Suggested Audiences

- Citizens
- Community Leaders
- Educators
- Students

Standard Categories

- Environment and Ecology
- Civics and Government

Standard Statements

- **4.8** Humans and the Environment
- **5.2** Rights and Responsibilities of Citizenship
- **5.3** How Government Works

Content Objectives

- Define the meaning of civic responsibility and citizenship
- Analyze services and actions that are good examples of civic actions
- Define Service Leaning
- Identify opportunities for action in communities
- Incorporate the model for Project Citizen in changing public policy

Instructional Strategies

- Discussion
- Survey analysis
- Group problem solving
- Presentations
- Demonstration

Assessment Strategies

• Develop a portfolio of action projects

Materials

Included:

- Chart Worksheet
- Object to Action Worksheet
- Community Network Worksheet
- Community Services Worksheet
- Service Learning Project Examples

Time

• 3.0 hours

What is the reason for Pennsylvania Land Choices and the development of the educational initiative that is called Pennsylvania Land and Community Education (PLACE)? The Department of Conservation and Natural Resources supports staff and citizen education that leads to land conservation, thoughtful management of natural resources and the encouragement of sustainable communities.

Education provides insight, wisdom, knowledge and skills for each citizen to gain confidence in their decisions and to make choices that will enhance the quality of life for their community, their state and their nation. It is the goal of Pennsylvania Land Choices to provide activities that help others learn and to encourage the teaching of others as they themselves become active leaders in their communities. It is developed for citizens, community leaders and educators to learn about their role in guiding the future of their communities.

By highlighting the value of the landscape, natural resources, recreational activities, economic stability and historic character that encompass the quality of life that every citizen deserves, PA Land Choices encourages the development of engaged conservation citizens by building a foundation

Ready, Set...Action!

of civic knowledge, public action and the skills of democratic deliberation focusing on local government and community involvement.

Overview

Ready, Set...Action includes three activities:

Activity 1: iConserve Pennsylvania
Activity 2: Conservation Heroes

Activity 3: ACTION: Stewardship and Service Learning

Summary: The ultimate goal of education is to develop responsible citizens. This lesson focuses on the power and responsibility of each individual to become involved in improving his or her community through community action and leadership in conservation. Involvement can happen at many levels...on a personal level, a community level, a state level, a national level and a global level. The community provides many opportunities for involvement and participation in local leadership. From planting trees to picking up litter to joining an Environmental Advisory Council, people can choose the type of contribution they can afford to make. The local government structure of communities involves elected officials, laws, and enforcement, enabling residents to practice citizenship on a local level involving themselves in the democratic process and the importance of democratic deliberation.

The activities will introduce participants to the DCNR iConservePA website (www.iConservePA.org) that promotes the actions of people who have participated in various conservation activities. Participants will meet heroes who have contributed energy, resources, leadership and commitment to protect land in their communities. Participants will explore a variety of ideas to inspire actions in their own communities. Discussions for teachers on service learning projects and contacts will encourage conservation projects through public schools.

Activity 1:

iConserve Pennsylvania

Summary: The iConserve Pennsylvania activity focuses on identifying the opportunities for participants to become involved in conservation and community projects. It provides the opportunity to describe the types of actions that help communities and to describe the process of becoming involved. The activity focuses on the website developed by the Department of Conservation and Natural Resources: www.iConservePA.org.

Questions: What is the definition of the word "conservation" and what does it entail? What do people look like when they are practicing conservation, stewardship and citizenship? What type of partnerships, tools and skills are needed to conduct conservation projects?

Preparation

- Develop a T chart on a flip chart (p 217).
- Assemble the objects that symbolize various conservation actions.
 - a. Cloth shopping bag
 - b. Faucet aerator
 - c. Bus pass
 - d. Shovel
 - e. Bluebird box
 - f. Borough map or website
 - g. Compact fluorescent bulb
 - h. Recyclable can or bottle
 - i. Voter registration card, paper and pen
- Copy and distribute the Object to Action cards (pp 218-219).

- Provide access to the internet to demonstrate the iConservePA website.
- Copy and distribute the Community Network Worksheet (pp 220).

Procedure

1. We can define the words "community action" in many ways. What are some of the words that we associate with the words "community action" (stewardship, volunteer, service-learning, partnership, citizenship, conservation, voting, writing a letter)? Define the meaning of the word "conservation." Write the words on a flip chart.

When we say each of those words, we have an image that emerges in our minds based on our experiences. To help others develop a common understanding, it is important to define examples of the word. What does "conservation action" look like? It can be a personal commitment to conserve water by turning off a faucet when brushing teeth. It could be a group action such as joining a watershed organization to clean up litter along stream. It can be a monetary donation to a favorite conservancy or creating a land easement that leaves a profound legacy.

