

# **CURRICULUM VITAE OF LOGAN O. PARK, PH.D.**

## **PROFESSIONAL AFFILIATION AND CONTACT INFORMATION**

### **Present University Department/Program:**

Forest Recreation and Park Management  
Forestry Department

### **Office Address:**

College of Agricultural Sciences  
1205 Lincoln Drive, Room 194 D  
Southern Illinois University Carbondale,  
IL 62901  
E-Mail: Logan@logan-park.org  
618-303-2799

## **EDUCATION**

### **Formal:**

Doctor of Philosophy (Forestry: Recreation Ecology); Virginia Polytechnic  
Institute and State University; 2006 – 2009

Master of Science (Natural Resources Planning); The University of  
Vermont; 2004 – 2006

Bachelor of Chemistry (Environmental Chemistry); Furman University;  
1999 – 2003

### **Professional Certification:**

Leave No Trace Trainer; Leave No Trace International Center for Outdoor Ethics;  
2009

## PROFESSIONAL EXPERIENCE

- 2015 – Present    **Associate Professor**, Southern Illinois University.  
Appointment: 50% teaching, 45% research, 5% service.
- 2014 – 2015      **Assistant Professor**, Southern Illinois University.  
Appointment: 65% teaching, 30% research, 5% service.
- 2009 – 2013      **Assistant Professor**, Southern Illinois University.  
Appointment: 50% teaching, 45% research, 5% service.
- 2006 – 2009      **Graduate Research Assistant**. Virginia Polytechnic Institute and State University. Designed and implemented interdisciplinary quantitative visitor behavior/resource impacts modeling research projects across six U.S. national parks. Administered visitor & GPS surveys, collected resource metrics, performed unobtrusive observation, designed trail impact monitoring protocols, supervised field staff, computer modeled, calculated statistics, utilized geographic information systems, generated computer visualizations including real-time animations, prepared reports, presented findings to national agency managers. Advisors: Dr. Jeffrey L. Marion, U.S. Geological Survey/U.S. National Park Service & Dr. Steven Lawson, Virginia Tech Forestry Department/Resources Systems Group, Inc.
- 2008              **Instructor of Record**: Outdoor Recreation Management, Virginia Polytechnic Institute and State University. Upper-division major requirement class. Built and delivered content, graded.
- 2006 – 2009      **Graduate Teaching Assistant**, alternating semesters. Virginia Polytechnic Institute. Courses: Nature and American Values, Natural History and Field Ecology, Nature and Culture. Taught field ecology skills in outdoor lab setting, developed lab content and assessment rubric, graded, coached students academically.
- 2007 – 2009      **Independent Software Architect**, Major clients: Nissan USA Motor Co., Ltd.; CBS Broadcasting, Inc.; Thompson Reuters; MoreSteam Inc.; IBM International; and Acura Motors USA.
- Software development efforts facilitated massively multi-user online interaction, dynamic stochastic computer simulation modeling, user interface and experience design, 3D object modeling, and quantitative real-time analytics. Specifics remain under non-disclosure agreements with each company. Contracted through The Electric Sheep Company.
- 2004 – 2006      **Graduate Research Assistant**, The University of Vermont, Park Studies Laboratory.

Assisted with interdisciplinary research projects in Acadia National Park and Lake Umbagog National Wildlife Refuge. Administered surveys, prepared computer animation clips, supervised data entry, prepared technical report sections and journal article. Advisor: Dr. Robert E. Manning.

2001 – 2003      **Undergraduate Research Assistant**, Furman University, River Basins Research Initiative. Advisor: Dr. John Wheeler & Dr. Sandra Wheeler.

Collected and analyzed water samples using onsite and laboratory procedures including Inductively-Coupled Plasma / Atomic Emission Spectroscopy and ion chromatography analyses. NSF-REU (2001 - 2002) and South Carolina Department of Health and Environmental Conservation (2002 - 2003) funded.

## RESEARCH ACTIVITY

### Interests and Specialties:

**Climate change**, effects on protected area ecosystem functions and human factors impacts.

**Recreation ecology** (physical and social effects of humans on ecosystem dynamics and each other) including computational impact simulation, prediction, and modeling. Effects of ubiquitous mobile technologies on outdoor recreationist perceptions, attitudes, beliefs, norms, and behaviors. Climate shift planning and management in parks, forests, and other protected areas. Geographic and behavioral effects of human activities in protected natural areas including national parks, national forests, national wildlife refuges, and federally designated wilderness areas. Nighttime sky and soundscape impacts of forest recreation modeling.

**Novel portable sensors** development with emphasis on continuous/high frequency data collection, primarily LiDAR and structure-from-motion visible spectrum.

**Autonomous/unmanned ground vehicle** (UGV) drone development with emphasis on mobility in forested environments. Applications in ecological monitoring and search and rescue.

**Quantitative safety and risk analysis** in forest recreation management.

**Novel approaches to 3D printing** using cellulosic feedstock and biopolymer binders.

### Current Research Projects:

1. **LandCraft**: Interactive automated realtime GIS simulation modeling, incorporating daily climate and weather data 1880 – present & to 2100, risk & hazard analysis, ecosystem dynamics, and AI-assisted user spatial analyses. Live multi-user networked interaction. <https://landcraft.org/>

2. **Comparative ecoacoustics** of southern Illinois vs. Mexican Yucatan peninsula, forest vs. agricultural vs. lowland tropical jungle/*cenote*.
3. **Project Lightcycle**: measures cm-accurate distance of passing motor vehicles relative to on-road bicycle riders to quantitate effectiveness of bicycle safety lights. Currently testing spoke-mounted, frame-mounted, and rider-mounted lighting and collecting data via custom-built bicycle mounted microelectronic sensor suite using near-infrared LiDAR (14 Hz sample rate) time-of-flight ranging and sidescan ultrasonic (44.1 kHz) acoustic rangefinding, accelerometry and gyrometry, synchronized GPS location and data logging. Software, firmware, and vehicle-bike relative trajectory reconstruction algorithms developed in-house.
4. **Project TEXAS (Trail Environment eXtraction and Summarization)**: custom-built portable handheld forest foot trail surface scanner: near-infrared LiDAR (14 Hz sample rate) and side-scan ultrasonic (44.1 kHz) rangefinding accurate to 1 mm, active self-leveling, substrate surface color detection, integrated GPS and continuous automated soil erosion measurement. Software and 3D surface reconstruction developed in-house.

