote a 16 page draft report in English, with an emphasis on the word *draft*. The resident I spoke to does not know if there is going to be a follow-up report.

Rita Selén and Anette Nybom together wrote a seven page report for their Environmental Studies class. I do not know for which school.

The technical information in both student reports is limited. The presentation of the character of the ecovillage and its residents is what is interesting. The information on the planning process came from these reports and various newspaper articles.



Fig. 19 - Wood for heating is sustainably harvested

Bålarna - Overview

Planning start:	mid 1980's	Number of Households:	5 households, 19 people
Move in date:	winter 1991	Size of homes:	160m ²
Location:	60 km S of Sundsvall	Type of ownership:	4 km SW of Bergsjö renter's association
Project initiators:	future residents	Project developers:	Stiftelsen Nordanstigs Bostäder
Project leader:		Builder:	Skanka, total contractor
Architect:	future residents	Building cost:	10,000 SEK/m ² at 1990 prices consultation with Anders Nyquist
Landscape architect:			future residents
S I T E			
Location:	facing lake, surrounded by 48 hectares of forest collectively owned by residents		
Transportation:	automobile or 20 minute bicycle ride to town		
Design:	two duplexes and single house in row, set back from entrance, back door facing lake (south side) open marshy field between lake and houses, surrounded on three sides by forest commonhouse and other structures near entrance gravel pathways		
Landscaping:	most of existing foliage retained grazing area for horses		
Gardens:	individual garden plots by each house		
animals:	horses, sheep, hen house, bee keeping - 25 hives		
compost:	central compost for yard and household waste, toilet compost buried in woods		
food storage:	root cellar, pantry in each house		

Common house: other structures:	computer firm, shared laundry, furnace room, trash/recycling room, storage rooms under carport, horse stalls, work room
House exterior:	traditional style: cooper red wash on wooden siding with white boarders red tile roof, copper sheeting on front awning
INTERIOR	
General:	
Floor plan:	living room, kitchen, storage on first floor - bedrooms on second floor, bathrooms by front entry, entrance on north side
Foundation:	concrete slab
Frame:	wood
Insulation:	ecofiber, airtight diffusion layer of paper
Floors:	clinkers and linoleum
Walls:	painted
Woodwork:	painted
Windows:	double glazed
Glass rooms:	none
Kitchen:	pantry, other is standard, recycling under sink
SYSTEMS	
Heating:	district heat: central wood furnace (circa 120 m ³ wood per year) - wood gathered on site, solar panels, two accumulator tanks, floor heating - no radiators
Ventilation:	thermostat regulated fans on vents on outer walls
Water:	own tap water from a well
grey water:	gray water to two-chambered settling tank and infiltration bed
black water:	two separate toilets, one for urine the other for feces, second floor toilet only for urine, entrance to compost cellar outside
Electricity:	feces composted (Wolgast), buried in woods, urine collected in 10m ³ shared tank -spread on site standard
Trash/Recycling:	no municipal collection - recyclables transported by residents to recycling center, non-recyclable combustibles incinerated in central furnace, organic waste composted barely one bag of trash per week for all five families that must be taken to landfill