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Non-Point Source Polluting Lawn Mower
1/23/06

Milestones

- ◆ Safety training completed: September 27, 2005
- ◆ Calculate power requirements for typical lawn to accurately size battery/fuel cells
Use an existing electric lawnmower to measure power consumption by recording the amperage draw while mowing a defined size lawn: October 11, 2006
- ◆ Decision for mode of power source using pro's/con's of electric, solar, fuel cells and biofuel when power, mowing time, and cost are compared: October 18, 2005
- ◆ Engine and blade sizing completed, begin CAD drawings using Solid Works: November 11, 2005
- ◆ Presentation of first semester results: December 6, 2005
- ◆ Machine piece to connect the blade to the motor shaft: January 31, 2006
- ◆ Purchase different types of blades and perform lab to find the optimal blade for the lawnmower: February 7th, 2006
- ◆ Set up lab to test the performance of the motor at different voltages(24V, 36V, 48V) for choosing final battery size: February 17, 2006
- ◆ Fill out purchase request form for the final battery: February 20, 2006
- ◆ Plot batter curve with motor as well as torque vs. time or power vs. discharge: February 28, 2006
- ◆ Research and design control board, which will charge the battery, damp out initial amp spike, protect system from burnout, and a safety shut-off: March 14, 2006
- ◆ Finish design of removable battery packaging as well as cowl for the mower and other final cosmetics: March 28, 2006
- ◆ Finish assembly of lawnmower and design test on standard grass: April 11, 2006
- ◆ Set up of projects for final review, Maine Day: May 3, 2006
- ◆ Open house, operational review of project: May 4, 2006
- ◆ Final Project Report due: May 10 2006