#### **Recent Research Projects:**

1. **Project PARCS (Protected Area Recreation and Conservation Simulator)**: Large-scale dynamic computer simulation modeling of human/resource interactions in forest recreation settings. Python-based high performance spatial and temporal modeling engine. Applications abound in the classroom, the patent office, and with my primary research client, the U.S. National Park Service.
2. **Comparative assessment of Leave No Trace outdoor ethics knowledge, attitudes, and behaviors among visitors to Shawnee National Forest vs. Wyoming State Parks and Yellowstone National Park**: replication of national visitor survey protocol followed by meta-analyses.
3. **Assessment of and management recommendations on physical resource and social conditions impacts of rock climbing at Jackson Falls, Shawnee National Forest**: Leading partnership to provide sustainable forest recreation activities in popular, dangerous, and ecologically fragile area also host to intensive equestrian use.
4. **River use levels and visitor perceptions at the Namekagon River, St. Croix National Scenic Riverway** Using quantitative physical and social data to model river use dynamics and their effects on the quality of visitor experiences.
5. **Assessment of Equestrian trails at Wilson's Creek National Battlefield, Missouri** Using quantitative physical trails condition data and onsite behavioral data to model trail network use dynamics.
6. **River use levels and visitor perceptions at Ozark National Scenic Riverways, Missouri** Using quantitative physical and social data to model river use dynamics and their effects on the quality of visitor experiences.

7. **River use levels and visitor perceptions at the Snake River Headwaters, Grand Teton National Park, Wyoming** Using quantitative physical and social data to model river use dynamics and their effects on the quality of visitor experiences.

**Grants Received:**

**Software for Forest Resource & Outdoor Recreation Management:** Safely & preemptively surfacing consequences of human ecosystem stewardship  
U.S. Department of Agriculture, McIntire- Stennis. \$123,260 requested,  
**\$313,844 funded.** 2019 - Present.

**Emergent: GIS Simulation Software / Operation Mousetrap business development grant:** \$1,500 funded. 2017.

**Controlled experimental recreation trail design assessment:** Soil loss and prevention in loess soils of Southern Illinois. U.S. Department of Agriculture, McIntire-Stennis. \$123,260 requested, **\$123,260 funded.** 2012 – 2016.

**Assessment of equestrian recreation at Wilson’s Creek National Battlefield (II).**  
U.S. Department of the Interior, U.S. National Park Service. \$3,960 requested,  
**\$3,960 funded.** 2011 - 2016.

**Optimized horse trail construction in Illinois loess soil.** Horsemen’s Council of Illinois.  
\$25,000 requested, **\$20,000 funded incl. match.** 2011 – 2013.

**Raystown Lake Recreation Area use level and initial direct economic impact assessment (Phase I).** U.S. Department of Defense, U.S. Army Corps of Engineers and Bikes Belong. \$6,000 requested, **\$6,000 funded.** 2011 – 2013.

**Assessment of equestrian recreation at Wilson’s Creek National Battlefield (I).** U.S. Department of the Interior, U.S. National Park Service. \$24,000 requested,  
**\$19,000 funded.** 2009 – 2013.

**Research to support general management plan development at Ozark National Scenic Riverways regarding use monitoring and measurement of informal trail proliferation.** U.S. Department of the Interior, U.S. National Park Service.  
\$150,000 requested, **\$103,000 funded.** 2009 – 2012.

**Grand Teton National Park: Assessment of Snake River Headwaters use and capacity.** U.S. Department of the Interior, U.S. National Park Service. \$71,500 requested,  
**\$29,000 funded.** 2010 – 2012.

## **Grants Applied for But Not Funded:**

**Nurturing Sustainability Leaders at SIU through Evidence-Based Environmental Education Program: A Research and Education Hybrid Project;** National Association of Interpreters Program Challenge Fund

**STEM Education's classroom applications using geospatial technologies;** National Science Foundation

**Quantitative planning assessment of alternative transportation options on the Shawnee National Forest;** U.S. Department of Transportation, Sarbanes Transit in Parks Program; \$420,053

**Economic impacts of Raystown Lake Allegrippis mountain bike trail system (Phase II);**  
U.S. Army Corps of Engineers, Economic impacts of recreation management (EL-35); \$79,986

**Indirect economic impact of Raystown Lake Allegrippis mountain bike trail system (Phase II),** Ford Foundation, \$337,568

**Empowering youths outdoors:** Experiential environmental stewardship tools, The North Face Foundation, \$2,499

**Critical thinking-based environmental education program evaluation for pre-field trip pro-social behaviors teaching content,** U.S. Environmental Protection Agency,  
\$214,071

**BLM Social Science Research:** Recreation Satisfaction Survey Development and Analysis U.S. Department of the Interior, \$324,504

## **Grants Applied For:**

**Assessment of rock climbing physical and social impacts and management recommendations for Jackson Falls,** Shawnee National Forest, U.S. Department of Agriculture, U.S. Forest Service. \$60,000 requested, anticipate \$10,000 funded.

## **Honors and Awards:**

Honors Teaching Fellow, Southern Illinois University Honors Program 2019 – 2020

Robert S. Burruss Fellowship, competitive academic merit fellowship awarded to an outstanding graduate degree candidate by Virginia Polytechnic Institute's College of Natural Resources 2006 – 2009.

