

4-H / ESRI GIS Project

A. See support letter from Dr. Keith Diem, State 4-H Leader, Clemson University

B. Club Profile

1. **Club Name:**
Dacusville 4-H/Leo Club
2. **Grant Level:**
Introductory
3. **Organization Agency Responsible for Club:**
Dacusville Middle School
4. **Club Mailing Address:**
Dacusville 4-H/Leo Club
c/o Bob Spalding
3909 Dacusville Hwy.
Easley, SC 29640
5. **Organization Physical site address:**
Dacusville Middle School
899 Thomas Mill Road
Easley, SC 29640
6. **Primary Club Contact:**
Bob Spalding
4-H Volunteer Leader
7. **Primary contact mailing address:**
3909 Dacusville Hwy.
Easley, SC 29640
864-859-2313 (h)
864-855-9533 (f)
864-430-0119 (c)
bspaldng@clemson.edu
8. **Secondary club Contact:**
Catherine S. Spalding
Teacher/4-H Volunteer
9. **Secondary contact mailing address:**
3909 Dacusville Hwy.
Easley, SC 29640
864-859-2313 (h)
864-855-9533 (f)
864-918-9292 (c)
cathy@scsbob.com

10. **Description of estimated population demographics and geographic area encompassed by club activities/members:**

Geographic area of Club activities and members: is in the northeast section of Pickens County called the Dacusville Community. It has approximately 14,000+ people and covers about 1/5 of the county or approximately 102 square miles

11. **Club Web site:**

The website is under construction at this time.

C. Description of Club and Volunteers

Dacusville 4-H/Leo club has 27 members that all attend Dacusville Middle School (grades 6-8 from 12-14 years old). The club is sponsored by the Dacusville Lions Club and the Dacusville Middle School. The club has two volunteer leaders Bob and Catherine Spalding. When this grant is approved, it will also be supported by the science teachers in all three grades, the 6th grade Math teacher, the 9th grade English teacher and the Media Coordinator. The club will also receive financial support and direct member support from the Dacusville Lions Club and members of the Dacusville Fire Department. Total involvement will be approximately 75 people.

D. Description of hardware and software to be used:

1. The club needs 25 sets of software
2. Twenty (20) of the computers are running XP Pro and have the MS Office loaded and have access to the Internet
 - 10 Dell Laptops – mobile lab (512 ram)
 - 10 Dell Desktops – school lab (256 ram)
 - 5 individual home computers
 - Bob Spalding's desktop (1 gig ram),
 - other individuals who show a real interest in GIS – their configurations unknown at this time.
3. The labs will be networked into either a laser or a inkjet printer. The laptop computers will have access to digital imaging software as well as a scanner.
4. The club will have access to 1 Dell Axim PDA's at this time and two 2 Garmin GPS receivers. The Lions Club has agreed to purchase additional GPS receivers in the future. The club also has access to 10 Canon digital cameras
5. Both the Mobile and School Labs are networked. The School lab is hardwired and the Mobile lab is wireless.

6. Both labs have internet access via the School is a T-1 line. As for the home computers, Spalding's is connected via satellite. The others will probably be connected via phone, since DSL is not available in the area of the county at this time.
7. We are requesting ArcView 9.x

E. A one-paragraph response to each of the following questions:

Brief description of the planned community service project.

The first year will be spent on learning the software, finding and marking the 30+ fire hydrants as well as junk cars in the Dacusville Community. There is a county ordinance against junk cars in people's yards. Maps will be given to the local fire department and to the County Administrator.

Why is the inclusion of GIS in our club activities important?

This will be a way to teach young people about their community, county, state and world. Of course the 4-H'ers are more interested in their community, but through teaching them to use the GIS software, they will be able to relate some of the things they learned in geography back to their community. The 4-H'ers will learn additional computer skills, communication skills, analytical skills, interpretive skills and more. This will also give the youth a chance to interact with community adults and county officials. It will also provide our 4-H'ers with GIS and GPS skills, which are increasingly important in daily life.

How does our club plan to contribute to the creation or further development of the 4-H Technology Action Plan in South Carolina?

At this time all of the 4-H'ers involved with GIS/GPS are from the middle and lower parts of South Carolina. This club will be the first 4-H club in the upper part of the state, so it would be bring a different perspective to the already formed State 4-H Technology Club. Through interactions, the Dacusville 4-H/Leo club will gain a new insights on what other groups are doing with GIS and at the same time share what they are doing. Our club will collaborate with other members of the state team to develop projects that will not only benefit the Dacusville area, but the rest of the state as well.

Why should our 4-H club be considered for the 2005 ESRI GIS Grant Program for U.S. 4-H?

The Dacusville 4-H/Leo should be considered for the ESRI grant because we are establishing community improvement program that will be ongoing for years to

come. It will give the young people a change to establish relationships with county administrators, local businesses, community leaders and others that will last a lifetime. It will also give a dedicate group of youth and adults a chance to eagerly apply the GIS technology to real-world problems. More importantly, it will give the local Fire Department local detailed maps on fire hydrants.

F. Description of current GIS and other geospatial activities....

At this time, Mr. Spalding is taking a ArcView 9 class through EOS (Earth Observing System) from The University of Montana School of Education. He also plans to join the Foothills chapter of the SC Arc GIS Users Network.

G. Description of plans for 2007 and beyond.....

The Dacusville 4-H/Leos' vision includes the utilization of geotechnologies in mapping and tracking of community characteristics. This technology will empower citizens to acquire a better knowledge of their community. Empowering the community to solve its own problems by utilizing the geotechnological resources that are available, will enable the community to take steps to improving the overall quality of life. In addition, exposure to the use and applications of this technology will broaden the outlook of career opportunities that will develop in the future. This will be done with the help of community leaders and teachers at the Middle School.

- In 2006, the Dacusville 4-H/Leo Club will
 - Will work with the local Fire Department to develop a map all the fire hydrants in the community. It will also work with the county to map abandon cars in the community.
 - Submit performance reports by 7/1/06, 12/31/06 and 8/30/07
 - Participate in a GIS Day event.
 - Make at least one presentation to other 4-H Clubs.
 - Make presentations to the local Fire Department and the Dacusville Lions Club during the grant period.
 - Submit map poster for 4-H Online Map Book Album
 - Complete and submit Community Atlas project by May 30, 2007
 - Contribute to www.youthfavorieplaces.org
 - Participate in monthly 4-H GIS/GPS conference calls

- In 2007 the club will start mapping the residences of people that have some type of special needs. Special needs such as handicapped and immobilized, elderly persons and persons who may need some type of assistance in emergency situations.