



**2009-2010 CHAPTER GRANT**

- PLEASE NOTE THAT THIS IS THE OLDER VERSION OF THE GRANT APPLICATION. THE UPDATED VERSION FOR 2010-2011 ASKS FOR THE SAME INFORMATION, BUT WITH UPDATED SECTION HEADERS.

**FFA CHAPTER CONTACT INFORMATION**

Chapter Name:	Chapter #:	State: WV
Advisor Name:	Advisor Phone #:	Advisor Alt./Cell Phone #:
School Name and Address:		
Advisor Email:	# of FFA members: 30	# of Agriculture Students Enrolled in School: 80
Proposed Project Title: Outdoor Learning Lab	Total Amount Requested: \$3200	# of Agriculture Teachers at School: 1

**COMMUNITY INFORMATION & DESCRIPTION**

County (ies) to be served:	Local Community (ies) to be served:	Congressional District(s):
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Provide the name and location of the community to be served as well as a rich narrative description of the community. Give a visual image of the community. Include information such as demographics, risk factors, and community assets:

Cradled in the foothills of the rugged Appalachian Mountains and bordered by the majestic Ohio River, Mason County's beautiful landscape, friendly people, and unique heritage await you. Our historic county seat, Point Pleasant, is located at the confluence of the Ohio and Great Kanawha rivers. A small but vibrant river town, Point Pleasant provides opportunities for shopping and dining, as well as the chance to learn about epic battles and a tenacious pioneer culture that contributed to the character of the America that we know today. Mason County, a land of rolling hills and dense forests, is a paradise for outdoor enthusiasts who enjoy bird watching, camping, boating, fishing, hiking, or cycling.

As of the census of 2000, there were 25,957 people, 10,587 households, and 7,569 families residing in the county. The racial makeup of the county was 98.37% White, 0.50% Black or African American, 0.18% Native American, 0.27% Asian, 0.01% Pacific Islander and 0.11% from other races. The median income for a household in the county was \$27,134, and the median income for a family was \$32,953. The per capita income for the county was \$14,804. About 16.60% of families and 19.90% of the population were below the poverty line, including 27.30% of those under age 18 and 14.50% of those age 65 or over.

**DESCRIPTION OF LIVING TO SERVE PROJECT**

Please provide a detailed description of your project including timelines, SMART goals, community partners, beneficiaries, marketing/public relations plans and educational outreach to inform community members about the project:

**Project Description:**

We would like to redesign a vacant courtyard at our high school to serve as an outdoor learning lab. A previous agriculture teacher began construction on the courtyard, but left it undone and unsafe for use by students. Our redesign will involve the planting of the area with native trees, small plants and herbs, as well as the construction of lab tables where 7<sup>th</sup> – 12<sup>th</sup> grade classes can meet for outdoor, hands-on class discussion. Students will be involved in all stages of the new construction and maintenance of the lab, and our high school teachers will give their input about how the space could be used to complement their lesson plans. Teachers will develop lesson plans using the outdoor learning lab to help students meet the state science and biology standards below:

9<sup>th</sup> grade Science standard 1:

Students will formulate scientific explanations based on historical observations and experimental evidence, conduct and/or design investigations that incorporate the skills and attitudes and/or values of scientific inquiry, research protocol, accurate record keeping, replication of results and peer reviews, objectivity, openness, skepticism, fairness or creativity and logic; they will design, conduct and evaluate and revise experiments

10<sup>th</sup> grade Biology standard 2:

Students will analyze the flow of energy through cellular processes; examine processes of binary fission, mitosis and meiosis; evaluate the evidence of evolution through natural selection; evaluate forest and wildlife best management practices as they affect succession, populations and communities; assess the implications of invasive species on native wildlife and their habitat requirements; predict the effects of human activities on biogeochemical cycles of matter and energy in the biosphere over time

11<sup>th</sup> & 12<sup>th</sup> grade Biology standard 2:

Students will compare and contrast members of the plant kingdom in terms of their reproductive systems; survey the fungi kingdom; design investigations for the application of Mendelian genetics to explanations of phenotypic probabilities and genetic abnormalities; classify and analyze living organisms by their characteristics