## Papers and Presentations at Professional Meetings:

*During Current Appointment:*

\* denotes own graduate advisee

Heavner, H.K., Pense, S.L., and Park, L.O. (2019). *The shortage of licensed secondary agriculture instructors in Illinois: An examination of the impact on secondary agricultural education program quality*. North Central AAAE Research Conference. East Lansing, Michigan.

Fuson, C., Goldkuhl, R., Coulson, E.\* & **Park, L.O.** (2016). *Influence of specialization, history, and place on rock climbers' awareness of impacts*. (Regional conference). Southeastern Recreation Research, Asheville, NC, USA.

Coulson, E.\*, & **Park, L. O.** (2016). *Effects of origin, place, knowledge, and specialization on rock climber behavior*. (Regional conference). Southeastern Recreation Research, Asheville, NC, USA.

**Park, L. O.** (2015). *Simply elegant: Applications of behavioral modeling and computer vision in wilderness and backcountry planning and management*. (International conference). George Wright Society, San Francisco, CA, USA.

**Park, L. O.** (2014a). *Building trails that last: Siting, construction and maintenance*. (State conference) Illinois Horsemen's Council, Springfield, Illinois, USA. <http://logan-park.org/wp-content/uploads/manual/Presentations/IHF%202014/IHF%20Trail%20Construction%202014.pptx>

**Park, L. O.** (2014b). *Multimodal handheld hyperspectral/ultrasonic/LiDAR recreation trail assessment vs. analog methods*. (Regional conference) Central Hardwoods, Carbondale, Illinois, USA. <http://logan-park.org/wp-content/uploads/manual/Presentations/Central%20Hardwoods%202014/Park%20Central%20Hardwood%202014%20Extended%20Abstract.docx>

**Park, L. O.** (2014c). *Using high technology to monitor trails*. (State conference) Illinois Horsemen's Council, Springfield, Illinois, USA. <http://logan-park.org/wp-content/uploads/manual/Presentations/IHF%202014/High%20Tech%20Trail%20Monitoring%20-%20Logan%20Park.pptx>

Jones, C. A.\*, & **Park, L. O.** (2014). *Optimized horse trail design for Illinois soil*. (Regional conference) Central Hardwoods, Carbondale, Illinois, USA. <http://logan-park.org/wp-content/uploads/manual/Presentations/Central%20Hardwoods%202014/Optimize%20Horse%20Trail%20Design%20for%20Illinois%20Soil.pptx>

- Baird, L. E.\*, & **Park, L. O.** (2014a). *Testing tools for outdoor recreation environmental education and stewardship: Allowing youth to choose the rules.* (Regional conference) Central Hardwoods, Carbondale, Illinois, USA. <http://logan-park.org/wp-content/uploads/manual/Presentations/Central%20Hardwoods%202014/Baird%202013%20Hardwood%20Conference%20abstract%20%281%29.docx>
- Baird, L. E.\*, & **Park, L. O.** (2014b). *Tools Tested for outdoor recreation, environmental education and stewardship.* Keep America Beautiful, Charlotte, North Carolina, USA. [http://logan-park.org/wp-content/uploads/manual/Presentations/KAB%202014/02.05.1620%20Breakout%204B\\_Tools%20Tested%20for%20Outdoor%20Recreation\\_Providence%20I.pptx](http://logan-park.org/wp-content/uploads/manual/Presentations/KAB%202014/02.05.1620%20Breakout%204B_Tools%20Tested%20for%20Outdoor%20Recreation_Providence%20I.pptx)
- Park, L. O.** (2013a). *Smarter, faster, stronger: Advances in the state-of-the-art for trail science.* (State conference) Illinois Horsemen's Council, Springfield, Illinois, USA. <http://logan-park.org/wp-content/uploads/manual/Presentations/IHF%202013/IHF%20Trails%20Science%202.pptx>
- Park, L. O.** (2013b). *Trails that last: Siting, construction, and maintenance that can keep horses on the trail.* (State conference) Illinois Horsemen's Council, Springfield, Illinois, USA. <http://logan-park.org/wp-content/uploads/manual/Presentations/IHF%202013/IHF%20Trail%20Construction%202013.pptx>
- Park, L. O.** (2013c). *Updating computer simulation of hikers in complex trail networks: GPS-based movement, Rocky Mountain National Park.* (International conference) George Wright Society Conference on Parks, Protected Areas, and Cultural Sites, Denver, Colorado, USA. <http://logan-park.org/wp-content/uploads/manual/Presentations/GWS%202013/GWS%202013%20Hiking%20Speeds.pptx>
- Park, L. O.** (2013d). *Your cellphone measures far more than you can: Smartphones as pro-grade park monitoring sensor platforms.* (International conference) George Wright Society Conference on Parks, Protected Areas, and Cultural Sites, Denver, Colorado, USA. <http://logan-park.org/wp-content/uploads/manual/Presentations/GWS%202013/GWS%202013%20Smartphones.pptx>
- Riechman, J. A.\*, Ruffner, C. M., **Park, L. O.**, & Groninger, J. W. (2012). *Sustaining a landowner-based prescribed burn association: Case study of the Southeastern Illinois Prescribed Burn Association (poster).* (National conference) Society of American Foresters, Spokane, Washington, USA.
- Park, L. O.** (2012). *Visitor capacity and use monitoring research at Snake River headwaters in Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway.* (Invited presentation) Moose, Wyoming, USA: Protected Area Recreation Conservation Sciences (PARCS) Research Group. <http://logan-park.org/wp-content/uploads/manual/Publications/GRTEFinalReportRevised.pdf>



