

## **Yu-Fai LEUNG, Ph.D.**

Professor and Director of Graduate Programs  
Department of Parks, Recreation and Tourism Management  
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### **EDUCATION**

- **Doctor of Philosophy**, Forestry, Virginia Polytechnic Institute & State University (Virginia Tech), 1998  
Dissertation: Assessing and Evaluating Recreation Resource Impacts: Spatial Analytical Approaches (Advisor: Dr. Jeffrey L. Marion)
- **Master of Philosophy**, Geography, The Chinese University of Hong Kong (CUHK), 1992  
Thesis: A Study of Trail Degradation along the Pat Sin Range, North New Territories, Hong Kong (Advisor: Dr. Ronald J. Neller)
- **Bachelor of Social Science (Honors)**, Geography (Biology Minor), CUHK, 1989

### **ACADEMIC INTERESTS**

- Sustainable visitor use (e.g., recreation, tourism, ecotourism, geotourism) in global protected, conserved and wilderness areas, incl. UNESCO World Heritage sites, Biosphere Reserves, Global Geoparks, and Antarctica
- Recreation ecology, with special focus on monitoring and managing visitor use and impacts
- Participatory monitoring as applied to visitor use and impacts in parks and protected areas
- Effectiveness evaluation of site, visitor and protected area management strategies and actions
- Applications of geospatial technology and analytics

### **APPOINTMENTS HELD**

- **North Carolina State University (NCSU), Raleigh, NC, USA**
  - College of Natural Resources (CNR)
    - Department of Parks, Recreation & Tourism Management (PRTM)
      - Full Professor, 2012–Present (Associate Prof., 2005–2012; Assistant Prof., 1999–2005)
      - Director of Graduate Programs, 2014–Present
    - Department of Forestry and Environmental Resources (FER)
      - Associate Faculty, 2006–Present
    - Center for Geospatial Analytics (CGA)
      - Faculty Fellow, 2017–Present
    - Human Dimensions Faculty, 2018–Present
  - College of Humanities and Social Sciences (CHASS)
    - Graduate Faculty, Liberal Studies Graduate Program, 2023–Present
- **Oregon State University, Corvallis, Oregon, USA**
  - Affiliate Faculty, Department of Forest Ecosystems and Society, 2022–Present
- **The Chinese University of Hong Kong, Hong Kong SAR, PR China**
  - Adjunct Professor, Department of Geography and Resource Management, 2013–Present
  - Visiting Lecturer, 2009–2010

- National Taiwan University, Taipei, Taiwan ROC
  - School of Forestry and Resource Conservation
    - Visiting Professor, 2021
    - Visiting Associate Professor, 2007–2008
- 2002, International Consultant on Forest Ecotourism, Chinese Academy of Forestry Sciences, PR China
- 1998–1999, Postdoctoral Research Associate, Department of Forestry, Virginia Tech
- 1998, Recreational Use Consultant, New York City Department of Environmental Protection

## **TEACHING EXPERIENCE**

### *Courses Taught:*

- 2020–Present, Doctoral Seminar in Parks, Recreation and Tourism Research, NCSU (Graduate)
- 2010–2019, Application of GIS and Spatial Analysis in Parks, Recreation, Tourism and Sport, NCSU (Graduate; Professional PRTM Master’s Program—Distance Education)
- 2009–2010, Resource and Environmental Management for Ecotourism (M.Soc.Sc. in Sustainable Tourism Program, CUHK (Graduate; Summer class)
- 2000–Present, Environmental Impacts of Recreation and Tourism, NCSU (Graduate)
- 2000–2006, Principles of Geographic Information Science, NCSU (Graduate)
- 1999–2014, Principles of Recreation Planning and Facility Development, NCSU (Undergraduate)

### *Guest Lectures:*

- Introduction to Geographic Information Science (Graduate)
- Landscape Design Methods (Graduate)
- Introduction to Forest Science (Undergraduate)
- World Forestry (Undergraduate)
- Various PRTM classes

