



STEWART CAMERON BRUCE

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PROFESSIONAL PROFILE

Extensive work experience with local government GIS and IT related issues from a county and university perspective. Established GIS and IT Departments from scratch at Mifflin County, Pennsylvania, creating a regional partnership that include townships, boroughs, municipal authorities, and local police departments. Developed and wrote training manuals into the use of ArcView GIS software and conducted numerous classes. Broad experience writing GIS needs assessments for local government organizations at the county and local level.

EMPLOYMENT EXPERIENCE

Washington College, Chestertown, MD GIS Program Coordinator, Center for Environment and Society	2007 - present
Pennsylvania State, College Park, PA Senior Extension Associate, Penn State Cooperative Extension Geospatial Technology Program	2001 - 2007
York College, York, PA. Adjunct GIS Faculty	2004 - 2007
Mifflin County Government, Lewistown, PA. Director of GIS and Information Technology	1996 - 2001
Centre County Planning Department, Bellefonte, PA.	1995 - 1996
Pennsylvania Historical and Museum Commission, Bureau for Historic Preservation, Johnston, PA.	1995
National Geographic Society, Washington, D.C.	1994

EDUCATION

Enrolled in the Agricultural & Extension Education Doctoral Program, Pennsylvania State University, University Park, PA.
M.S., Geography, Pennsylvania State University, University Park, PA. G.P.A.
B.A., Geography, California State University, Long Beach, CA.

DESCRIPTIVE EMPLOYMENT HISTORY

Washington College GIS Program Coordinator, Center for Environment and Society Chestertown, Maryland

Teach Introduction and Intermediate GIS courses, supervise student interns on various GIS projects, work with faculty and staff on research and infrastructure projects involving GIS, and work with local municipal organizations on various GIS projects.

Pennsylvania State Senior Extension Associate, Penn State Cooperative Extension Geospatial Technology Program University Park, Pennsylvania

Provided GIS outreach and extension services to local organizations. Conducted community training in the applications of ArcView GIS software including teaching how to geocode crime events. Co-principal investigator on over five specific research projects totaling over \$370,000 of external funding. Created custom training materials for geospatial technology training as well as completing GIS needs assessments for local governments as requested. Organized three GIS for Local Government conferences. Also Project leader for Chesapeake Bay Program land use/land cover project.

York College Adjunct Faculty York, PA.

Teach evening Introduction to Geographic Information Systems. Focus of the GIS class is on community projects with local organizations including police department at the City of Lancaster.

Mifflin County Mapping/MIS Department Director of Information Technology Lewistown, PA.

Established and created a Geographic Information System (GIS) for 9-1-1, Planning, and Assessment. Created a regional partnership amongst 16 municipalities including local law enforcement agencies.

Centre County Planning Department, Bellefonte, PA.

Land use planning, fieldwork verifying land use status, aerial photo interpretation, produced land use maps.

Pennsylvania Historical and Museum Commission Bureau for Historic Preservation Johnston, PA.

Historic research, fieldwork to identify historic structures, interviewed local citizens, report preparation for nomination to the National Historic Register.

**National Geographic Society,
Washington, D.C.**

Geographic research for page maps in National Geographic Magazine, prepared draft maps.

PROFESSIONAL HONORS

1999 Governor's Award for Local Government Excellence in the category of innovative community/government initiatives

2001 FEMA Region III Outstanding Community Award

PUBLICATIONS

Class, Space, and Ethnicity in a Railroad Town: The Making of Renovo, Pennsylvania.
Master's Thesis, Pennsylvania State University, 1997.

A research project to analyze the spatial distribution of various demographic and land use variables over a historic period. Extensive database developed from manuscript census along with historic land use maps thematically displayed using the GIS software Arcview.

The Historical Geography of San Clemente Island, 1542-1937.
Honor's Thesis, California State University, Long Beach, CA. 1994.

Research report prepared as part of a U.S. Navy funded project to determine the significance of historic sites. Atlas GIS was used to compile thematic data.