- Park, L. O.**, Chilman, K., & Sharp, R. (2011). *Park planning and social science informing general management plans: Ozark National Scenic Riverways case study*. (International conference) George Wright Society Conference on Parks, Protected Areas, and Cultural Sites, New Orleans, Louisiana, USA. <http://logan-park.org/wp-content/uploads/manual/Presentations/GWS%202011/OZAR%20Use%20Research%20Presentation.ppt>
- Ramtahal, J. F.\*, **Park, L. O.**, & Lawson, S. R. (2011). *Predicting hiker movement rates via terrain characteristics at Rocky Mountain National Park (poster)*. (International conference) George Wright Society Conference on Parks, Protected Areas, and Cultural Sites, New Orleans, Louisiana, USA.
- Chilman, K., & **Park, L. O.** (2011). *Recreation visitor inventories to provide data for management decisions/communications*. (National conference) River Management Society, Asheville, North Carolina, USA.
- Park, L. O.**, Chilman, K., Thomas Ellison, E., & Ramtahal, J. F. (2010). *River use characteristics on the Ozark National Scenic Riverways*. (Invited presentation) U.S. National Park Service General Management Planning workshop, Van Buren, Missouri, USA. <http://logan-park.org/wp-content/uploads/manual/Presentations/NPS%202010/OZAR%20Horse%20Trails%20and%20River%20Use%200014.pptx>
- Park, L. O.** (2009). *Topics in Australian recreation. Center For ecology invited lecture*. (Invited presentation) Center for Ecology lecture series, Southern Illinois University, Carbondale, Illinois, USA. <http://logan-park.org/wp-content/uploads/manual/Presentations/CFE%202009/2009%20Center%20for%20Ecology%20Guest%20Lecture%20-%20Topics%20in%20Australian%20Recreation.pptx>
- Prior To Current Appointment:*
- Wimpey, J. F., Marion, J. L., & **Park, L. O.** (2008). *Land/habitat fragmentation indices: Spatial analysis of formal and informal trail networks of Potomac Gorge National Park Service Units*. (International conference) International Symposium on Society and Resource Management, Burlington, Vermont, USA.
- Wimpey, J. F., **Park, L. O.**, & Marion, J. L. (2008). *Monitoring informal (visitor-created) trail networks in parks: Some methods and results*. (Regional conference) Southeastern Recreation Research Conference, Savannah, Georgia, USA. <http://logan-park.org/wp-content/uploads/manual/Presentations/SERR%202008/Informal%20trails%20extendedabstract.doc>

- Park, L. O.**, Wimpey, J. F., & Marion, J. L. (2008). *Reducing and preventing off-trail walking in ecologically sensitive park areas: additive techniques*. (Regional conference) Southeastern Recreation Research Conference, Savannah, Georgia, USA. <http://logan-park.org/wp-content/uploads/manual/Presentations/SERR%202008/BGT%20Observation%20Study.ppt> and <http://logan-park.org/wp-content/uploads/manual/Presentations/SERR%202008/SERR%202008%20Executive%20Summary.docx>
- Park, L. O.** (2008). *Relating trail design characteristics to tread width: Correlates in the Acadia National Park formal hiking trail system*. (International conference) International Symposium on Society and Resource Management, Burlington, Vermont, USA.
- Hockett, K., Marion, J. L., **Park, L. O.**, Clark, A., & Leung, Y.-F. (2008). *Efficacy of educational messaging and site management actions in discouraging off-trail hiking*. (International conference) International Symposium on Society and Resource Management, Burlington, Vermont, USA.
- Park, L. O.**, & Marion, J. L. (2007). *Evaluating efficacy of and visitor responses to management alternatives designed to limit ecological impacts on the summit of Cadillac Mountain, Acadia National Park*. (International conference) George Wright Society Conference on Parks, Protected Areas, and Cultural Sites: Rethinking Protected Areas in a Changing World, Minneapolis, Minnesota, USA. <http://logan-park.org/wp-content/uploads/manual/Presentations/GWS%202007/GWS2007.ppt>
- Park, L. O.**, Manning, R. E., Marion, J. L., Lawson, S. R., & Jacobi, C. (2006a). *Efficacy of visitor management alternatives on the summit of Cadillac Mountain, Acadia National Park*. (International conference) International Symposium on Society and Resource Management, Vancouver, British Columbia, Canada.
- Valliere, W., **Park, L. O.**, Hallo, J. C., Stanfield McCown, R., & Manning, R. E. (2006). *Enhancing visual research with computer animation: Crowding-related standards of quality for the loop road at Acadia National Park*. (International conference) International Symposium on Society and Resource Management, Vancouver, British Columbia, Canada.
- Park, L. O.**, Manning, R. E., Marion, J. L., Lawson, S. R., & Jacobi, C. (2006b). *Evaluating efficacy of and recreationist responses to management alternatives at a popular and ecologically fragile icon site, Acadia National Park*. (Regional conference) Northeastern Recreation Research Conference, Bolton Landing, New York, USA.
- Hallo, J. C., **Park, L. O.**, Valliere, W. A., & Manning, R. E. (2005). *Parks or parking lots: Vehicle-related crowding at Acadia National Park using simulation modeling*. (Regional conference) Northeastern Recreation Research Conference, Bolton Landing, New York, USA.

Manning, R. E., Hallo, J. C., Valliere, W. A., & **Park, L. O.** (2005a). *Standardized standards: Developing and applying the “Levels of Service” concept to carrying capacity planning and management in the national parks.* (International conference) George Wright Society Conference on Parks, Protected Areas, and Cultural Sites, Philadelphia, Pennsylvania, USA.

Manning, R. E., Hallo, J. C., Valliere, W. A., & **Park, L. O.** (2005b). *Standardized standards: Developing and applying the “Levels of Service” concept to carrying capacity planning and management in the national parks.* (Regional conference) Northeastern Recreation Research Conference, Bolton Landing, New York, USA.

**Park, L. O.**, Geist, S., Andersen, B., & Wheeler, J. (2002). *Hydrogeochemical trends: Fluvial systems in subtropical land use array, upstate South Carolina.* (Regional conference) Southeastern Geological Society of America, Lexington, Kentucky, USA.

## PUBLICATIONS AND CREATIVE WORKS

### Articles in Professional Journals:

*During Current Appointment:*

\* denotes own graduate advisee

Coulson, E.\*, **Park, L. O.**, Lawhon, B., Taff, D., Vagias, W., & Newman, P. (2019). Visitors' attitudes and behavioral intentions toward Leave No Trace on a national forest. *Applied Environmental Education & Communication*, 1-18.