## **ADVISING/MENTORING EXPERIENCE**

### *Graduate Students*

- 2018–2023, Faculty advisor, National Parks Club of NC State
- 2017–Present, Host/advisor of 5 exchange students/scholars (Brazil, PR China, Ecuador, Hong Kong SAR)
- 2007–Present, Member of graduate student committees (off-campus)
  - Oregon State University (Department of Forest Ecosystems and Society), Corvallis, Oregon, USA (1 PhD)
  - Stephen F. Austin State University (Arthur Temple College of Forestry and Agriculture), Nacogdoches, Texas, USA, 2014-2017 (3 Master’s)
  - University of Washington (School of Environmental and Forest Resources), Seattle, Washington, USA, 2010-2013 (1 PhD)
  - National Taiwan University (School of Forestry and Resource Conservation), Taiwan ROC, 2007-2016 (3 Master’s)
  - National Taiwan Normal University (Department of Geography), Taiwan ROC, 2007-2009 (2 PhD’s)
- 2006–Present, Student participation in NCSU Graduate Research Symposia
  - 8 posters presented
- 2010–Present, Advisor, Masters of Parks, Recreation, Tourism and Sport Management (MPRTSM) Degree Program
- 1999–Present, Chair/Co-chair of graduate student committees, NCSU (30)
  - 11 PhD, 19 MS/MNR
- 1999–Present, Member of graduate student committees, NCSU (44)
  - 13 PhD, 31 MS/MNR

## *Undergraduate Students*

- 2013 and 2019, Undergraduate Research Mentor
  - 2019: Developing and evaluating a camera-trap method for visitor use monitoring in the Galapagos Islands (award amount \$1000)
  - 2013: Characterizing visitor behavior and the associated impacts at disc golf courses (award amount \$750)
- 2012, Faculty Mentor, NCSU Global Perspectives Certificate

## **RESEARCH EXPERIENCE**

*Research Grants:* (Total = \$2,131,744; in US\$ unless otherwise indicated)

1. 2023-2028 Dutch Research Council (Co-P.I.)  
Bastmeijer, K., Aerts, R., Bokhorst, S., **Leung, Y.-F.**, Chown, S., Convey, P., Lee, J. Antarctic tourism: Developing knowledge and tools to minimize cumulative impacts on biodiversity and wilderness values in Antarctica (ANT-MICI)  
\$229,106 (€ 212,136, exchange rate as of March 24, 2023)
2. 2023-2028 Dutch Research Council (Co-P.I.)  
Scheepstra, A. J. M., Liggett, D., **Leung, Y.-F.** GUIDE-BEST: Growing understanding of individual drivers of expectations and behaviours to enhance sustainable tourism in Antarctica  
\$47,765 (€ 44,227, exchange rate as of March 24, 2023)
3. 2020–2022, Academic Consortium for the 21<sup>st</sup> Century (P.I.)  
**Leung, Y.-F.**, Liggett, D., and Wu, C.-Z. Workshop to develop a collaborative research network and agenda for Antarctic tourism  
\$9,824
4. 2017–2022, North Carolina Wildlife Resources Commission (co-P.I.)  
Peterson, N., **Leung, Y.-F.**, Pacifici, K. and Sills, E., Determining use, economic impacts and value of game lands in North Carolina  
\$371,697
5. 2017–2018, U.S. National Park Service, Cape Lookout National Seashore (co-P.I.)  
Stevenson, K., **Leung, Y.-F.**, and Strnad, R. Creating Resource Stewardship: Data & K-12 Curriculum for Sustainable Wild Horse-Visitor Dynamics (Phase I)  
\$45,235
6. 2015–2018, Conservation Legacy (co-P.I.),  
Edwards, M. B., **Leung, Y.-F.**, Seekamp, E. L. and Blank, G. B., 2015-2018 Conservation Corps Trail and Habitat Improvements Evaluation  
\$185,689
7. 2015–2017, USDI National Park Service (co-P.I.),  
Marion, J. L., Wimpey, J. and **Leung, Y.-F.**, Appalachian Trail sustainability assessment study  
\$19,000 to NCSU (Total grant received: \$93,500)
8. 2014–2016, Hong Kong Research Grants Council, General Research Fund (co-P.I.),  
Ng, S.-L., Lin, H. and **Leung, Y.-F.**, A multidisciplinary study of trail degradation, mechanism and virtual geographic environment  
No direct funding to NCSU (Total grant received: \$88,000/HK\$680,683)