GIS NEEDS ASSESSMENT REPORTS

Clearfield County Board of Commissioners, Pennsylvania, 2001
Blair County Board of Commissioners, Pennsylvania, 2002
Carbon County Board of Commissioners, Pennsylvania, 2002
Potter County Board of Commissioners, Pennsylvania, 2002
Westmoreland County Board of Commissioners, Pennsylvania, 2002
Wyoming County Board of Commissioners, Pennsylvania, 2002
Fulton County Board of Commissioners, Pennsylvania, 2003
Laguna Pueblo Tribal Government, New Mexico, 2003
Southwest Pennsylvania Commission, Pennsylvania, 2003
Northwest Commission, Pennsylvania, 2003
Bucks County Board of Commissioners, Pennsylvania, 2004
York County Board of Commissioners, Pennsylvania, 2005
Crawford County Board of Commissioners, Pennsylvania, 2006
City of Oil City, Pennsylvania, 2006
Borough of Grove City, Pennsylvania, 2006

TECHNICAL TRAINING MANUALS

Introduction to ArcView, versions 3.3, 8.0, 8.3, 9.0, 9.1, and 9.2
Intermediate ArcView, versions 3.3, 8.0, 8.3, 9.0, 9.1, and 9.2

ENVI Remote Sensing, co-authored a five day workshop training manual
Customized training manuals for the Pennsylvania FFA Farm Mapping Program

PRESENTATIONS

New Approaches for Learning ArcView 9.2, Pennsylvania State GIS Conference, Camp Hill, PA 2007.

Georeferencing in ArcView Desktop 9.2, Pennsylvania State GIS Conference, Camp Hill, PA 2007.

Personal Geodatabases in ArcView Desktop 9.2, Pennsylvania State GIS Conference, Camp Hill, PA 2007.

Hands-on GIS for Township Officials, Pennsylvania State Association of Township Supervisors, Hershey, PA 2007

Geographic Information Systems for Roadmasters, Mid-Atlantic Roadway Management Conference, Charlottesville, VA 2007

Plenary Introduction: Penn State On-Lot Septic Failure Research Project, Pennsylvania SEO Conference, Grantville, PA 2007

GIS for FFA Farm Mapping, FFA Conference I, Harrisburg, PA 2007

GIS for FFA Farm Mapping, FFA Conference II, Harrisburg, PA 2007

GIS for Municipal Officials, Clarion University GIS Conference, Clarion, PA 2006

Using GIS to Map Retail Store Locations, WISE Conference, State College, PA 2006

Labeling and Annotation in ArcView 9.2, Southwestern Pennsylvania GIS Conference, Pittsburgh, PA 2006

GIS for County Animal Response Teams (CART), Columbia/Montour CART Meeting, Bloomfield, PA 2006

GIS for Tribal Leaders, SIPI Summer Institute, Albuquerque, NM 2006

Grant Writing for Small Water and Sewer Systems, Pennsylvania Rural Water Association Annual Conference, State College, PA 2006

Grant Writing for Geospatial Technology Applications, Pennsylvania State GIS Conference, Harrisburg, PA 2006

Hands-on GIS for Township Officials, Pennsylvania State Association of Township Supervisors, Hershey, PA 2006

Geospatial Technology Applications: Basics, Cooperative Extension In-Service Training Conference, State College, PA 2006

Geospatial Technology Applications: Opportunities with Local Governments and Communities, Cooperative Extension In-Service Training Conference, State College, PA 2006

Labeling and Annotation in ArcView 9, GIS for Local Government Conference, State College, PA, 2005

Digitizing in ArcView 9, GIS for Local Government Conference, State College, PA, 2005

Comparison of Locally Generated Land Use Data with Satellite Derived Land Cover Data, Richmond Area GIS Users Group, Richmond, VA 2005

Grant Writing 101, Central Pennsylvania Dietician Association Conference, 2005

Show me the Money: Grants for GIS, GIS for Local Government Conference, State College, PA, 2004

Municipal GIS on a Budget, Pennsylvania GIS Conference, Hershey, PA, 2002

Funding your Local Government GIS by Creating Regional Partnerships, Pennsylvania GIS Conference, Hershey, PA, 2000.

The Isolation of San Clemente Island from Mainland California. Association of American Geographers Annual Conference, Chicago, IL, 1995

The Distribution of Brosimum alicastrum in Relation to Mayan Archaeological Sites in Yucatan, Mexico. CSULB Student Research Conference, Long Beach, CA, 1994

Utilizing Geographic Information Systems and Remote Sensing as an aid in the Discovery of Lost Mayan sites in the Quintana Roo Province of Mexico. CSU Social Sciences Conference, CA, Best Undergraduate paper, 1993

WORKSHOP PRESENTATIONS (2006 and 2007 listed)

2007

Introduction to ArcView, Chestertown, MD, 10/10 – 10/11,
FFA Farm Mapping Pilot Training, Elizabethville, PA, 3/29 – 3/31
Introduction to ArcView, State College, PA, 4/19-4/20
Introduction to ArcView, Harrisburg, PA, 5/14 -5/15
Introduction to ArcView, Franklin, PA, 6/7 – 6/8