Rijal, S., Wang, G., Woodford, P. B., Howard, H. R., Hutchinson, J. S., Hutchinson, S., ... & **Park, L. O.** (2018). Detection of gullies in Fort Riley military installation using LiDAR derived high resolution DEM. *Journal of Terramechanics*, 77, 15-22.

Shrestha, P., Williard, K. W., Schoonover, J. E., & **Park, L. O.** (2018). Prevalence of Concentrated Flow Paths in Agricultural Fields in Southern Illinois. *Water, Air, & Soil Pollution*, 229(6), 198.

Rijal, S., Wang, G., Woodford, P. B., Howard, H. R., Schoof, J., Oyana, T. J., **Park, L. O.** & Li, R. (2017). Comparison of military and nonmilitary land condition using an image derived soil erosion cover factor. *Journal of Soil and Water Conservation*, 72(5), 425-437.

**Park, L. O.**, Marion, J. L., & Wimpey, J. F. (Accepted, in press). Efficacy of combining education and site management in reducing off-trail travel in a fragile biotic community, Acadia National Park. *Journal of Park and Recreation Administration*.

Ramtahal, J. F.\*, & **Park, Logan O.** (Accepted, revising). Willingness to pay for campsite restoration in small Midwestern wilderness. *Forests*.

Riechman, J. A.\*, **Park, L. O.**, Ruffner, C. M., & Groninger, J. W. (2014). Challenges and motivations behind sustaining a volunteer-based forest management organization: Case study of the Southeastern Illinois Prescribed Burn Association. *Journal of Forestry*, 112(2), 215-220.

Ward, W., **Park, L. O.**, & Coulson, E.\* (2012). Economic impacts of search and rescue operations on wilderness management in the national parks. *Park Science*, 28(3), 103-105. <http://www.nature.nps.gov/parkscience/index.cfm?ArticleID=553>

Marion, J. L., Wimpey, J. F., & **Park, L. O.** (2012). The science of trail surveys: Recreation ecology provides new tools for managing wilderness trails. *Park Science*, 28(3), 60-65.  
[http://www.nature.nps.gov/ParkScience/archive/PDF/Article\\_PDFs/ParkScience28\(3\)Winter2011-2012\\_60-65\\_Marion\\_et\\_al\\_2845.pdf](http://www.nature.nps.gov/ParkScience/archive/PDF/Article_PDFs/ParkScience28(3)Winter2011-2012_60-65_Marion_et_al_2845.pdf)

Manning, R., Valliere, W., Anderson, L., McCown, R. S., Pettengill, P., Reigner, N., Lawson, S. R., Newman, P., Budruk, M., Laven, D., Hallo, J., **Park, L. O.**, Bacon, J., Abbe, D., van Riper, C., Goonan, K. (2011). Defining, measuring, monitoring, and managing the sustainability of parks for outdoor recreation. *Journal of Park and Recreation Administration*, 29(3), 24-37.  
<http://www.uvm.edu/parkstudieslaboratory/publications/Manning%20and%20others%202011.pdf>

**Park, L. O.**, Lawson, S., Kaliski, K., Newman, P., & Gibson, A. (2010). Modeling and mapping hikers' exposure to transportation noise in Rocky Mountain National Park. *Park Science*, 26(3), 59-64.  
[http://www.nature.nps.gov/ParkScience/archive/PDF/Article\\_PDFs/ParkScience26\(3\)Winter2009-2010\\_59-64\\_Park\\_et\\_al\\_2692.pdf](http://www.nature.nps.gov/ParkScience/archive/PDF/Article_PDFs/ParkScience26(3)Winter2009-2010_59-64_Park_et_al_2692.pdf)

#### *Articles in Professional Journals Prior To Current Appointment:*

**Park, L. O.**, Manning, R. E., Marion, J. L., Lawson, S. R., & Jacobi, C. (2008). Managing visitor impacts in parks: Multi-method study of the effectiveness of alternative management practices. *Journal of Park and Recreation Administration*, 26(1), 97-121.  
<https://www.uvm.edu/parkstudieslaboratory/publications/ManagingVisitorImpactsParks.pdf>

#### **Peer-Reviewed Creative Contributions:**

LandCraft (2019 – present) Realtime interactive behavioral computer simulation of recreation trail siting, layout, and revision. Built using Unity3D, C#, and geographic information systems (GIS) biogeophysical data layers provided by USGS, NOAA, NASA, etc. Algorithmic and artificial intelligence pathing, ecosystem dynamics, ecoacoustics, etc. Currently more than 60,000 lines of code.  
<https://LandCraft.org>

## Chapters in Professional Books:

*During Current Appointment:*

**Park, L. O.**, Lawson, S. R., Kaliski, K., Newman, P., & Gibson, A. W. (2014). Modeling and mapping hikers' exposure to transportation noise in Rocky Mountain National Park. In R. E. Manning, S. R. Lawson, P. Newman, J. C. Hallo, & C. A. Monz (Eds.), *Sustainable Transportation in the National Parks: From Acadia to Zion* (1st ed., pp. 134–143). Hanover, New Hampshire: University Press of New England. Retrieved from [http://www.amazon.com/Sustainable-Transportation-National-Parks-Acadia/dp/1611685524/ref=sr\\_1\\_1?ie=UTF8&qid=1406574163&sr=8-1](http://www.amazon.com/Sustainable-Transportation-National-Parks-Acadia/dp/1611685524/ref=sr_1_1?ie=UTF8&qid=1406574163&sr=8-1)

**Park, L. O.**, Manning, R. E., Marion, J. L., Lawson, S. R., & Jacobi, C. (2009). Managing visitor impacts on Cadillac Mountain. In *Parks and people: Research to guide management of outdoor recreation at Acadia National Park* (1st ed., pp. 215-239). Burlington, Vermont: University of Vermont Press. <http://www.amazon.com/Parks-People-Managing-Recreation-National/dp/158465791X>