9. 2014–2015, USDI National Park Service (P.I.),  
**Leung, Y.-F.** and Walden-Schreiner, C., Geospatial analysis of pack stock movement and grazing patterns as related to vegetation and ground features in Yosemite’s subalpine meadows.  
\$16,330
10. 2012–2019, IUCN-International Union for Conservation of Nature, Gland, Switzerland (P.I.),  
**Leung, Y.-F.**, Spenceley, A., Hvenegaard, G. and Buckley, R., *IUCN Best Practice Guidelines for Sustainable Tourism in Protected Areas (Third Edition)*.  
\$125,237 (Funding sources included IUCN, French Ministry of Foreign Affairs, and GIZ-Germany)
11. 2012–2013, University Global Partnership Network (P.I.),  
**Leung, Y.-F.**, Developing a collaborative learning network for visitor impact monitoring in U.S. and Brazilian protected areas.  
\$10,000
12. 2012–2013, NCSU Extension and Engagement Seed Grant (P.I.),  
**Leung, Y.-F.**, Enhancing protected area management and stewardship education through participatory monitoring: prototype development for North Carolina Coastal Reserves.  
\$9,800
13. 2012–2013, North Carolina Sea Grant (co-P.I.),  
Morais, D., Brothers, G. L., **Leung, Y.-F.** and Rozier Rich, S. J., Inventorying non-consumptive utilitarian uses of coastal resources.  
\$5,000
14. 2011–2013, USDI National Park Service (P.I.),  
**Leung, Y.-F.** and Anderson, D., Developing a strategy for protection of cultural sites along the shoreline of Lake Powell at Glen Canyon National Recreation Area.  
\$7,500 (Total grant received: \$35,000)
15. 2010–2014, USDA McIntire-Stennis Research Program (P.I.)  
**Leung, Y.-F.** and Anderson, D., Understanding natural resource impacts of emerging recreational activities in urban forests and natural areas.  
\$72,000 (about \$18,000 per annum; funding allocated through college/department)
16. 2010–2012, North Carolina Wildlife Resources Commission (co-P.I.)  
Peterson, M. N., **Leung, Y.-F.** and Duda, M. D., A comprehensive action plan for restructuring North Carolina’s licensing and permit systems.  
\$56,288 (Total grant received: \$141,588)
17. 2010–2011, USDI National Park Service (P.I.),  
**Leung, Y.-F.** Developing methods for integrated analysis of meadow condition and informal trail data in Yosemite National Park.  
\$18,000
18. 2009–2012, USDA Forest Service, Urban and Community Forestry Grant (Co-P.I.)  
Floyd, M, McHale, M., **Leung, Y.-F.**, Baran, P., Devine, H. and Anderson, D., Understanding urban and community forests contributions to physical activity and health.  
\$148,752
19. 2007–2010, Burroughs Wellcome Fund (Co-P.I.)  
Ting, R. S., **Leung, Y.-F.** and Stewart, K., Geosciences in Middle School Program.  
\$171,222

