Epworth United Methodist Church
Green Team

Saving Energy & Saving Money
Third Green Congregations Workshop
Jodi Perras
January 31, 2009
Epworth UMC Green Team

- Formed Dec. 4, 2006, through a charter approved by church council
- Expected Results:
  - Examine church operations and activities
  - Increased environmentally friendly operation of the church
  - Increased environmental stewardship by church members and friends
  - Environmental awareness and outreach to the community
- First tasks included review of energy bills
Energy Audit – Gas (2005-06)
Dover House
Dover House – Rear View
Problems Identified

- Less than 2 inches of insulation in attic
- Large, drafty windows/sliding doors with aluminum frames
- Programmable thermostat not programmed

Front Window
Rear Sliding Door
Window Insulation

- Shrink & Seal Window Kit (3 @ $6 each)
- Clear tape ($3)
- Door draft dodgers (3 @ $10)
- Hair dryer (loan)
- Scissors (on hand)

**Total Cost: approx. $51**
How It’s Done

- Attach two-sided tape to window frame
- Attach plastic to tape
- Blow with dryer until plastic shrinks tight
- Time: 30 minutes-1 hour per window
- Inspect regularly
Door Draft Dodger
Programmable Thermostat

- New in 2005 or 2006
- Apparently never programmed - or programming was lost
- Programmed to match typical use of building
Attic Insulation Costs

- Contractor Estimates: $1,300 - $2,400
- Trustees spent several months arguing whether to insulate attic

**Do-It-Ourselves Approach**

- Materials & Rental Equipment: $700
- Labor (mostly volunteer): $200
- Total: $900
Gas Usage 2005-2008

- Dover Therms
- Galloway Therms
- 65th Street Therms
- Heating Degree Days

Usage (Therms) vs. Heating Degree Days from Jan-05 to Nov-08.
Natural Gas Costs – 2005-08

Dover House Annual Gas Costs

- 2005: $2,357
- 2006: $1,585
- 2007: $1,665
- 2008: $1,194