**Timeline:**

January:

- Agriculture and technical education students begin building picnic tables and developing a tentative blueprint for learning lab
- Students in plant science units will research native plant species in West Virginia that could be studied through the outdoor lab

<ul style="list-style-type: none"> <li>Students will take pre-test to gauge understanding of West Virginia Science Standards for 7-12 grade students</li> </ul>
<b>February:</b> <ul style="list-style-type: none"> <li>Teachers' meeting held to discuss cross-disciplinary ways to use and design the space</li> <li>Blueprint for learning lab finalized using comments from teachers' meeting</li> <li>Teachers will conduct pre-tests with students to gauge their understanding of agricultural-science concepts related to the West Virginia Science Standards for 7-12 grade students</li> </ul>
<b>March-April:</b> <ul style="list-style-type: none"> <li>Students place orders with local nurseries for seed using as a reference the native plant list developed by students in the plant science unit</li> <li>Students begin planting in outdoor lab</li> <li>Students will monitor plant growth cycles, maintain plant health and conduct experiments through 1-2 classes/week held in learning lab</li> </ul>
<b>May:</b> <ul style="list-style-type: none"> <li>Students will monitor plant growth cycles, maintain plant health and conduct experiments through 1-2 classes/week held in learning lab</li> <li>Students will take post-test to gauge understanding of West Virginia Science Standards for 7-12 grade students</li> <li>Teachers and administration will take part in a written evaluation and wrap-up meeting to discuss program successes and room for improvement</li> <li>Open House held to introduce community to benefits of the outdoor classroom/lab</li> </ul>
<b>June-July:</b> <ul style="list-style-type: none"> <li>FFA Work Days will be held weekly at site to maintain plant health and cleanliness of lab facilities</li> </ul>
<b>SMART Goals/ Measurable Outcomes:</b> <ul style="list-style-type: none"> <li>Increase in knowledge of 80% of student participants in the area of the West Virginia Science Standards will be measured through a pre and post assessment as well as classroom testing as is required by West Virginia Department of Education.</li> </ul>
<b>Community Partner/ Roles:</b> <ul style="list-style-type: none"> <li>Staff at local greenhouses will advise students in plant science units on the selection and care of native plant species</li> <li>County extension agents will make visits to classes held in outdoor lab to advise students on plant care and soil and water conservation</li> </ul>
<b>Beneficiaries:</b> <ul style="list-style-type: none"> <li>Students will benefit from opportunity to have hands-on experience with their classroom curriculum</li> <li>High School teachers will benefit from additional resources provided by outdoor lab that they can use to give students hands-on learning experiences</li> </ul>
<b>Marketing/Public Relations Outreach:</b> <p>FFA members will be responsible for marketing and publicizing our spring Open House to the community; this Open House will serve as an opportunity to garner support for the learning lab's mission and showcase the benefits of hands-on learning experiences to the parents of our students.</p>

**PROCESS TO IDENTIFY COMMUNITY NEEDS**

Describe how community needs were identified and prioritized (e.g. community forums, needs assessment survey, class discussion). Who was involved in the process? Include numbers of people and who they represented. Why was the project chosen? Who will it benefit? How many will benefit? How will they benefit? What is the role of youth in long-term efforts?

The principal met with the new agriculture teacher to discuss options for picking up on a project begun by previous agriculture teacher. At that time, the courtyard was seen as unusable space and was not safe for class meetings. Plans were made to transform the courtyard into an outdoor learning lab that would feature native plant species, trees and an herb garden to be completely managed and maintained by students and FFA members.

**YOUTH VOICE**

How will youth be engaged in the design, implementation and evaluation of the projects (This can include other youth besides FFA members)?

FFA members will be responsible for implementing and evaluating the plan for the renovated outdoor learning lab. They will organize and execute all FFA Work Days at the site and the spring Open House for the community. High school students will be responsible for the maintenance of the outdoor lab and regular care of the plants and herbs in the garden.