20. 2006–2010, USDI National Park Service (Co-P.I.)  
Marion, J. and **Leung, Y.-F.**, Investigating resource impacts associated with on- and off-trail hiking within the Potomac Gorge.  
\$52,745 (Total grant received: \$150,494)
21. 2006–Present (continuing), National Association of State Park Directors (P.I.),  
**Leung, Y.-F.** Annual Information Exchange of state park operations in the U.S.  
\$348,330 as of January 25, 2023
22. 2007–2008, USDI National Park Service (P.I.),  
**Leung, Y.-F.**, Developing monitoring/analysis protocol for informal trails in Yosemite National Park  
\$8,704
23. 2003–2009, USDA McIntire-Stennis Research Program (P.I.)  
**Leung, Y.-F.**, Assessing and managing recreational use impacts.  
Funding varies each year; allocated through college/department (actual amount unknown)
24. 2006–2007, NCSU Internationalization Seed Grant (P.I.),  
**Leung, Y.-F.**, Comparing visitor impact monitoring programs between the U.S. and Australia.  
\$4,000
25. 2006–2007, USDI National Park Service (P.I.),  
**Leung, Y.-F.**, Research to Support the Application of the Visitor Experience and Resource Protection Program to the Tuolumne Wild and Scenic River, Yosemite National Park: Development of Preliminary Indicators and Standards of Quality (Phase I). \$8,297
26. 2006–2007, USDI National Park Service (P.I.),  
**Leung, Y.-F.**, Development and implementation of monitoring protocols in support of the Visitor Experience and Resource Protection Program for the Merced Wild and Scenic River, Yosemite National Park (Phase III).  
\$11,024
27. 2004–2005, USDI National Park Service (P.I.)  
**Leung, Y.-F.**, Developing sampling and data analysis methodology for Merced River Monitoring Field Guide, Yosemite National Park.  
\$26,780
28. 2003–2004, NCSU Faculty Center for Teaching and Learning, Teaching Grant (P.I.)  
**Leung, Y.-F.**, Enriching course contents and improving student learning with multimedia examples and demonstrations.  
\$2,000
29. 2002–2005, USDI National Park Service (Co-P.I.)  
Monz, C. and **Leung, Y.-F.**, Developing visitor impact monitoring programs for seven coastal national parks in the eastern United States.  
\$42,350 (Total grant received: \$103,866)
30. 2001–2002, Earthwatch Institute (Co-P.I.),  
Manning, R. and **Leung, Y.-F.**, Carrying Capacity in National Parks.  
\$11,520
31. 2000–2003, USDI National Park Service (P.I.)  
**Leung, Y.-F.** and Manning, R., Research to support implementation of the Visitor Experience and Resource Protection (VERP) framework in the Boston Harbor Islands National Recreation Area.  
\$89,248 (Total grant received: \$214,399)

32. 2000–2002, The Leave No Trace, Inc. (P.I.)  
**Leung, Y.-F.** and Attarian, A., Effectiveness evaluation of the national Leave No Trace (LNT) outdoor skills and ethics program.  
\$10,000
33. 2000–2001, NCSU Internationalization Seed Grant (P.I.)  
**Leung, Y.-F.**, Sustainable ecotourism development in China.  
\$4,700
34. 1999–2003, Aldo Leopold Wilderness Research Institute (P.I.)  
**Leung, Y.-F.**, An annotated bibliography of recreation ecology and visitor impact research.  
\$8,000

#### *Involvement in Other Funded Projects*

1. 2019–Present, Invited Member, XXIV Antarctic Research Expedition Team, Ecuadorian Antarctic Institute
2. 2017–2019, Invited Member, University of San Francisco Quito, Institute for Applied Ecology (ECOLAP) Research Team (Galapagos National Park monitoring partnership)
3. 2016–2018, Management effectiveness evaluation and strategic planning for Yangmingshan National Park (Taiwan Department of Interior, National Park Administration)
4. 2014–2018, Community of practice for tourism management in Brazilian protected areas (USAID/USFS)
5. 2011–2012, International exchange of recreation ecology research (US Forest Service & Griffith Univ., Australia)
6. 2009–2016, Building capacity of Taiwan Forestry Bureau staff for protected area management, Taiwan ROC (Taiwan Forestry Bureau)
7. 2008–2010, Application of VERP Management Framework to Yu Shan and Taroko National Parks, Taiwan ROC (Taiwan Department of Interior, National Park Administration)
8. 2007–2012, Building community capacity through trail resource monitoring in Linmei Village, Ilan County, Taiwan ROC (Taiwan Forestry Bureau)