In order for people to understand what is truly meant by the word, a helpful exercise is to develop a tool called a "T" chart. We use it for helping small children learn what is expected, for example, when a teacher says "to listen." What does it look like when a person is listening? These actions are discussed and modeled. (They look at the person speaking. They might nod their head. They aren't talking. They pay attention.) This type of discussion helps young children to visualize what it looks like when a teacher says "to listen."

This tool is useful for older participants and adults in defining and modeling the behaviors that are valued. Defining the word is only part of the communication.

Discussing the behavior provides a clearer understanding of the expectation.

Give each group one of the words listed above. Discuss the word and describe a behavior that represents that word. Add other words to the "T" chart and have the group discuss examples.

2. Objects can symbolize community actions. Cut and copy the Object Action Cards. Give a card with a brief explanation to a team of participants.

Have a collection of objects or photos that represent action projects. Assemble objects in the front of the group. Have participants select an object that relates to their card. Explain how that object relates to a conservation action. Discuss conservation actions that are individual actions, household actions, and community actions.

3. iConserve. What is "conservation?" A very exciting place to learn about conservation in action is to visit a DCNR website dedicated to conservation in Pennsylvania—www.iConservePA.org.

You will not just read about conservation, you will meet a host of individuals that practice it every day. They are people like you and me. They are people who have developed a life style of conservation from saving water to developing outdoor ethics in children. Each person is considered a "PA iCon." You too can be a Conservation Icon. You can be listed on the website by registering your commitment to conservation and sending a photo. Conservation can look like many things to many people but the common thread is a commitment to making wise choices in our actions that are positive for the environment and our community. Develop a list of conservation actions from the icons on the website.

Partnerships and resources are very important in developing community initiatives. Using the Community Network Worksheet, define sources of support and information for your community project.

Activity 2:

Conservation Heroes

Summary: Pennsylvania has a history of conservation heroes. From Gifford Pinchot to Dr. Joseph Rothrock to Rachel Carson, Pennsylvanian's have dedicated their lives to protecting natural resources. This activity focuses on current heroes of land protection and conservation highlighted in the publications produced by the Pennsylvania Land Trust Association. By connecting to personal stories, the activity hopes to inspire and motivate others based on the dedication of these land conservation heroes. The activity also includes identifying actions among the participants.

Questions: What stories support the importance of land conservation? What were some of the reasons that people save land? Who is impacted by their actions? Who is practicing conservation in your community?

Preparation

- Copy, cut and distribute copies of Conservation
 Heroes (p 221) from the book *In Their Own Words*by the Pennsylvania Land Trust Association
 (www.conserveland.org).
- Copy and distribute the Trading Cards worksheets (pp 222-223) to pairs of participants.

Procedure

One meaning of conservation is to protect special places.
 Our public parks and forests are special places where
 land management decisions are based on sound conser-

vation practices. What are your favorite natural places?

According to the Pennsylvania Land Trust Association, "conservation is defined as a choice to protect special places for present and future generations. It is a choice to safeguard our water, care for wildlife, preserve productive farmland and forest, and maintain natural beauty. Everyday across Pennsylvania, individuals and families make the conservation choice...Those who conserve their land create a profound legacy. They make a gift that will resonate through time."

A conservation easement is an agreement between a landowner and a private land trust or government. The agreement limits certain uses on all or a portion of a property for conservation purposes while keeping the property in the landowner's ownership and control. The agreement is tailored to the particular property and to the goals of the owner and conservation organization. An easement applies to present and future owners of the land. Most easements are donated by people who wish to protect a beloved place.

- 2. In Their Own Words by The Pennsylvania Land Trust Association is a booklet filled with 15 remarkable stories of conservation and inspiration. Four of the stories are summarized on the worksheet. Assign participants to read the stories. Discuss these questions about the people in the stories.
 - 1. What is common in each of the stories?
 - 2. How do the people in the stories view their land?
 - 3. Why do people save land?
 - 4. Who are the other people or organizations important for land conservation?
 - 5. How do you think their decision impacted the surrounding community?

3. Baseball, football, famous people...trading cards are great ways to honor people who have accomplished something.

Trading cards have been used to highlight sports figures and cartoon heroes. We will use trading cards to recognize conservation heroes. The activity is to make trading cards about real people doing great things. Trading cards could also be used as a research project, having participants develop trading cards about famous people in Pennsylvania history involved in conservation such as Gifford Pinchot, Rachel Carson, Ned Smith, Myra Dock, etc.

