

**Night Comes to the Cumberlands...and It's Brilliant: Promoting Night Sky
Conservation and Development in the Upper Cumberland**

Jean Mercer
Assistant Vice Chancellor for Research
UT Knoxville Office of Research
1534 White Ave.
Knoxville, TN 37996-1529
Phone: (865) 974-3466
Fax: (865) 974-7400
Email: research@utk.edu

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Dr. Tim Ezzell
Research Scientist
Department of Political Science
University of Tennessee
Suite 311, UT Conference Center
Knoxville, TN 37996-4134
865-974-9036
tezzell@utk.edu

FINAL REPORT NARRATIVE

Title of Project: _Night Comes to the Cumberland...and It's Brilliant: Promoting Night Sky Conservation and Development in the Upper Cumberland

Grant Period: January 1, 2017-June 30, 2018

Grantee Name: The University of Tennessee

Project Director: Dr. Tim Ezzell

DESCRIPTION OF PROJECT

UT students worked with staff at Pickett CCC State Park and local stakeholders in Fentress County to explore community engagement and tourism development ideas related to the park's dark skies programming. Project ideas included creation of a Jr. Astronomer program, a local telescope library, construction of rental yurts, and the potential for a local food truck service.

PROJECT ACTIVITIES

The UT class conducted site visits to the park site on October 3rd and November 14th. During these visits they met with park officials, evaluated park assets, and collected research data for the planning process. Individual students also made trips to the park during the semester to gather information.

Students also met with stakeholders in Jamestown. These included the county tourism director, Chamber of Commerce director, and the director of the county library system. Students also talked with local food truck manufacturers and operators.

On November 14th, students presented their project findings to local elected officials and other government officials. The presentation took place at the Fentress County Courthouse in Jamestown. Attendees included Fentress County mayor, Michael Cross, Jamestown mayor, Darlene Davis, and Leann Smith, county director of economic development.

Students also researched funding opportunities for the project recommendations. Most notable of these was an Advances in Informal STEM Learning (AISL) opportunity from the National Science Foundation. Students also developed a preliminary business plan for rental yurts, demonstrating costs, projected revenues, and estimated payback times.

Students presented their findings at the annual ATP meeting in Washington and created a poster for the meeting.

PROJECT OUTCOMES

The project resulted in the following outcomes:

- Increased awareness of dark skies resources and astronomical tourism opportunities.

- Increased support for proposed local lighting and night sky conservation ordinances.
- Creation of a dark skies business plan for the park.
- Identification of a potential funding source for proposed park programming activities.
- Identification of strengths and weaknesses related to dark skies activities at the park site.
- Presentation of findings before local officials and at the ATP meeting in Washington.
- Creation of a poster for the ATP meeting in Washington.

The project addressed the following goals from ARC's strategic plan:

- **Goal 1: Economic Opportunities:** Invest in entrepreneurial and business development strategies that strengthen Appalachia's economy.
- **Goal 4: Natural and Cultural Assets:** Strengthen Appalachia's community and economic development potential by leveraging the Region's natural and cultural heritage assets.
- **Goal 5: Leadership and Community Capacity:** Build the capacity and skills of current and next-generation leaders and organizations to innovate, collaborate, and advance community and economic development.

PROBLEMS ENCOUNTERED

The UT class encountered no significant problems with the project.

PROGRAM CONTINUATION AND SUSTAINABILITY

Pickett State Park has made significant investments in dark skies programming and has received certifications as a dark skies park by the International Dark Skies Association. As such they are likely to continue with these efforts.

UT is working with Colgate University, Shawnee State University, and Fairmont State University to create a proposal for an NSF AISL grant. The grant would fund telescope libraries and astronomical programming at Pickett CCC State Park and other dark skies destinations in Appalachia. UT will submit the proposal in October 2018.

UT has committed to work with Pickett CCC State Park again for the 2018 ATP class. This year's class will address issues identified in the 2017 class, namely needed improvements to the observing field and dark skies events.

UT has participated in the ATP every year since its creation. The Political Science Department views the class as an important engagement and learning opportunity for students and has no plans to end its participation.

CONCLUSIONS AND RECOMMENDATIONS

While staff at Pickett CCC State Park have embraced dark skies programming, they seem to have little awareness of activities at other destinations. They were, for example, unfamiliar with standard dark skies etiquette guidelines and had little awareness of other sites, such as Cherry Springs State Park (PA) or Green Bank (WV).

Dr. Ezzell has been working with dark skies sites for several years and, through this project, has familiarized the Pickett park staff with efforts in other parts of the region. He has also invited them to attend Calhoun Stargaze 2018 at Calhoun County Park in WV to help them raise their site's profile and observe, firsthand, activities at a multi-day event.

While the 2017 project highlighted many opportunities related to the activities at the Pickett park, it also raised some concerns. The lack of multi-day events and the location and characteristics of their observing field may, in the future, limit the impact of their programming. Concentrating on these potential limitations in 2018 may help park staff address these shortcomings.

Several students from the 2017 class have since graduated and now work in public service, mostly for local governments and state agencies. One student's ATP experience was recently highlighted by her new employer, a state commissioner. All students expressed gratitude for the opportunities afforded by the ATP experience.

Appendices

- 1. Dark Skies Business Plan**
- 2. ATP Conference Poster**
- 3. ATP Conference Presentation**
- 4. Project Photos**