## **PUBLICATIONS**

### *Peer-reviewed Journal Articles (84)*

1. Liggett, D., Cajiao, D., Lamers, M., **Leung, Y.-F.**, & Stewart, E. J. The future of sustainable polar tourism. *Cambridge Prisms: Coastal Future*, 1, Art. e21. <https://doi.org/10.1017/cft.2023.10>.
2. Laanisto, L., Jaksi, P., Härm, L., Hallikma, T., Kull, T., & **Leung, Y.-F.** (2023). GetDiv – A call for global coordinated study on plant diversity changes on nature trails. *Journal of Ecotourism*. Published online March 23, 2023. <https://doi.org/10.1080/14724049.2023.2191894>
3. Jouzi, Z., Nelson, S., & **Leung, Y.-F.** Spatial heterogeneity of child malnutrition, proximity to protected areas and environmental variabilities in Zimbabwe. *GeoJournal*. Published online February 14, 2023. <https://doi.org/10.1007/s10708-023-10842-5>

4. Jouzi, Z., **Leung, Y.-F.**, & Nelson, S. (2022). Addressing the food security and conservation challenges: Can be aligned instead of apposed? *Frontiers in Conservation Science*, 3, Art. 921895. <https://doi.org/10.3389/fcosc.2022.921895>
5. Wu, C., Pan, W., & **Leung, Y.-F.** (2022). The international agreement on the development and management of Antarctic tourism (in Simplified Chinese) (南极旅游发展与管理的国际协议). *Ocean Development and Management (海洋开发与管理)*, 39(10), 55-61. <https://doi.org/10.20016/j.cnki.hykyfjgl.2022.10.001>
6. Tejedo, P., Benayas, J., Cajiao, D., **Leung, Y.-F.**, De Filippo, D., & Liggett, D. (2022). What are the real environmental impacts of Antarctic tourism? Unveiling their importance through a comprehensive meta-analysis. *Journal of Environmental Management*, 308, Art. 114634. <https://doi.org/10.1016/j.jenvman.2022.114634>
7. Cheung, S.-Y., **Leung, Y.-F.**, & Larson, L. (2022). Citizen science as a tool for enhancing recreation research in protected areas: Applications and opportunities. *Journal of Environmental Management*, 305, Art. 114353. <https://doi.org/10.1016/j.jenvman.2021.114353>
8. Cajiao, D., **Leung, Y.-F.**, Larson, L., Tejedo, P., & Benayas, J. (2022). Tourists' motivations, learning, and trip satisfaction facilitate pro-environmental outcomes of the Antarctic tourist experience. *Journal of Outdoor Recreation and Tourism*, 37, Art. 100454. <https://doi.org/10.1016/j.jort.2021.100454>