Marion, J. L., Wimpey, J. F., & **Park, L. O.** (2009). Monitoring and assessing trail conditions at Acadia National Park. In *Parks and people: Research to guide management of outdoor recreation at Acadia National Park* (1st ed., pp. 185-195). Burlington, Vermont: University of Vermont Press. <http://www.amazon.com/Parks-People-Managing-Recreation-National/dp/158465791X>

## Popular and Creative Writing:

*By Logan O. Park During Current Appointment:*

**Park, L. O.** (2014). Best & Worst Cities for Recreation. Retrieved from <http://wallethub.com/edu/best-worst-cities-for-recreation/5144/#Logan-Park->

**Park, L. O.**, & Jones, C. A. (2014). Eight things that might surprise you about trail riding. *Horsemen*, 4 (Winter).

*Popular Press and Creative Writing About Logan O. Park During Current Appointment:*

Les O'Dell. (2018). *'The sky is the limit': Looking at the impact our region's beauty has on the economy.* [https://thesouthern.com/business/southern-business-journal/the-sky-is-the-limit-looking-at-the-impact-our/article\\_96d9342a-5653-5e12-bb6a-1ba076d8a3ad.html](https://thesouthern.com/business/southern-business-journal/the-sky-is-the-limit-looking-at-the-impact-our/article_96d9342a-5653-5e12-bb6a-1ba076d8a3ad.html)

(2016). Field Camp Leads to Park Service and Forestry Service Careers. <https://coas.siu.edu/news/2016/04-26-2016.html>

“\$10,000 grant will help SIU researcher design better horse trails” Popular article source, Linda Rush, Southern Illinoisan, March 26<sup>th</sup>, 2012.

Jaehnig, K. C. (n.d., posthumous). Real trailblazing. *SIU Journeys/Press Release*.

### **Book Reviews:**

No book reviews to-date.

### **Other Writing**

*Abstracts In Peer-Reviewed Proceedings During Current Appointment:*

Baird, L. E., & **Park, L. O.** (2014). Testing tools for outdoor recreation environmental education and stewardship: Allowing youth to choose the rules. In J. W. Groninger, E. J. Holzmueller, C. K. Nielsen, & D. C. Dey, Proceedings of the 19th Central Hardwood Forest Conference, Carbondale, Illinois, USA. Newtown Square, Pennsylvania, USA: U.S. Department of Agriculture, U.S. Forest Service, Northern Research Station.

Jones, C. A., & **Park, L. O.** (2014). Optimized Horse Trail Design for Illinois Soil. In J.W. Groninger, E. J. Holzmueller, C. K. Nielsen, & D. C. Dey, Proceedings of the 19th Central Hardwood Forest Conference, Carbondale, Illinois, USA. Newtown Square, Pennsylvania, USA: U.S. Department of Agriculture, U.S. Forest Service, Northern Research Station.

**Park, L. O.** (2014). Comparative Efficacy of Multimodal Digital Methods in Assessing Trail / Resource Degradation. In J. W. Groninger, E. J. Holzmueller, C. K. Nielsen, & D. C. Dey, Proceedings of the 19th Central Hardwood Forest Conference, Carbondale, Illinois, USA. Newtown Square, Pennsylvania, USA: U.S. Department of Agriculture, U.S. Forest Service, Northern Research Station.

*Technical Reports During Current Appointment:*

**Park, L. O.** (2019). Final report to U.S. National Park Service: St. Croix National Scenic Riverway, Namekagon River Use and User Dynamics. Carbondale, Illinois, USA: Protected Area Recreation Conservation Sciences (PARCS) Research Group. 202 pp.

**Park, L. O.** (2013). Final report to U.S. National Park Service: Wilson's Creek National Battlefield: Equestrian trail condition assessment and hiking trail use level monitoring. Carbondale, Illinois, USA: Protected Area Recreation Conservation Sciences (PARCS) Research Group.

**Park, L. O.** (2012). Visitor capacity and use monitoring research at Snake River Headwaters in Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway. Carbondale, Illinois, USA. <http://logan-park.org/wp-content/uploads/manual/Publications/GRTEFinalReportRevised.pdf>

**Park, L. O.** Chilman, K., & Seekamp, E. (2011). Assessment of visitor-related impacts and potential management strategies at Ozark National Scenic Riverways. Carbondale, Illinois, USA: <http://logan-park.org/wp-content/uploads/manual/Publications/OZAR%20Horse%20Trails%20And%20River%20Use%20Final%20Report%20Compressed.docx>

\*Hockett, K., Clark, A., Leung, Y.-F., Marion, J. L., & **Park, L. O.** (2011). Detering off-trail hiking in protected natural areas: evaluating options with surveys and unobtrusive observation. Patuxent Wildlife Research Center, Virginia Tech Field Unit, Blacksburg, (1201), 191. U.S.G.S. blinded peer-reviewed. [http://www.pwrc.usgs.gov/prodabs/pubpdfs/7495\\_Hockett.pdf](http://www.pwrc.usgs.gov/prodabs/pubpdfs/7495_Hockett.pdf)

\*Marion, J. L., Wimpey, J. F., & **Park, L. O.** (2011). Informal and formal trail monitoring protocols and baseline conditions: Acadia National Park. U.S. Dept. of the Interior. U.S.G.S. blinded peer-reviewed. [https://profile.usgs.gov/myscience/upload\\_folder/ci2012Feb2415165636429ACA D%20Trails%20Rpt,%20Final.pdf](https://profile.usgs.gov/myscience/upload_folder/ci2012Feb2415165636429ACA D%20Trails%20Rpt,%20Final.pdf)

*Manuscripts In Current Peer-Review:*

**Park, L. O.**, & Marion, J. L. (In review). Modeling hiking trail soil erosion cross-sectional area profiles across five U.S. national parks: trail network resource inventories and monitoring. *Resources*, 3(1-x). doi:10.3390/resources30x000x

**Park, L. O.**, Lawson, S. R., Kaliski, K., Newman, P., Gibson, A., Monz, C. A., & Pettebone, D. (Reviewed, in revision). Spatial acoustic noise modeling in visitor experience and transportation management at Rocky Mountain National Park. *Journal of Applied Acoustics*.

