CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY

Name(s)
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Project Number
J0620

Project Title
Wind City

Abstract

Objectives/Goals
The purpose of my research and experimentation was to determine if San Carlos has enough wind speed to support wind powered generators

Methods/Materials
1. Velometer
2. Anemometer
3. Pencil
4. Notebook for writing data
5. Computer/Internet

Results
While experimenting I found spots that would be successful in providing enough wind and I found spots that would not necessary be a great location for providing wind. Crestview Drive would be the best place to put wind powered generators and provided the most wind speed because of the high elevation. Crestview Drive is the highest point in San Carlos. The San Carlos Train Station provided the least amount of wind speed.

Conclusions/Discussion
The average wind speed in San Carlos could be enough to turn small or large wind powered generators. But there are other issues to consider such as economics (how much it would cost), environmental issues, and regulatory issues. The next problem would be where to put one for a homeowner or many for an entire city. The area around Crestview drive would be the best place to put smaller wind generators, because of limited amount of space in the residential area. Bair Island could be a place for much larger wind generators because of the massive amount of space. There are other problems with putting many generators on Bair Island, such as animal concerns and other environmental issues. Although if those concerns can be resolved San Carlos is in good shape to have wind generators not just at Bair Island and Crestview but at our homes as well.

Summary Statement
Determining if the region of San Carlos, has enough average wind speed to generate wind powered wind speeds.

Help Received
My Father helped me build my anemometer and record obsevations since it takes two people to operate.