

CASE STUDY

Office of Waste Reduction Services
 State of Michigan • Departments of Commerce and Natural Resources

Gretchen's House III - Ann Arbor
Cloth diapers reduce waste and save money at a day care center

Replacing Disposable Diapers With Cloth

Cloth diapers might seem less convenient than disposables, but a staffer at Gretchen's House III in Ann Arbor has this to say about the day care center's recent conversion to cloth:

"We approached the change with the attitude, 'How can we do this without making our day any harder?' At first I thought it would be messy and hard to do. It took some time to learn how to put them (cloth diapers) on, but now it's quick, easy, and better for the babies."

Better for landfills, too. The conversion from disposable to cloth diapers at Gretchen's Houses III reduced solid waste generation by 53 pounds per week, for 12 infants over a five day week.

Even though disposable diapers weigh only .12 pound each, an estimated 680 million disposables are used annually in Michigan. This represents a substantial amount of waste that could be avoided if cloth were used for all diapering.

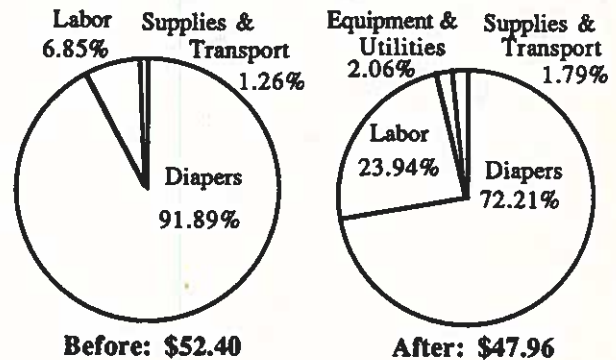
- *Diapers contribute more than any other other consumer item to municipal solid waste except newspapers and beverage containers.*
- *Cloth diaper use could reduce the state's solid waste generation by:*

850 tons per year, if used in all day care centers

41,000 tons per year, if used throughout the state for all purposes

Total costs at Gretchen's House III for disposables were 25¢ per diaper, while total costs for each cloth diaper were 22¢. After conversion to cloth, most infants still leave the day care center in disposables, because few parents use cloth diapers at home. Use of cloth diapers while the children are at Gretchen's House III reduced total weekly diapering costs from \$52.40 to \$47.96, for a savings of 9.3%. The following figure demonstrates the cost advantages of cloth diapers.

Weekly Diapering Costs at Gretchen's



How Many Diapers Does it Take?

An often-cited study by A.D. Little (1990) states that 1.9 cloth diapers are used for every diaper change. At Gretchen's House III, only 1 cloth diaper is used per change, and no other evidence was found to verify the excessive diapering reported by A.D. Little. Some parents double diaper at night to reduce the need for changing, but projecting this practice over 24 hours creates a false impression of diaper use.

Aided by assumptions of cloth double diapering, A.D. Little concluded that disposable diaper use results in fewer environmental impacts than cloth. Several omissions and other unlikely assumptions create doubt about the study's accuracy.

Doing Her Part for the Environment

Gretchen Preston, owner of four Gretchen's House day care centers in Ann Arbor, considered using cloth diapers several years ago but found that waterproof outer wraps essential for a successful cloth diapering system were not offered or handled by the local diaper service. Laundering outer wraps at her centers seemed too complicated and expensive, so she waited until a more convenient cloth diapering option could be found.

Continuing debate over the rapid depletion of Ann Arbor's landfill soon prompted Gretchen to "do her part for the environment." She was also motivated to reconsider cloth diaper use by the rising cost of disposables and the burdensome task of monthly diaper purchases. When a local company that both supplied and washed outer wraps was located, Gretchen's House converted to cloth diapers.

One staff member recalls, "It was definitely Gretchen's idea and came from her philosophy of being part of the community. As a community based center, we should do our part."

Persistence Is Rewarded

Unfortunately, the initial experience with cloth diapers at Gretchen's House was short lived. The diaper company servicing the center went out of business, forcing a return to disposable diapers while the search for a new diaper service began. When it became obvious that no diaper service could be found that supplied or washed wraps, another day care center assured Gretchen that washing wraps at her centers would present few problems. Bolstered by this support, she returned to cloth diapers early in 1990.

Staff at the day care center approached the prospect of washing wraps in-house with a relaxed attitude. "We have a 'try anything' mentality; if someone can see a more efficient or organized way of doing something that is still good for the children, we'll do it." Another staffer adds, "After all, we work with children; you have to be flexible."

In addition to feeling that they are helping solve the problem of excess solid waste generation, many of the staff believe cloth diapers are more comfortable for infants. Several parents have even switched to cloth diapers because of the day care center's example.

Recognition for Waste Reduction

Gretchen's House day care centers won the Ann Arbor Ecology Center's *Most Waste Conscious Business* award in 1989 largely because of cloth diaper use but also as a result of efforts to reuse and recycle waste products whenever possible. The centers return grass clippings to the lawn, compost leaves, reduce food waste by training children to take only as much as they will eat at mealtime, and recycle as much material as possible, including aluminum and glass containers, corrugated cardboard, newspapers, and office paper.

Concerns about solid waste and environmental quality were translated into a successful source reduction program at Gretchen's House III. The day care center's experience demonstrates how cloth diapers can save money while helping solve the solid waste problem.

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