Distribute trading card worksheets to the participants. They can work in pairs or individually. You can use the blank cards or use ones that have already been developed. Facilitators could distribute one of each worksheet of trading cards.

If using blank trading cards, develop a set of conservation trading cards by listing a different conservation action on each card. If using the cards that have an action already printed on them, your goal is to find at least one person that has accomplished the task on the trading card. You will meet that person and find out about their contribution to conservation. Write their name on the front of the card. You might want a set number of blank cards which can be used as bonus cards. This can be done in the classroom or in the community. More than one person can be listed on each card. The object of the "game" is to complete all the cards by finding people who have accomplished that activity. Once completed, discuss the results in a large group. Ask questions such as:

- 1. Which activity is the most common? Why?
- 2. Which conservation activity is not common? Why?
- 3. How did the conservation activity improve the environment?
- 4. Which activity has the greatest impact on the environment or community?

4. Another way to conduct the activity is for each participant or team of participants to distribute a set of conservation trading cards. Read each activity on the back of the trading card or develop new cards with different conservation ideas. The object of this activity is to distribute a card to another person in the room until all your cards are gone. Try to find a person who has not received that specific trading card. This time, it is not important to ask if they have accomplished the action on the card. Give the card to that person so that they must complete the task on the card in less than seven days.

Each person who received a trading card must try to complete the conservation activity during the week. They place their name on the card when they have completed the task. They then return the card to the one who gave them the card. The goal is for the original person to get the most cards returned indicating that those people on the trading cards had conducted their conservation activity.

Activity 3:

Action: Stewardship and Service Learning

Summary: Service to the community is very important. Students learn the value of service by imitating adults involved in their community. There are a multitude of projects that can help improve the community. Motivating people to action is a very important part of PA Land Choices. This activity helps define some of the projects and helps organize initiatives in your community.

Questions: What are the advantages of stewardship projects and service-learning? What is the difference between service-learning and volunteering? What are examples of action projects? How does an individual organize a project to be successful and valuable?

Preparation

- Divide participants into groups and discuss group activities.
- Prepare the Community Services Project Worksheet (pp 224) for each group.
- Prepare Stewardship Service and Learning Project Cards (pp 225-228) for distribution one per group.

Procedure

1. Making changes in the world starts in our own homes and communities. In Stephen Covey's book, The 7 Habits of Highly Effective People (New York: Simon and Schuster, 1989), he identifies two different areas of problems and problem solving. There are problems that fall within our "Circle of Influence" or within our "Circle of Concern." Problems that fall within our "Circle of Influence" are those things that we can affect or are able to choose our response. Problems that fall outside our "Circle of Concern" are those that we cannot directly influence but remain a subject of our discontent. The key for community action is to focus on situations that we can influence.

What is Service-Learning? (www.servicelearning.org)
"Service-learning is a teaching and learning strategy that
integrates meaningful community service with instruction and reflection to enrich the learning experience,
teach civic responsibility and strengthen communities."

In the past several years, service-learning has expanded throughout communities, schools and universities. Statistics from 2001 indicate that over 13 million individuals were participating in services to their community that met the criteria for service-learning.

What makes service-learning different from other forms of service is that it must have service objectives plus learning objectives with the intent that the activity change the learner and the receiver of the service. The activity is connected to self-reflection, self-discovery and the acquisition and comprehension of values, skills and knowledge.

For example, if participants collected trash from a streambed, they are providing a service. To be considered a service-learning project, they will analyze what they found, determine the possible sources, develop possible solutions to improve the situation and act upon those recommendations.

Service-learning is not simply a service project (i.e. food drive). It's not an internship, and it's not necessarily voluntary since in most cases, it is an assigned responsibility just as an exam or a traditional assignment is assigned. Service-learning must be connected to learning objectives and there must be scheduled time for pre-reflection.

Pre-flection is an exercise accomplished at the beginning of the project. Participants examine their expectations by writing down what they think they will learn and what they hope to learn.

- 2. Reflection provides a framework for documenting personal growth. There are different techniques for reflection. It can take different forms such as journals, tape recordings, photography, poetry, music and/or dance. Here are some examples of reflection techniques:
 - **Reflection** Reflection involves higher level thinking skills. The following are creative methods that provide a framework for reflection. Participants ask three questions:
 - "What?" (identify topic)
 - "So what?" (importance)
 - "Now what?" (steps you did or will take)
 - **Graffiti** Place posters of different issues on tables and allow for individuals to rotate around different posters and place comments and ideas.

