



Berks County Conservation District

INSIDE BERKS BUSINESS, 2016

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TULPEHOCKEN AREA SCHOOL DISTRICT





The inside Berks business Program (iBb)

- Purpose: allow educators to obtain information that will better prepare their students for the local workforce
 - Occupations
 - Job skills
 - Abilities / aptitudes
- Additional benefit: educators discover ways to connect curriculum to relevant issues within Berks community
- Requirements:
 - 4 day job shadow
 - 1 day attendance and participation in seminar
 - Communication of experience and its curriculum integration via presentation and written abstract

PA Academic Standards for “Career Education and Work” Tied to Berks Conservation District Internship

Standard: Career Awareness and Preparation

High-interest connections for Tulpehocken students to Conservation District jobs (FFA, 4H, hunting, fishing, farming, rural awareness, Ag courses)

- (A, B) Relating career options to individual interests, abilities and aptitudes
- (F) Explore, Investigate, Analyze, Connect career choices, the relationship of school subjects, extracurricular activities and community experiences to career preparations

Standard: Career Retention and Advancement

Strong ties to 4Cs of our STEM Education Initiatives: Critical Thinking, Creativity, Communication, and Collaboration

- (A) Personal attitudes and work habits that support career retention and advancement
- (C) Effective group interaction strategies
- (G) Formal and informal lifelong learning (habits) opportunities and how it impacts career retention and advancement

Environment and Ecology PA Academic Standards Tied to the work done within the Berks County Conservation District:

Agriculture and Society

- Grade 7 (A) Describe how Agricultural practices, the environment, and the availability of natural resources are related.

Natural Resources

- Grade 2(A) Describe the jobs people have in the community that relate to natural resources
- Grade 3 (B) Identify local natural resources

Humans and the Environment

- Grade 8 (4.5.8A) Explain how BMP (Best Management Practices) can be used to mitigate environmental problems ties to the role of the Conservation District's Urban team permit responsibilities regarding storm water management for both pre and post construction
- Grade 7 (4.5.7B) Describe the impact of pests on different geographic locations and techniques used to manage- research integrated pest management practices ties to West Nile/ Zika Virus Mosquito monitoring technician's job



My experience: Berks County Conservation District

- Shadow experiences: Protecting our soil and our water
 - Urban Team: permit-related visits to sites > 1 acre where ground will be disturbed
 - West Nile and Zika Virus Technician: monitoring traps, data collection & entry
 - Watershed Specialist: projects to protect Berks' waterways and regional watersheds
 - Ag Team: Permits and DCNR projects monitoring, partnerships with local growers
- Observation of Board of Directors Meeting

What Technology is Used by Berks Conservation District?

- GPS Mosquito Sprayer
- Mapping software ArcMaps and EmapPA: these are databases that are often referenced for permitting, policy, and planning efforts
- Still very paper-driven: hard copies of maps, permits, and other pertinent documents are physically completed and exchanged between relevant parties
- Their office **is influenced** by technological advances to assist builders and growers protect soil and water- with greater feasibility of use, the greater the expectations of policy/permit requirements (domain of Conservation District)

What is the Level of Education Needed to Work at the Berks County Conservation District?

- Education
 - Bachelor or Associate Degree
 - Environmental science or related discipline
 - Typical: recent graduate with internship work experiences
 - Not necessary, but potentially advantageous: specialized certifications
- Relevant academic courses:
 - Biology
 - Soil Labs
 - Environmental Issues
 - Cartography
 - CAD (computer aided drafting)
 - GIS (geographical information system)
 - Technical Writing

Skills for Success at the Berks Conservation District:

- High Learning Agility:
 - Willing to learn on the job
 - Learn by doing, sometimes working through mistakes
 - Self-starter: seeks out and pursues acquisition of job relevant expertise
- Other Personal Traits:
 - Can work through disappointments
 - Enjoys the outdoors!
 - Organized
 - Can work with little supervision
 - Keen on building and cultivating relationships
- Excellent communication skills: speaking and writing
 - Ability and desire to educate a diverse audience (age, occupation, culture)
 - Speak with authority and persuasion to public
 - Translate technical jargon to laymen terms
 - Write technical and persuasive pieces such as grants, permits, news publications
- Multi-generational interpersonal skills
 - Demonstrates respect and empathy for generations not their own
 - Can successfully communicate across generations
 - Collaborate within groups composed of multiple generations

New Hire / Entry Level positions offer...

- Annual Salary
 - \$33,000
 - Incentives may be offered for certain certificate holders
 - Typical: 3% annual increase
 - Opportunity for \$1,000 annual bonus
 - Opportunity for higher pay if you become a “team leader”
- Some seasonal hires, but generally try to make it annual by “adding onto” job roles
- Benefits
 - Dental, Health, Death Insurances
 - 2 weeks vacation to start, 3 after 5 years
 - Flex schedule
 - Time and Financial support for certifications
 - Strong growth projected for the office

Berks County Conservation District:

Greatest Asset: Passionate Employees

- Passionate about informing the public on the importance of water and soil conservation
- Passionate about protecting and preserving our water and soil
- Internally motivated to do their jobs

Greatest Challenge: Funding

- Receive most of their funding from state-related grants (DEP)
- Receive some federal monies and some private donor dollars
- Varying portions of all job roles require grant writing/ input

Greatest Challenge: Maintain and Improve Funding

Addressing through public outreach and education efforts!

- ✓ Changing of public policies to protect soil and water could lead to greater government-related funding
- ✓ Inspire more private donations
- ✓ Increase interest in fundraisers

IMPORTANT NOTE: Advances in technology- making it more economically feasible to implement equipment or practice- will assist the Conservation District in their mission to protect our soil and water resources.

Summary of Project 1 Abstract

- 8th Grade 90-Day Agriculture Introductory Course and FFA Career Activities will be introduced to jobs within Berks County Conservation District and show how each ties to a topic / course within our Agricultural Sciences Program
- Ties to PA Career Education and Work Standards
 - Career Awareness and Preparation A, B, F
 - Career Retention and Advancement A, C, G
- Also ties to Environment and Ecology,
 - Watersheds and Wetlands (4.2)
 - Address Grade 8, “Describe factors that affect the quality of ground and surface waters”
 - Address Grade 6, “Identify natural and human-made factors that affect water quality”
 - Agriculture and Society
 - Address Grade 7, “Describe how agricultural practices, the environment, and the availability of natural resources are related

Summary of Project 2 Abstract

- 2nd Graders will learn about the natural resources of soil and water during their “plants and planting” unit. They will be introduced to jobs within Berks County Conservation District whose job it is to protect these resources by working with local farmers.
- Ties to PA Career Education and Work Standards
 - Career Awareness and Preparation (D) Gr 3 “Identify range of jobs available in (farming) community
 - Career Retention and Advancement (A) Gr 3 “Identify attitudes (passion to protect soil and water) that contribute to success”
- Also ties to Environment and Ecology, Natural Resources
 - (A) Gr 2 “Describe the jobs people have in the community that relate to natural resources”
 - (A) Gr 3 “Identify the natural resources used to make various products”
 - (B) Gr 3 “Identify local natural resources” (ID and visit closest stream to school building)