**COMMUNITY "CAPITALS" FRAMEWORK**

Please see the application instructions for additional help located at [www.ffa.org/ltsgrants](http://www.ffa.org/ltsgrants). For consistency in reporting, the following research-based framework and definitions will be used. For more information, review the "Community Capital Diagram," "Community Capital Handout," and other resources at the following website: <http://www.ag.iastate.edu/centers/rdev/projects/commcap/index.htm>

**ISSUE(S) OR NEED(S) IDENTIFIED AND OUTCOMES**

**Human:** As demonstrated by increased skills and abilities of local people; increased initiative, responsibility and innovation. Youth serving in leadership roles, serve as change agents, and are stakeholders in their communities.

**Project Outcomes:** Increase in knowledge of 80% of student participants in the area of the West Virginia Science Standards will be measured through a pre and post assessment as well as classroom testing as is required by West Virginia Department of Education.

9<sup>th</sup> grade Science standard 1:  
Students will formulate scientific explanations based on historical observations and experimental evidence, conduct and/or design investigations that incorporate the skills and attitudes and/or values of scientific inquiry, research protocol, accurate record keeping, replication of results and peer reviews, objectivity, openness, skepticism, fairness or creativity and logic; they will design, conduct and evaluate and revise experiments

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invasive species on native wildlife and their habitat requirements; predict the effects of human activities on biogeochemical cycles of matter and energy in the biosphere over time

11<sup>th</sup> & 12<sup>th</sup> grade Biology standard 2:  
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**Action Plan:** Noted in Project Description

**EVALUATION**

Describe how the project will be evaluated. Include strategies and methods and timelines for evaluation. Identify how evaluation information will be shared with the community and others.

- Teachers will administer pre-tests in January and post-tests in May to gauge how the students’ understanding of science standards has changed over the course of the project.
- Results from state science and biology tests will be analyzed against the previous year’s scores to understand how the outdoor classroom activities complemented students’ comprehension of state science standards.

**YOUTH PARTICIPANTS**

Estimated number of youth involved on leadership team	<b>8</b>	Estimated average number of hours of engagement per youth per month over the length of the project	<b>6</b>
Estimated number of youth involved in project (not on leadership team)	<b>40</b>	Estimated average number of hours of engagement per youth per month over the length of the project	<b>4</b>
<b>Total (no duplicated numbers)</b>	<b>48</b>		

**ADULT PARTICIPANTS**

Estimated number of adults involved on leadership team (i.e. parents, advisors, members of civic clubs)	<b>1</b>	Estimated average number of hours of engagement per adult per month over the length of the project.	<b>6</b>
Estimated number of adults involved in project (not on leadership team; i.e. parents, advisors, members of civic clubs)	<b>3</b>	Estimated average number of hours of engagement per adult per month over the length of the project.	<b>2</b>
<b>Total (no duplicated numbers)</b>	<b>4</b>		

**BUDGET**

Please include as much detail as possible. This will greatly reduce the review time both at National FFA and at USDA. USDA will ask budget clarification questions of sub-grantees when documentation is unclear or lacking detail ( More detail on budgets is available in Appendix A)

1. Sub-components of each category (for example, travel expenses itemized for several people under the travel category) must have totals and the totals must match the total for the category. Document how amounts are calculated.
2. There are many things that are not allowed to be budgeted with federal funds such as: “give away” items to program participants or the public, purchase or repairs of facilities, or food and snacks, unless food or snacks must be provided to maintain continuity of training and maximize time available for educational sessions. A table has been included that identifies allowable and unallowable costs; this is not an exhaustive nor complete list.
3. Receiving guidance from the National FFA program director prior to budget allocations will significantly reduce the application review time.