Activity 3

• "Get off the fence and take a stand." Have participants address an issue by standing on a value line or physically indicate the degree of their opinion from "strongly agree to strongly disagree." Participants realize that there are varying degrees of values when addressing issues. They are given opportunities to explain why they place themselves where they are. Participants are encouraged to change their location on the value line as they learn how a rain barrel or rain garden can be used to combat storm water runoff.

Head+Heart+Hands

Head: What did you learn? (i.e. explain what you learned about decline of water quality in a local stream)

Heart: How do you feel?

Hands: Describe what you propose to do. (i.e. plant trees, reduce soil erosion)

• Integral Approach (The dart board). Address the issues from different perspectives such as that of the participant, community, region, etc. Draw a bulls eye and label each circle with these elements. Throw a wad of masking tape at the bulls eye and start the discussion from that point of view.

Service-learning strengthens knowledge about civic responsibility. It must be developmentally and age appropriate. Effective programs provide diverse perspectives and represent all stakeholders. The project must meet genuine needs in the school or community, have clear goals and have positive impacts. It is important that there is a significant "youth voice." Youth should take a lead role in defining their project.

• Think of a Project. Divide participants into groups. Assign one of the following topics to each group. Their task is to come up with as many ideas for projects relating to that topic. Explore websites to gather ideas. Develop an ongoing list for future participants.

- Community Improvement Projects
- Habitat Protection Projects
- Endangered and Threatened Species Projects
- Wildlife Management Projects
- Ecosystem Services Projects
- Trees and Forestry Projects
- Tools for Protecting Land Resources

Once you have decided on a project, complete the Community Project Worksheet or follow the framework developed in Project Citizen. Discuss the importance of an organization framework for a successful project.

We the People is a portfolio-based civic education program for children and adult groups promoting competent and responsible participation in local and state government. The program is a catalyst to involve people in public policy by following a step-by-step plan. Workbooks guide participants through the process.

It outlines the following organized framework for participants to use as a guideline:

- Identify a problem in the community that requires an action or public policy solution.
- Gather and evaluate information on the problem.
- Examine and evaluate alternative solutions.
- Develop an action plan.
- Propose public policy and accomplish the solution.

There are two levels of Project Citizen. Each level includes a process-oriented participant text. Level one is for middle-school participants and level two is for secondary and adults. There is a teacher's guide for each level providing instructions for developing a class portfolio and preparing a simulated public hearing.

Participants develop support for democratic values and principles, tolerance and confidence that they can and do make a difference. It is funded by the US Department of Education by act of Congress. Project Citizen is admin-

istered by the Center for Civic Education and the National Conference of State Legislatures through a network of state and congressional district coordinators throughout the United States.

I know of no movement...as convincing, as
effective, as compassionate as the land trust
movement. It is like water, seeping into the most
unexpected places; rising, falling, rising, falling,
filling the basins of the human heart.

Terry Tempest Williams
(Writer/Naturalist/Conservation Advocate)



Word	Definition	What Does It Look Like?
Conservation Volunteer		A person goes to a state park office and asks if there is an opportunity to trim overgrown branches on a trail because it is a favorite place to ride horses and it is becoming overgrown. The person organizes a work day for horseback riders to trim the trail. They decide to make it a monthly event. They work with state park staff to maintain the trail.
Stewardship		A person notices a vacant lot in their community that is an eyesore to the neighborhood. They decide to do something about it. They get permission to improve the site, form a neighborhood comittee, write a grant and develop a beautiful little park. Now there are green trees and a bench, a natural play area for children and an island of green that is enjoyed by all.

How does this object represent action? Participants select an object or select cards naming an object. The goal is to describe a community action that involves the object. Explain how you would use the object to improve your community or participate in a conservation action.

Cloth Shopping Bag	Water Faucet Aerator	Bus Pass
Shovel	Bird Feeder/Bird House	Town Brochure and Visitors Map
Light Bulb	Packaging, Aluminum Can, Orange Peels	Voter Registration Card and Pen

Reduce paper waste. It takes one 20-year old tree to make paper for 700 grocery bags. Use cloth shopping bags. Stopping junk mail will also save paper. The average junk mail received in a year per person is equivalent to 1.5 trees. In a class of 30 participants, you could save about 45 trees a year. Eliminate unwanted catalogs by using www.catalogchoice.com

Promote water conservation at home, schools and other public places. If every American installed faucet aerators we could save 250 million gallons of water every day. A normal running faucet uses about 3-5 gallons a minute. Save 9 gallons when brushing teeth. Wash cars by hand instead of a full service car wash and save over 100 gallons each time. Take care of streams.

