

# 2004

## DACUM Panel

Dawn Browne, GIS Manager  
Ducks Unlimited, Inc.,  
National Headquarters, Memphis, TN

Brad Denton, USDA, Natural Resources  
Conservation Services, Jackson, TN

Mike Hansbrough, USDA, Natural Re-  
sources Conservation Services, Jackson, TN

Wray Pulliam, USDA, Natural Resources  
Conservation Services, Alamo, TN

David Rizzuto, Fisheries Biologist, Tennes-  
see Wildlife Resources Agriculture, Jackson,  
TN

Shaun Williamson, Wildlife Biologist  
Jackson, Mississippi

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## Jackson State Community College

Dr. James L. Grove, Jr., Professor of Biology

Mitch Pigue, Natural Resources Manage-  
ment Assistant

Stacy Hollowell, Lab Assistant/Secretary

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## Facilitator

Deb Klopp, Curriculum Specialist,  
AgrowKnowledge

# DACUM

## Natural Resources Technician

### August 3-4, 2004



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**Conducted by:**



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# DACUM: Natural Resources Technician

## DUTIES

## TASKS



Perform biological surveys <b>A</b>	<b>A1</b> Follow field sampling standards and equipment preparations	<b>A2</b> Conduct aquatic resources collection	<b>A3</b> Conduct terrestrial resources collection	<b>A4</b> Identify flora and fauna	<b>A5</b> Record and input field data
	<b>A6</b> Analyze data, including trends analysis and statistics	<b>A7</b> Report results, by summarizing and mapping data	<b>A8</b> Identify soil, water, and landscape characteristics	<b>A9</b> Acquire and catalog digital photos	
Manage data <b>B</b>	<b>B1</b> Define data standards and format (jpg, shape files, etc.)	<b>B2</b> Organize and manage data and files	<b>B3</b> Manipulate data (download, upload, sort, and rank, etc.)	<b>B4</b> Archive data through back-up and database management	<b>B5</b> Develop meta-data
	<b>B6</b> Report data through interpretation and creation of visualizations (i.e. graphs, charts, hot and hyper-linking, ppt, etc.)	<b>B7</b> Interpret and generate of cartographic products	<b>B8</b> Back-up and recover data		
Plan and manage conservation <b>C</b>	<b>C1</b> Understand state and federal programs and policies with ability to present alternative scenarios within accepted standards	<b>C2</b> Assess natural resources and identify habitat types and needs	<b>C3</b> Assist in natural resources management plan development	<b>C4</b> Recommend and implement conservation practices (natural resources and agronomy)	<b>C5</b> Prioritize workload based on job responsibilities
	<b>C6</b> Monitor and document management prescriptions (responsive to and consistent with federal and state requirements)				

# DACUM: Natural Resources Technician

## DUTIES

## TASKS

Operate and maintain equipment	<b>D1</b> Operate vehicles and perform general maintenance and repair (boats, ATV, backhoe, tractors, and trailers)	<b>D2</b> Understand the basic operation and safety issues of engineering concepts and principles	<b>D3</b> Calibrate and operate GPS with the ability to create data dictionaries	<b>D4</b> Operate digital camera, ArcPad, laptop, and other appropriate field technology and equipment	<b>D5</b> Configure, install, and troubleshoot hardware and software
	<b>D-6</b> Perform upgrades to hardware and software applications				
Maintain and enhance customer relationships and communications	<b>E1</b> Respond to customer needs (adjacent landowner, private citizens, industries and organizations)	<b>E2</b> Maintain effective interpersonal relationships	<b>E3</b> Maintain and enhance relationships between disciplines and other agencies	<b>E4</b> Interpret customer needs and address concerns	<b>E5</b> Attend and participate in local and regional meetings
	<b>E6</b> Represent and promote the organization				
Perform administrative tasks	<b>F1</b> Write clearly and effectively	<b>F2</b> Supervise and/ or provide peer training to other technicians, interns, and or laborers	<b>F3</b> Participate in training; obtain and then maintain appropriate certifications	<b>F4</b> Participate in staff meetings	<b>F5</b> Learn about the grants and the grant writing process
	<b>F6</b> Monitor compliance of contractors to accepted standards	<b>F7</b> Organize and maintain work facility and workspace	<b>F8</b> Order materials and supplies		

# DACUM: Natural Resources Technician

## Tools, Equipment, Supplies, and Materials

### Hardware

Plotters  
Scanners  
GPS Equipment

### Software

Microsoft Office (Word, Excel, PowerPoint, and Access)  
Imagine  
Arc GIS  
ArcPad

### Equipment

Field sampling  
General office supplies  
Survey equipment  
TI series  
Spectrometers  
Digital cameras

### Licenses

Commercial Driver's License  
Certified Crop Advisor  
Herbicide Applicator's License  
Certified Demolition Training  
Small Boat Operator's License



## Acronyms

NRCS – Natural Resources Conservation Service  
MSDS – Material Safety Data Sheets  
TWRA – Tennessee Wildlife Resource Agency  
FOTG – Field Office Technical Guide  
NEPA – National Environmental Protection Act  
CSP – Conservation Security Program  
CRP – Conservation Reserve Program  
WRP – Wetlands Reserve Program  
GPS – Global Positioning Systems  
EQIP – Environmental Quality Incentive Program  
WHIP – Wildlife Habitat Incentive Program  
GRP – Grassland Reserve Program  
FIP – Forestry Incentive Program

## Work Behaviors

Team building, team player  
Taking initiative  
Mobility, able to relocate  
Flexibility  
Adaptability  
Organized  
Self-starter  
Multi-tasking  
Dependable  
Personable



## Future Trends and Concerns

- Regulatory changes - continual updating, responding, and documenting actions
- Job changes related to process obsolesces
- Education requirements
- Loss of experienced personnel due to retirements, reorganization, budget restraints

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