9. Cajiao, D., **Leung, Y.-F.**, Tejedo, P., Barbosa, A., Reck, G., & Benayas, J. (2022). Behavioural responses of two penguin species to human presence at Barrientos Island, a popular tourist site in the Antarctic Peninsula region. *Antarctic Science*, 34(2), 107-119. <https://doi.org/10.1017/S0954102021000559>
10. Miller, A. B., Blahna, D. J., Morse, W., **Leung, Y.-F.** & Rowland, M. M. (2022). From recreation ecology to a recreation ecosystem: A framework accounting for social-ecological systems. *Journal of Outdoor Recreation and Tourism*, 38, Art. 100455. <https://doi.org/10.1016/j.jort.2021.100455>
11. Cajiao, D., Benayas, J., Tejedo, P., & **Leung, Y.-F.** (2021). Adaptive management of sustainable tourism in Antarctica: A rhetoric or working progress? *Sustainability*, 13(14), Art. 7649. <https://doi.org/10.3390/su13147649>
12. Rogers, A., & **Leung, Y.-F.** (2021). "More helpful than hurtful?" Information, technology, and uncertainty in outdoor recreation. *Leisure Sciences*. Published online January 13, 2021. <https://doi.org/10.1080/01490400.2020.1871132>
13. Spenceley, A., McCool, S., Newsome, D., Baez, A., Barborak, J. R., Blye, C.-J., Bricker, K., Cahyadi, H., Corrigan, K., Halpenny, E., Hvenegaard, G., King, D., **Leung, Y.-F.**, Mandic, A., Naidoo, R., Ruede, D., Sano, J., Sarhan, M., Santamaria, V., Beraldo Sousa, T., & Zschiegner, A.-K. (2021). Tourism in protected areas amid the COVID-19 pandemic. *PARKS: International Journal of Protected Areas and Conservation*, 27(SI), 103-118. <https://doi.org/10.2305/IUCN.CH.2021.PARKS-27-SIAS.en>
14. Smith, C., **Leung Y.-F.**, & Seekamp, E. (2021). Assessing geospatial technology implementation capacity and engagement for natural resource management networks: A proposed framework. *Journal of Park and Recreation Administration*, 39(2), 24-42. <https://doi.org/10.18666/JPRA-2020-10548>
15. Cajiao, D., Izurieta, J. C., Casafont, M., Reck, G., Castro, K., Santamaria, V., Cardenas, S., & **Leung, Y.-F.** (2020). Tourist use and impact monitoring in the Galapagos: An evolving program with lessons learned. *PARKS: International Journal of Protected Areas and Conservation*, 26(2), 89-102. <https://doi.org/10.2305/IUCN.CH.2020.PARKS-26-2DC.en>
16. Jouzi, Z., **Leung, Y.-F.**, & Nelson, S. (2020). Terrestrial protected areas and food security: A systematic review of research approaches. *Environments*, 7(10), Art. 83. <https://doi.org/10.3390/environments7100083>