Promote mass transit. Cars are multiplying faster than people. On an average, 140 million cars in America travel almost 4 billion miles a day and use over 200 million gallons of gas emitting about 4 billion pounds of carbon dioxide in one day. If 1 percent of car owners rode a bus for one day a week, we could save 42 million gallons of gas a year and keep 840 million pounds of CO2 out of the atmosphere.

Plant native trees. Read about DCNR's TreeVitalize program. Between 1950 and 2008 the forested surface of earth was reduced by 25 percent Trees provide shade, evaporative cooling and protection. Great for wildlife. Plant riparian zones along streams.

Establish backyard habitats or community gardens for wildlife. Develop a plan for wildlife throughout the community. Maintain bluebird boxes. Plant native species. Provide water in winter. Establish green corridors through your community for wildlife migration.

Develop a brochure for visitors to your community. Develop a green map that indicates places with environmental focus. Questing is the craze. Develop a treasure hunt in your community to help people learn about the best historic places or where to get the best donut. Follow clues and win a prize.

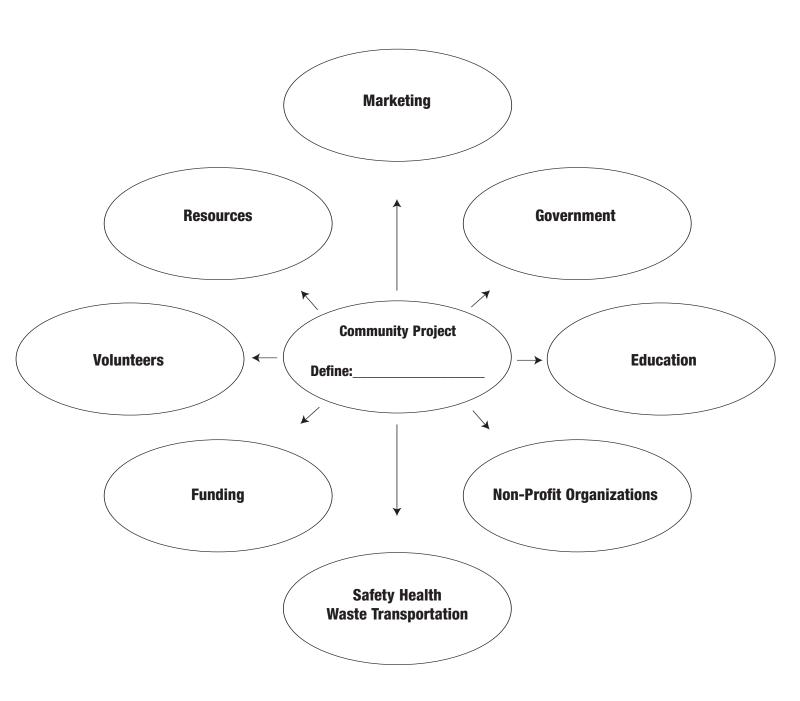
There are over 100 million households in America. If one single compact fluorescent replaced a traditional bulb, the energy of 60 million bulbs would be saved. Substituting a compact fluorescent will keep a halfton of CO2 out of the atmosphere over the life of the bulb.

The average American family produces more than 1,200 pounds of organic garbage a year. 70 percent of American garbage is compostable. Precycle and recycle. Packaging waste accounts for about 1/3 of all garbage Americans send to landfill. Reduce, reuse, recycle. Making aluminum from recycled aluminum uses 90 percent less energy than making aluminum from scratch.

Get out to vote. Write letters to your community leaders about things you want to change. Write letters to legislators. Let your voice be heard.

Write letetrs to the editors to educate the public to be more "green." Start a blog to provide daily/weekly tips on how others can conserve natural resources.

Define Your Project	
Describe Your Audience and Profile	
Describe rour Addresses and Frome	
What is the Goal of the Project?	
What is the Community Network?	



