Sierra and Sorcha's Awsomely Cool EDGE Project

How the forest has changed around Floyd Dryden Middle School And Glacier Valley Elementary School between 1942 and 1996

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Floyd Dryden Middle School

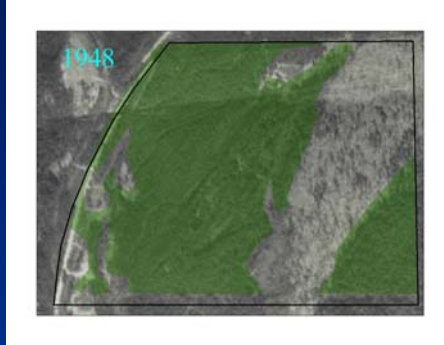Experiential Discoveries EDGE in Geoscience Education

Introduction

Our project is about forests and how we affect them and their growth. We chose this project because we have loads of forests around our school and it seemed like a good idea. Together with Ms. Morris and Mr. Carstensen we came up with the idea of forest growth and how we have affected it over time.

Fig. 1. **This is Mr. Carstensen. He helped us with ArcMap and with our report. It would be hard without him.**

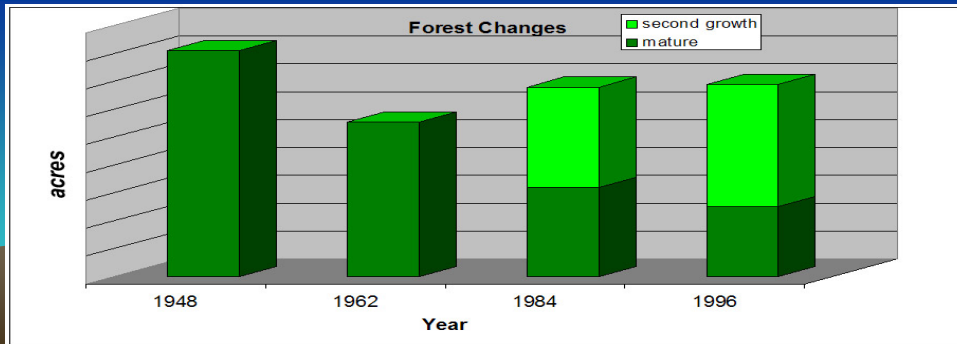## Materials and Methods

Materials

1. ArcMap
2. EDGE Computers
3. Historic air photographs

Method

Step 1: We obtained different aerial photos of the area around Floyd Dryden in 1948, 1964, 1984 and 2001.

Step 2: We traced patches of closed forest in all of the aerial photos. We identified them as either "mature" (over 100 years old) or second-growth.

Step 3: We measured acreage of all our traced forest polygons in Xtools.

Step 4: We totalled the acreage of mature and second growth forest for the 4 time periods and generated bar charts for comparison.

Fig. 3. This is our pretty computer.☺

1948

1962

1984

1996

Forest Changes

- second growth
- mature

acres

Year: 1948 1962 1984 1996

Results

If you look at the graph below then you will find out that over 50 years we have had about the same amount of trees but we have gained more second growth and lost more mature trees. The air photos make it look like we have lost trees but looks can be deceiving.

Conclusion

Yes, after doing this project we have realized that we have cut some trees down but they are mostly for good reasons like we need schools and homes and we make money off of logging. And we found out that we have a lot of second growth forest so that is a positive thing. We could possibly keep going on cutting trees down but we should at least leave room for some for new trees to grow in. The only bad thing about the second growth is that it takes about 200 years to support plants and animals.

Acknowledgments

We would like to thank Mr. Carstensen and Ms. Morris for their time, energy and patience.

For further information

For further information please ask Sorcha Hazelton, Sierra Risley, Mr. Cartensen or Pam Morris.