17. Roger, A. G., & **Leung, Y.-F.** (2020). Smarter long-distance Hike: How smartphones shape information use and spatial decisions on the Appalachian Trail. *International Journal of Wilderness*, 26(2), 88-103.
18. Perry, E. E., Thomsen, J. M., D'Antonio, A. L., Morse, W., Reigner, N., **Leung, Y.-F.**, Wimpey, J., & Taff, B. D. (2020). Toward an integrated model of topical, spatial, and temporal scales of research inquiry in park visitor use management. *Sustainability*, 12(15), Art. 6183. <https://doi.org/10.3390/su12156183>
19. Miller, A., Kays, R., & **Leung, Y.-F.** (2020). Wildlife response to recreational trail building: An experimental method and Appalachian case study. *Journal for Nature Conservation*, 56, Art. 125815. <https://doi.org/10.1016/j.jnc.2020.125815>
20. Guo, J.-H., Guo, T., Lin, K.-M., Lin, D.-D., **Leung, Y.-F.**, & Chen, Q.-H. (2019). Managing congestion at visitor hotspots using park-level use level data: Case study of a Chinese World Heritage site. *PLoS ONE*, 14(7), e0215266. <https://doi.org/10.1371/journal.pone.0215266>
21. Smith, J. W., Wilkins, E., & **Leung, Y.-F.** (2019). Attendance trends threaten future operations of America's state park systems. *Proceedings of the National Academy of Sciences of the U.S.A.*, 116(26), 12775-12780. <https://doi.org/10.1073/pnas.1902314116>
22. Tsai, W.-L., **Leung, Y.-F.**, McHale, M. R., Floyd, M. F., & Reich, B. J. (2019). Relationships between urban green land cover and human health at different spatial resolutions. *Urban Ecosystems*, 22(2), 315-324. <https://doi.org/10.1007/s11252-018-0813-3>
23. Ng, S.-L., **Leung, Y.-F.**, Cheung, S.-Y., & Fang, W. (2018). Land degradation effects initiated by trail running events in an urban protected area of Hong Kong. *Land Degradation and Development*, 29(3), 422-432. <https://doi.org/10.1002/ldr.2863>
24. Tsai, W.-L., McHale, M. R., Jennings, V., Marquet, O., Hipp, J. A., **Leung, Y.-F.**, & Floyd, M. F. (2018). Relationships between characteristics of urban green land cover and mental health in U.S. metropolitan areas. *International Journal of Environmental Research and Public Health*, 15, Art. 340. <https://doi.org/10.3390/ijerph15020340>
25. Walden-Schreiner, C., **Leung, Y.-F.**, & Tateosian, L. (2018). Digital footprints: Incorporating crowdsourced geographic information for protected area management. *Applied Geography*, 90, 44-54. <https://doi.org/10.1016/j.apgeog.2017.11.004>
26. Walden-Schreiner, C., **Leung, Y.-F.**, Kuhn, T., & Newburger, T. (2018). Integrating direct observation and GPS tracking to monitor animal behavior for resource management. *Environmental Monitoring and Assessment*, 190, Article 75. <https://doi.org/10.1007/s10661-018-6463-3>
27. Walden-Schreiner, C., Rossi, S. D., Barros, A., Pickering, C., & **Leung, Y.-F.** (2018). Using crowd-sourced photos to assess seasonal patterns of visitor use in mountain-protected areas. *Ambio*, 47(7), 781-793. <https://doi.org/10.1007/s13280-018-1020-4>
28. Burroughs, K., **Leung, Y.-F.**, Moore, R. L., & Blank, G. (2017). Trail drainage features: Development and testing of an assessment tool. *Park Science*, 33(1), 42-49. [https://www.nps.gov/articles/parkscience33-1\\_42-49\\_burroughs\\_et\\_al\\_3854.htm](https://www.nps.gov/articles/parkscience33-1_42-49_burroughs_et_al_3854.htm)
29. Hockett, K., Marion, J. L., & **Leung, Y.-F.** (2017). The efficacy of combined educational and site management actions in reducing off-trail hiking in an urban-proximate protected area. *Journal of Environmental Management*, 203, 17-28. <https://doi.org/10.1016/j.jenvman.2017.06.073>
30. Miller, A., **Leung, Y.-F.**, & Kays, R. (2017). Coupling visitor and wildlife monitoring in protected areas using camera traps. *Journal of Outdoor Recreation and Tourism*, 17, 44-53. <https://doi.org/10.1016/j.jort.2016.09.007>