**BUDGET NARRATIVE**

## A. Salaries and Wages

## D. Nonexpendable Equipment

## E. Materials and Supplies \$2935

Forty 12' 2 x 4 treated wood boards @ \$2.50/board = \$100 ←(used for construction of 5 wood lab tables for class meetings)

1 box wood screws (1000 screws/box) @ \$30/box = \$30

6 hammers @ \$10/hammer = \$60

1 roto-tiller @ \$300 = \$300

10 shovels @ \$12/shovel = \$120

15 spades @ \$8/spade = \$120

10 hoes @ \$12/hoes = \$120

10 rakes @ \$12/rake = \$120

40 pairs gardening gloves @ \$4/pair = \$160

5 watering cans @ \$15/can = \$75

5 pairs pruning shears @ \$15/pair = \$75

250 lbs. fertilizer @ \$35.50/25 lbs. = \$355

4 wheelbarrows @ \$75/wheelbarrow = \$300

Native herb species = \$250 ←(the selection of specific types and quantities of species will be a research-intensive component of this project which will be completed by our students; we anticipate spending \$250 total on herb species; the following is a list of possible herb species that may be chosen by our students)

- Dill
- Chicory
- Caraway
- Coriander
- Cumin
- Fennel
- Horehound
- Sweet Cicely
- Curly parsley
- Summer savory
- Clary sage
- Peppermint

Native plant species seedlings/seeds = \$750 ←(the selection of specific types and quantities of species will be a research-intensive component of this project; we will anticipate spending \$750 total on native species; the following is a list of possible plant species that may be chosen by our students)

- Golden Aster
- Black Cherry
- Purple Loosestrife (invasive)
- Fern-leaved Yellow Foxglove
- Shale Binweed
- Chestnut Oak
- Chinkapin Oak
- Sassafras
- Redbud
- Shale Evening Primrose
- Garlic mustard (invasive)
- Birdfoot Violet
- Honey Locust
- White Ash
- Giant Sunflower
- Christmas Fern
- Royal Fern
- Black-eyed Susan
- Spring Iris
- Butterfly Weed
- Mountain Laurel

## F. Travel: \$265

20 students (in teams of 4 over 5 FFA Work Days) will travel an average of 26.5 miles (roundtrip) to the learning lab during summer break to maintain the facility and care for plants, so that the plants do not die and the lab can be used in subsequent years; this equals a total of 530 miles traveled over the summer; reimbursed at the rate of \$0.50/mile, this equals \$265 for travel.

## H. Computer (ADPE) Costs

## I. Student Assistance/Support

## J. All Other Direct Costs

## K. Total Direct \$3200

**BUDGET WORKSHEET**

ORGANIZATION AND ADDRESS		USDA AWARD NO.: 2005-45201-03329		
<b>A. Salaries and Wages</b>		DURATION PROPOSED MONTHS: _____ <b>Funds Requested by Proposer</b> _____		
1. No. Of Senior Personnel				
a. _____ (Co)-PD(s)	<b>CSREES-FUNDED WORK MONTHS</b>			
b. _____ Senior Associates	Calendar	Academic	Summer	
2. No. of Other Personnel (Non-Faculty)				
a. _____ Research Associates/Postdoctorates				
b. _____ Other Professionals				
c. _____ Paraprofessionals				
d. _____ Graduate Students				
e. _____ Prebaccalaureate Students				
f. _____ Secretarial-Clerical				
g. _____ Technical, Shop and Other				
<b>Total Salaries and Wages</b>				
B. Fringe Benefits				
<b>C. Total Salaries, Wages, and Fringe Benefits (A plus B)</b>				
D. Nonexpendable Equipment (Attach supporting data. List items and dollar amounts for each item.)				
E. Materials and Supplies				\$2935
F. Travel				\$265
G. Publication Costs/Page Charges				
H. Computer (ADPE) Costs				
I. Student Assistance/Support (Scholarships/fellowships, stipends/tuition, cost of education, etc. Attach list of items and dollar amounts for each item.)				
J. All Other Costs (In budget narrative, list items and dollar amounts, and provide supporting data for each item.)				
<b>K. Total Costs (C through J)</b>				<b>\$3200</b>
L. Other				
<b>M. Total Amount of This Request</b>		<b>\$3200</b>		
NAME AND TITLE (Type or print)				
Project Director:				
Authorized Organizational Representative:		SIGNATURE (required for revised budget only)		DATE
Signature				