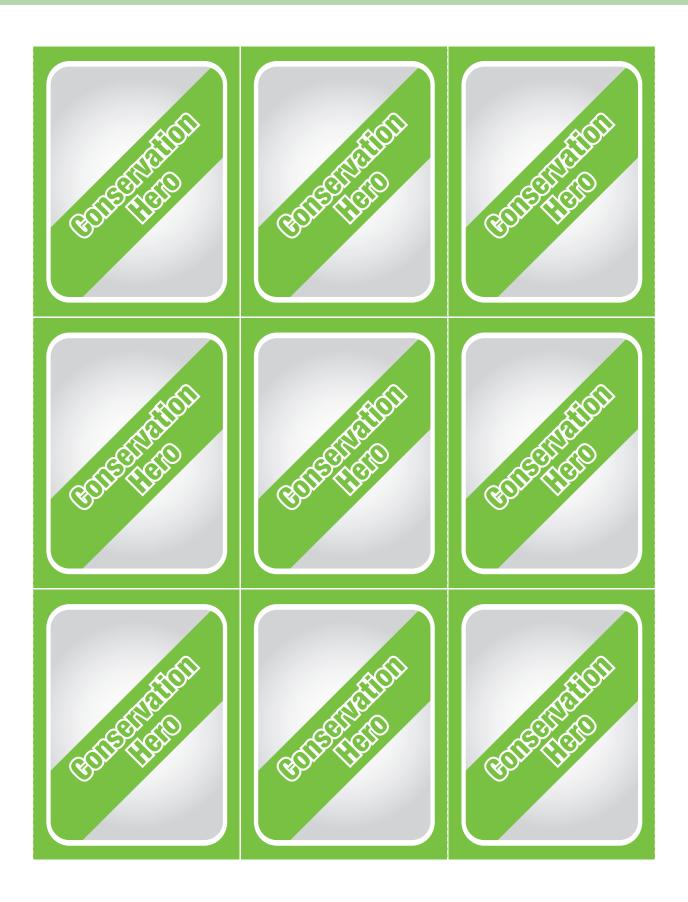
Stories from the heart from people who protected land. The following excerpts from *In Their Own Words: Fifteen Stories of Conservation and Inspiration* published by The Pennsylvania Land Trust Association focus on the value of conservation easements. For more information or to receive your own copy, please visit www.conserveland.org.

Jim Holden In 1973, my young family purchased an old dairy farm. The Holden Farm is an olde-style homestead operation. Participating in this process were three generations of our family, all of whom share the love of the land. The land was part of the spectacular French Creek Watershed. We decided to donate an easement of 122 acres of the farm to the French Creek Valley Conservancy to be used as a match for a grant to purchase an adjacent easement. In the end it was only a disappointing 40 acres. Our easement was the first and still is the only easement in Venango County. My son, John, and I led in the formation of a new conservancy—the Allegheny Conservancy.

Lewis and Wanda Irion This land is as much a part of our family as our children and our animals. We feel honored to have the chance to be its stewards. Our family so strongly believes in preserving open space for future generations that we have gone through the easement process two times in opposite ends of the state. We owned special property on the Chester County border at the top of a reservoir. When we moved, we donated a conservation easement. We chose Natural Lands Trust as the watchdog and developed a plan to allow future owners flexibility. We moved to northern Pennsylvania and placed an easement on our new property with the Northcentral PA Conservancy. That will be our legacy.

Faye and Carl Oberheim The land has given our family many years of enjoyment. All three properties border Penns Creek and surrounding mountains. Developments, homes and trailers were beginning to pop up around us. We learned we could protect a variety of the habitats through easements. We contacted Merrill W. Linn Land and Waterways Conservancy and an appraiser, forester, attorney and accountant with easement experience. We chose to have envelopes on each property to allow for changes like a pool or improvements. We have completed two out of three easements so far. It took about a year. We were very fortunate and privileged to work with so many helpful and knowledgeable people.

Beverly Grening Our son, Gregory, was born in Lewistown. He had a tree house in the woods. At about age 3 he wrote a note to a neighbor, who owned the woods, and said "John, Please don't sell the woods." Greg grew up and joined the Marines, fought in the first Gulf War in Iraq, returned home and proposed to his high-school sweetheart. Soon after, Greg died in a car accident. We decided to buy the woods Greg had so loved. We contacted the Central Pennsylvania Conservancy. On a beautiful sunny day in June 1996, we dedicated the Gregory Alan Grening Forest Preserve. Thanks to the help of many people, a young boy turned young man, who will never grow old, has his wish that no one will 'ruin his woods.'



Conservation Action

Walk to School

Encourage physical activity among children. Identify and map safe biking and walking routes to schools and other places. Adults also benefit as they accompany the children. Walk to work. If distance allows... walk. Find opportunities to leave the car and walk. Ask others to walk with you. Take a bus or train.

Conservation Action

Create a Green Space

Create a greenway. Save an area at a municipal or state park or by a stream. Develop plans to plant trees or a butterfly garden. Check with Master Gardeners for help. Plant native plants. Develop maintenance plans for watering, fertilizing. Organize volunteers and a volunteer schedule. Check the garden at Kings Gap Environmental Ed. Center

Conservation Action

Happy Trails to You

Do you walk on a trail? Do you canoe on a water trail? Take an interest in helping to maintain the trail. Pick up litter. Help trim branches and manage erosion. Construct signs. Develop a map at the trailhead. Connect trails to towns and other resources. Join an Appalachian Trail Club or check on the web for rails-to-trails initiatives.