Baird, L. E.\* , & **Park, L. O.** (Reviewed, in revision). Efficacy of critical thinking---based pre---trip content to prevent onsite environmental impacts. *North American Colleges and Teachers of Agriculture Journal*.

Thomas Ellison, E.\* , & **Park, L. O.** (In review). Four decades of Experience Use History at Ozark National Scenic Riverways: Long-term trends and influential factors. *Social Sciences*, 3. doi:10.3390/socsci30x000x

Hallo, J. C., Brownlee, M. T. J., Manning, R. E., **Park, L. O.**, & Valliere, W. A. (In second review). Contextual influences and respondent interpretation of visually-derived normative standards: Considerations for the determination of carrying capacities. *Leisure Sciences*.

## **TEACHING EXPERIENCE**

### **Teaching Interests and Specialties:**

Experiential education and ensuring relevant outdoor/onsite student engagement; gamification; custom-built mobile and/or multi-user networked apps in education; mentorship.

### **Teaching and Training Grants:**

No teaching / training grants pursued in lieu of research grants and high Instructor / Course Evaluation system scores throughout appointment.

### **Instructor of Record, Current Appointment:**

University Honors: Evergreen Community Model, 3 credits  
Forestry 220: Introduction to Forest Recreation, 2 credits  
Forestry 391: Forestry Independent Study, 1 – 3 credits  
Forestry 420: Park and Wildland Management, 3 credits  
Forestry 422C: Park and Wildland Management Field Camp, 6 credits  
Forestry/Recreation 423: Environmental Interpretation, 3 credits  
Forestry 470: Wilderness Management, 2 credits  
Forestry 500: Research Methods, 2 credits  
Forestry 523: Advanced Resource Interpretation, 3 credits  
Forestry 590: Thesis/Dissertation Research, 1 – 6 credits  
Agricultural Sciences 592: Thesis/Dissertation Research, 1 – 6 credits  
Environmental Resources and Policy 600: Dissertation research, 1 – 6 credits

### **Teaching Awards and Honors:**

Early Direct Dissertation status: SIU Graduate School, 2013

Champion Team Member, inaugural International Symposium on Society and Resource Management Quiz Bowl, 2008



The University of Vermont Graduate Teaching Assistant of the Year: Rubenstein  
School of Environment and Natural Resources, The University of  
Vermont, 2006

**Current Graduate Faculty Status:**

Active as of 2013

**Master's and Ph.D. Committees on Which Dr. Park Has Served:**

1. Yi-Chen Lee – Completed Ph.D. Agricultural Sciences Spring 2021
2. Samantha Lowman – Completed Ph.D. Agricultural Sciences Spring 2020
3. Mukesh Bhattaraj – Completed Ph.D. Agricultural Sciences Spring 2020
4. Chelsea Morton -- Completed M.S. Agricultural Sciences Spring 2021
5. Chris Sedivy – Completed M.S. Forestry Summer 2019
6. Mary Fischer – Completed Ph.D. Agricultural Sciences Spring 2020
7. Howard Heavener – Completed Ph.D. Agricultural Sciences Spring 2019
8. Peyton Gehrs – Completed M.S. Agricultural Education Spring 2019
9. Ben Alexander – Completed M.S. Agriculture Education Spring 2018
10. Rachel Sheely – Completed M.S. Forestry Spring 2018
11. Cortez Rohr – Completed M.S. Zoology Spring 2017
12. Prabisha Shrestha – Completed M.S. Forestry Fall 2016
13. Jodie Delaney – Completed M.S. Forestry Fall 2017
14. James Anderson – Completed Ph.D. Agricultural Sciences Spring 2016
15. Alex Halbrosk – Completed M.A. Outdoor Recreation Spring 2016
16. Molly Maxwell – Completed M.A. Outdoor Recreation Summer 2016
17. Santosh Rijal – Completed Ph.D. Geography 2015
18. Veronica Kelly – Completed M.S. Forestry 2015
19. Mitchell Belsley – Completed M.A. Outdoor recreation 2014
20. Brandon Smith – Completed M.A. Outdoor recreation 2013
21. Mary McDaniel – Completed M.A. Outdoor recreation 2013
22. Jared McDaniel – Completed M.A. Outdoor recreation 2013
23. Alexis Sandoval – Completed M.A. Outdoor recreation 2013
24. Natalia Mujica-Cameroni – Completed M.S. Forestry 2012
25. Lionel Grant – Completed M.S. Forestry 2012
26. Beth Marcoot – Completed M.A. Outdoor recreation 2012
27. David Drogos – Completed M.S. Forestry 2012

*Ongoing Graduate Committee Memberships:*

1. Max Walsh – M.S. Outdoor Recreation
2. Allene Houston – Ph.D. Curriculum Design and Instruction

**Students Who Have Completed Graduate Master's Theses and Doctoral Dissertations Under Dr. Park's Direction:**

*Graduate Advisements Completed To-Date:*

Ramiz Alabd Alsaid – Ph.D. Agricultural Sciences dissertation, 2021  
Laith Zeinaldeen – Ph.D. Agricultural Sciences dissertation, 2021  
Rachel Steiger – (Coadvised with Vice-Chancellor for Research) M.S. Zoology Spring 2019  
Christopher Jones, Washington State Parks, 2016  
Ethan Snively, Macon County Parks and Recreation, 2016  
Ely Lane, M.S. Forestry thesis, 2016  
Evan Coulson, Ph.D. Agricultural Sciences dissertation, 2016  
Laura Baird, M.S. Forestry thesis, 2014  
Erin Thomas Ellison, M.S. Forestry thesis, 2013  
Joel Ramtahal, M.S. Forestry thesis, 2012  
Jesse Riechman, M.S. Forestry thesis, 2012, Co-advised with Dr. Charles Ruffner