2006

Introduction to ArcView, Ridgeway, PA, 5/8 – 5/10
Introduction to ArcView, Altoona, PA, 5/24 – 5/25
Introduction to ArcView, Oil City, PA, 5/31 – 6/1
Intermediate ArcView, Altoona, PA, 6/7 – 6/8
Intermediate ArcView, Ridgeway, PA, 6/14 – 6/15
Introduction to ArcView, Harrisburg, PA, 6/21 – 6/22
Introduction to ArcView, State College, PA, 8/15 – 8/16
Intermediate ArcView, State College, PA, 8/17 – 8/18
Introduction to ArcView, Harrisburg, PA, 8/29 – 8/30
Introduction to ArcView, Bath, NY, 9/18 – 9/19
Introduction to ArcView, Scranton, PA, 9/27 – 9/28
Introduction to ArcView, Oil City, PA, 10/9 – 10/10

Intermediate ArcView, Scranton, PA, 10/12 – 10/13
Introduction to ArcView, Pittsburgh, PA, 10/16 – 10/17
Intermediate ArcView, Oil City, PA, 10/23 – 10/24
Intermediate ArcView, Pittsburgh, PA, 10/30 – 10/31
Introduction to ArcView, Harrisburg, PA, 12/6 – 12/7

GRANTS

Governors Office of Crime Control and Prevention

Project involves studying the regionalization of Crime Mapping on the Upper Eastern Shore of Maryland with a grant award of \$96,000.

FCC Rural Health Care Pilot Program

This 3.3 million dollar grant will fund telecommunication infrastructure for four hospitals, several rural health care clinics, and dozens of school based health care clinics in Mifflin, Juniata, Huntingdon, and Fulton Counties in Pennsylvania.

Environmental Systems Research Institute (ESRI)

Local Government Start-up Grant Program worth nearly \$100,000 in GIS software, data and training in 1999

County Commissioners Association of Pennsylvania (CCAP)

Social Net (SNET) grant for \$567,000 to create an Internet based system to share client data amongst over 20 human service organizations in Mifflin and Juniata County, 2000.

Pennsylvania Department of Community and Economic Development (DCED)

Shared Municipal Services grant, \$10,000 in Fiscal in 1997
Shared Municipal Services grant, \$20,000 in Fiscal in 1998
Shared Municipal Services grant, \$37,500 in Fiscal in 1999
Land Use Planning and Technical Assistance Program for a Land Use Information Center (LUIC) for \$177,000 in 2001
Community Revitalization Program, \$20,000 for a digital x-ray system for the Mifflin-Juniata Free Dental Clinic, 2004
Community Revitalization Program, \$8,000 for upgrades to Lewistown Hospital web site, 2006
Community Revitalization Program, \$10,000 for inpatient diabetes program at Mount Nittany Medical Center

Pennsylvania Commission on Crime and Delinquency

JNET and Crime Mapping, \$165,000 in 1999

Pennsylvania Department of Environmental Protection (DEP)

Kish Creek Watershed Grant, \$26,000 for GIS development in 1998/1999

Pennsylvania Department of Transportation (Penn DOT)

Municipal Services, \$8,000 in 1997/1998
Liquid Fuels Road/Bridge/Culvert Management System (now known as Transportation Network or TNET) for \$100,000 for 1999-2001

Pennsylvania Department of Agriculture (PDA)

Land Preservation Grant for \$10,000 in 1999
Land Preservation Grant for \$10,000 in 2000

Pennsylvania Technology Infrastructure Authority (PTIA)

Mifflin County Municipal Area Network grant for \$257,000 to lay fiber optics and place wireless connections in 2000.

United States Geologic Survey (USGS)

Don't "Duck" Metadata grant, \$6,100 in 2000

Federal Geographic Data Committee (FGDC)

Web Mapping linked to NSDI node – Open Use Server (OPUS) for \$20,000 in 2001

Federal Emergency Management Agency (FEMA)

Cooperating Technical Community (CTC) grant to correct Mifflin County floodplains for \$37,830 in 2001/2002

Verizon

Lumina Center, Community Technical Center, \$15,000 in 1999

USDA – Distance Learning and Telemedicine

Lewistown Hospital, Electronic Medical Records, \$500,000 in 2004
Lewistown Hospital, Home Health Care Electronic Monitoring, \$400,000 in 2005
Lewistown Hospital, Teleradiology and Telecardiology Picture Archiving and Communication System (PACS), \$500,000 in 2006
Lewistown Hospital, HER for Family Health Associates, \$108,000 grant in 2007

Pennsylvania Department of Health

Lewistown Hospital, Primary Care Community Challenge Grant, \$150,000 to establish a mobile free health care clinic in Mifflin/Juniata County, 2006

Center for Rural Pennsylvania

Research project to study reasons for failing on lot septic systems, \$50,000 in 2006