Conservation Action

Save a Stream

Check the water quality of a local stream. Map the stream and locate all the factors that could impact the stream. Determine causes of pollution. Develop action plans to improve the stream.

Plant along the stream. Stabilize bank erosion. Protect lands along the stream. Protect headwaters. Conservation Action

For the Birds

Protect quality habitat for nesting species of birds and food sources for migrating species of birds.

Monitor birds. Set up nesting boxes for birds like Bluebirds, Kestrels, Barn Owls. Set up winter feeders. Join Cornell's Feeder Watch. Join a birding group. Contact a state park for programs. Conservation Action

Precycle, Recycle, Compost

Find ways to reduce waste right from the start. Use cloth bags. Use glass to refill water bottles. Try to refill instead of buying new. Reuse appliances and other goods.

Develop recycling programs and see that it is promoted and "enforced." Compost organics and enrich garden soil.

Conservation Action

Map your Community

Make a green map of your community and label all the green places and all the hazards. Develop a quest to encourage visitors to find out more about your community. Create or join an Environmental Advisory Council.

Conservation Action

Plant a Tree

Any day is a good day for trees. Arbor Day (last Friday in April) is a good time to plan your project and realize how important trees are. Do a tree assessment of the health of each tree in your community. Encourage tree ordinances. Check with an urban forester.

Conservation Action

Water Runoff, Water Conservation

Find ways to curtail storm water management, reducing the force of runoff from paved surfaces and roof tops. Encourage developers to use pervious surfaces. Plant wetland plants in drainage areas. Plant trees in islands at parking lots.

Name	Date				
Project					
1. Does the project meet the following criteria?					
Do you have time to do this project well?	☐ Yes	☐ No	☐ Maybe		
Is the project local and within reach?	☐ Yes	□ No□ No□ No	☐ Maybe ☐ Maybe ☐ Maybe		
Will this project make a difference?	☐ Yes				
Does this project provide learning opportunities?	☐ Yes				
Are you committed to this project?	Yes	☐ No	☐ Maybe		
2. Define project goals.					
3. Define group member roles and actions.					
4. How will this project help your community?					
5. Who will be impacted by your project?					
6. What do you expect to learn?					
7. What is the time frame? Provide specific dates.					
8. What resources will you need? How will you fund	the projec	ct?			
9. Who are the people and organizations that will be	contacted	?			
10. What are the safety concerns? How will you prac	tice safety	þ			
11. What are the rewards for meeting your goal?					

Examples of Stewardship & Service Learning Projects

- Become a DCNR Volunteer by contacting your local state park or state park forest office. (www.dcnr.state.pa.us)
- Check out iConserve PA, a DCNR initiative at <u>www.iConservePA.org</u>. Get great ideas about conservation and how you can get involved in local projects.
- Check out the Earth Force: Student action initiatives at www.earthforce.org.
- Visit <u>www.penncord.org</u> for ideas on how to become involved in your community.

Habitat Protection

- Adopt a stream. Learn how to collect chemical and biological data on a local stream. Determine what you can do to improve the quality of the stream. Participate in volunteer stream monitoring as sponsored by PA Department of Environmental Protection or participate in the Bureau of State Parks Watershed Education program.
- Become a "weed warrior"—help with removal of invasive species and replant with native species.
- Build a butterfly garden at a local park or at your home remembering to plant shrubs and flowers not only for the adult but also those foods preferred by the caterpillars.
- Certify your backyard as a National Wildlife Federation Backyard Habitat. (www.nwf.org/backyard)
- Campaign for protection of a local wetland or ecologically sensitive area. Form a club to save a habitat. "Save the Swamp" is a participant organization from Central Dauphin High School that is involved in protecting a wetland on their school grounds.
- Make and sell bird boxes with proceeds going to an environmental organization.
- Organize and participate in a clean up project: The Great PA Clean Up; Adopt a Highway or sign your school up to be a Litter Free Zone (www.greatpacleanup.org/litterfreeschoolzones.asp).
- Paint a mural depicting local flora and fauna.
- Participate in Participant (PARC) Partners in Amphibian and Reptile Conservation (www.parcplace.org/sparc.html).
- Research and submit to the PA Online Herpetological Atlas at the Indiana University of Pennsylvania (www.webspace.ship.edu/tjmare/herp.htm).
- Participate in the 2nd PA Breeding Bird Atlas (www.carnegiemnh.org/atlas/home.htm).