*Current/Underway Graduate Advisees:*

Wesley Petty, Ph.D., Environmental Resources and Policy: Ecoacoustics  
Rebecca Raney, M.S., Anthropology of Forests

**Other Teaching Experience:**

*Undergraduate Student Advising:*

Senior Seminar, FOR 381: 5 – 14 upper division students every year for 20-minute research synthesis presentation or equivalent poster presentation

Academic advisor: 16-25 undergraduates advised and/or mentored one-on-one every semester

Faculty University Associate: Weekly office hours located in student on-campus College of Agricultural Sciences-themed Living Learning Community, 2010 – Present

Placed students directly into employment at Denali National Park, AK; Grand Teton National Park, WY; Ozark National Scenic Riverways, MO; *etc.*

*Registered Student Organization Advising:*

Advisor, Service Dawgs-In-Training, 2019 – present  
Advisor, Alpha Zeta registered student organization, 2009 – 2017  
Advisor, Environmental Coalition registered student organization, 2011 – 2012  
Co-advisor, Ag Council registered student organization, 2009 – 2012

*Miscellaneous:*

Saluki Finals Finish volunteer at Student Recreation Center, 2010 - 2013

Organized faculty volunteer move-in day at Steagall Hall College of Agricultural Sciences Living Learning Community, 2010

## **UNIVERSITY EXPERIENCE**

### **Department Committees:**

Research Committee, 2010 - Present

Liaison to Environmental Studies minor program, Forestry Department/ENVS,  
2012 - Present

Hiring Committee, Forest Recreation/Conservation Social Science tenure track faculty line,  
2013 – 2014

Operating Papers Revisions Committee, Merit Pay revisions, 2013 – 2014 Society  
of American Foresters: Forestry M.S. Program Review (Faculty section),  
2012 – 2013

### **College and University Committees and Councils:**

Graduate Dean's committee for graduate student recruitment and retention, 2018

University Tech Mentor program advisor, 2017 – 2019

Search committee: College of Science Interim Dean position, 2011

Vice Chancellor for Research's *ad-hoc* committee to transition Office of Sponsored  
Projects Administration website during university-wide rebranding initiative, 2011

College of Agricultural Sciences Information Technology Committee, monthly,  
2010 – Present

## **PROFESSIONAL SERVICE**

### **Membership in Professional Associations:**

George Wright Society for Parks, Protected Areas, and Cultural Sites, 2005 – Present

International Association for Society and Natural Resources, 2005 – 2007

### **Offices Held and Honors Awarded in Professional Associations:**

Technical Advisory Board member, Friends of the Shawnee National Forest, 2013 – Present

Chair of the Board of Directors, Friends of the Shawnee National Forest, Harrisburg, IL, 2011 – 2013

Founding board member, Friends of the Shawnee National Forest, 2010 – 2013

### **Consultantships:**

- 2007 – 2009 MoreSteam, Inc., custom interactive physics-based continuous simulation statistical modeling engine, under non-disclosure agreement
- 2008 IBM International, custom public-facing interactive software development under non-disclosure agreement
- 2008 Thompson Reuters, custom public-facing software development under non-disclosure agreement
- 2007 – 2008 Acura Motors, custom software development under non-disclosure agreement
- 2007 CBS Broadcasting, custom internal-use software for television show *CSI:NY*, under non-disclosure agreement
- 2006 – 2007 Nissan USA, custom interactive dynamic vehicle simulation, under non-disclosure agreement

**Evaluation of Manuscripts for Journals and Book Publishers and of Grant Proposals for Agencies:**

- 2019 Manuscript review for *PLOS One*  
Manuscript review for *Water*
- 2018 Manuscript review for *J. American Oil Chemists Society*  
Manuscript review for *Society & Natural Resources*  
Manuscript review for *Forest Research*  
Manuscript review for *PLOS One*
- 2017 Manuscript review for *J. American Oil Chemists Society*  
Manuscript review for *Environmental Management*  
Manuscript review for *J. Acoustical Society of America*
- 2015 Manuscript review for *J. Fire Ecology*  
Manuscript review for *J. Science Education and Technology*  
Manuscript review for *J. Conservation of Water Resources and Education*
- 2014 Manuscript review for *Central Hardwoods* peer-reviewed proceedings  
Manuscript review for *J. Ecotourism*  
Research proposal review for U.S. Geological Survey
- 2013 Manuscript review for *J. Park and Recreation Administration*  
Research proposal review for U.S. Geological Survey
- 2012 Manuscript review for *J. Environmental Management*  
Manuscript review for *Tourism in Marine Environments*  
Manuscript review for *Leisure Sciences*
- 2011 Manuscript review for *Leisure Sciences*

**Other Papers and Presentations at Professional Meetings:**

- 2014 Invited speaker, National Coalition of State Horse Councils

## COMMUNITY SERVICE

Green Earth Inc., Carbondale, IL, Trail design, construction, and maintenance consulting, organizing 30 – 100 student volunteers per year: 2009 – Present

Instructional workshops for sustainable equestrian trail building, IL State Horse Fair, 2013, 2014

Carterville High School, Career Day talks with classes of approximately 20 students. Spoke about natural resources-related careers including forestry, hydrology, and recreation management, 2010 – 2013

Illinois Department of Natural Resources and volunteers, designed and provided *pro bono* 2-day trail construction and maintenance training session at Jubilee College State Park, Peoria IL, 2012

Green Earth, Inc., Carbondale, IL, reviewed and updated environmental interpretive literature trailside pamphlets, 2010

Traffic and Parking Committee, Furman University, Environmental Representative, 2001 – 2002

Associated Colleges of the South, Environmental Ambassador to Furman University, 2001 – 2002