Endangered/Threatened Species

- Participate in Endangered Species Day May 18th activities. The goal of Endangered Species day is to protect our rare, threatened, and endangered animal and plant species (www.stopextinction.org/endangeredspeciesday).
- The Endangered Species Act is a federal law and is the safety net for wildlife, plants and fish that are on the brink of extinction. Upon signing the Endangered Species act on December 28, 1973, President Richard Nixon stated "Nothing is more priceless and more worthy of preservation than the rich array of animal life with which our country has been blessed." The act is based on three key elements. Listing species as threatened or endangered; designating habitat essential for their survival and recovery; restoring healthy populations of the species.
- Set up a display of locally known endangered/threatened species at the mall or other public arena to bring attention to the importance of protecting habitat.
- Organize a party to celebrate the bald eagle's removal from the endangered species list. This shows how the endangered species act has benefited one of our country's most recognized and well known species.
- Adopt an endangered species native to your area. Find out how you can help conserve it, and inform the citizens in your community about your adopted plant or animal with newspaper articles, brochures, buttons, signs, and videos.
- Write letters to your local senators or local newspaper.
- Write and present a play about threatened habitats.

Deer Management/Wildlife Management

- Erect a deer fence and monitor the difference in vegetation inside and outside.
- Participate in a browse study to determine if there is an overabundance of deer in that area affecting native vegetation. Contact a PA Game Commission Biologist for more information.
- Remove invasive trees and shrubs that deter native foraging plants needed by deer.
- Research, construct and install turtle platforms in a local pond.
- Research, construct trail tunnels for amphibians and small mammals.
- Research and establish water sources for wildlife in winter.
- Learn more from the PA Game Commission regarding habitat projects and nesting boxes for such wildlife as turkey, wood duck, barn owl, bats, etc (www.pgc.state.pa.us).

Ecosystem Services

- Adopt and maintain a local hiking trail.
- Stencil storm drains to bring attention to runoff.
- Erect a small windmill or solar panel to demonstrate alternative energy.
- Build and erect a rain barrel and/or rain garden to combat storm water runoff.
- Plant and maintain a community garden.
- Help publicize local farm produce. Buy from local farmers markets (www.buylocalpa.org).
- Organize and lead a green energy tour of local sites that demonstrate green practices.
- Plant a riparian buffer along a streamside.
- Plant trees to hold soil and reduce runoff.
- Sign your school up to be a litter free zone (www.greatpacleanup.org/litterfreeschoolzones.asp).
- Establish a composting site in your community.
- Sponsor programs that provide composting barrels to interested homeowners.
- Establish rain barrels at a local nature center. Teach others about water conservation and the application of rain barrels.

Trees/Forestry

- Organize and plant trees in your neighborhood.
- Participate in Arbor Day activities—always the last Friday in April!
- Plant trees in celebration of something or in memory of someone (<u>www.arborday.org/join/tictim/index.cfm</u>).
- Develop an inventory of the species and trees in your community. Include descriptions.
- Establish a Shade Tree Commission.
- Research and remove invasive plants, and plant native species.
- Research Tree Vitalize and learn how to establish it in your community.

Tools for Protecting Land Resources

- Participate in a community clean up (<u>www.pacleanways.org</u>).
- Organize a community household hazardous waste clean up.
- Recycle in your community.
- Attend township meetings and write letters to township officials about land use issues affecting your community.
- Help institute a community Christmas Tree Recycling program in your township.

Community Improvement Projects

- Develop a Quest: a treasure hunt that leads participants through the community using a set of clues with rewards. Resource: *Questing, A Guide to Creating Community Treasure Hunts by Delia Clark and Steven Glazer.* A guide to creating treasure hunts that teach and share the special places in your community.
- Develop Green Maps of your community. Design maps for specific purposes such as a map to all the gardens in your community, a walking map, a map of historic sites.
- Plant flowers at an intersection or beautify a vacant lot.
- Research, plan and produce a trail brochure for a favorite nature trail.
- Organize a way to beautify buildings. Paint a mural on a building as they did in the city of Reading, Pennsylvania depicting the migration of birds from South America and the faces of children that have migrated to Pennsylvania, sharing common ground.
- Survey trees in your neighborhood and develop a database which includes measurement of size, health, condition, etc.
- Plant trees in a parking lot. Develop a plan for maintenance.
- Stencil street drains with the destination of storm water (www.cbf.org).
- Organize a "Walk to School" Program.
- Promote healthy recreational activities (<u>www.keystonehealthyzone.org</u>).
- Adopt a highway, pick up litter and plant wildflowers.
- Collect and fix donated bicycles to give to younger children.