31. Walden-Schreiner, C., **Leung, Y.-F.**, Kuhn, T., Newburger, T., & Tsai, W.-L. (2017). Environmental and managerial factors associated with pack stock distribution in high-elevation meadows: Case study from Yosemite National Park. *Journal of Environmental Management*, 193, 52-63. <https://doi.org/10.1016/j.jenvman.2017.01.076>
32. **Leung, Y.-F.**, Smith, J. W., Seekamp, E., Conlon, K., Mayer, J. E., Guo, T., Walden-Schreiner, C., Adams, B., & Keane, R. (2016). The effects of 2D and 3D imagery and an educational message on perceptions of trail impacts. *Natural Areas Journal*, 36(1), 88-92. <https://doi.org/10.3375/043.036.0115>
33. Li, J. Whitlow, M., Meszaros, K., **Leung, Y.-F.**, & Barbieri, C. (2016). A preliminary evaluation of World Heritage tourism promotion: Comparing websites from Australia, China and Mexico. *Tourism Planning and Development*, 13(3), 370-376. <https://doi.org/10.1080/21568316.2015.1101393>
34. Marion, J. L., **Leung, Y.-F.**, Eagleston, H., & Burroughs, K. (2016). A review and synthesis of recreation ecology research findings on visitor impacts to wilderness and protected natural areas. *Journal of Forestry*, 114(3), 352-362. <https://doi.org/10.5849/jof.15-498>
35. Tsai, W.-L., Floyd, M. F., **Leung, Y.-F.**, McHale, M. R., & Reich, B. J. (2016). Urban vegetative cover fragmentation in the U.S.: Associations with physical activity and body mass index. *American Journal of Preventive Medicine*, 50(4), 509–517. <https://doi.org/10.1016/j.amepre.2015.09.022>
36. Xu, S., Barbieri, C., Anderson, D., **Leung, Y.-F.**, & Rozier Rich, S. (2016). Residents' perceptions of wine tourism development. *Tourism Management*, 55, 276-286. <https://doi.org/10.1016/j.tourman.2016.02.016>
37. Xu, S., **Leung, Y.-F.**, & Barbieri, C. (2016). Characterizing themed touring routes: A geospatial and tourism evaluation of wine trails. *Tourism Planning and Development*, 13(2), 168-184. <https://doi.org/10.1080/21568316.2015.1074096>
38. Guo, T., Smith, J. W., **Leung, Y.-F.**, Seekamp, E., & Moore, R. L. (2015). Determinants of responsible hiking behavior: Results from a stated preference experiment. *Environmental Management*, 56(3), 765-776. <https://doi.org/10.1007/s00267-015-0513-1>
39. **Leung, Y.-F.**, Walden-Schreiner, C., Conlon, K., & Miller, A. (2015). A simple method for monitoring dog leash compliance behavior in parks and natural areas. *Journal of Outdoor Recreation and Tourism*, 9, 11-16. <https://doi.org/10.1016/j.jort.2015.03.001>
40. Serenari, C., Peterson, N., Stowhas, P., **Leung, Y.-F.**, Wallace, T., & Sills, E. (2015). Private development-based forest conservation in Patagonia: Comparing mental models and revealing cultural truths. *Ecology and Society*, 20(3), Art 4. <https://doi.org/10.5751/ES-07696-200304>
41. Smith, J. W., **Leung, Y.-F.**, Seekamp, E., Walden-Schreiner, C., & Miller, A. (2015). Projected impacts to the production of outdoor recreation opportunities across state park systems in the U.S. due to the adoption of a domestic climate change mitigation policy. *Environmental Science and Policy*, 48, 77-88. <https://doi.org/10.1016/j.envsci.2014.12.013>
42. **Leung, Y.-F.**, Barbieri, C., & Floyd, M. (2014). Tourism and recreation research along the natural-rural-urban gradient: Global trends and implications for China (in Simplified Chinese) (基于“自然—乡村—城市”梯度开展的旅游和游憩研究: 全球发展趋势和对中国的含义). *Tourism Tribune (旅游学刊)*, 29(6), 3-6. [Received the journal's 2014 Best Forum Paper Award] <http://qikan.cqvip.com/Qikan/Article/Detail?id=49835709>
43. Walden-Schreiner, C., **Leung, Y.-F.**, & Floyd, M. (2014). Incorporating physical activity measures into environmental monitoring of national parks: An example from Yosemite. *Journal of Physical Activity and Health*,

44. **Leung, Y.-F.**, Walden-Schreiner, C., Matisoff, C., Naber, M., & Robinson, J. (2013). A two-pronged approach to evaluating the environmental sustainability of disc golf as emerging recreation in urban natural areas. *Managing Leisure, 18*(4), 273-285. <https://doi.org/10.1080/13606719.2013.809181>
45. Serenari, C., & **Leung, Y.-F.** (2013). Going global: Rethinking the cross-cultural transfer of minimal impact education programs in protected areas. *Journal of Park and Recreation Administration, 31*(2), 61-75. <https://js.sagamorepub.com/jpra/article/view/3886>
46. Walden-Schreiner, C., & **Leung, Y.-F.** (2013). Spatially characterizing visitor use and its association with informal trails in Yosemite Valley meadows. *Environmental Management, 52*(1), 163-178. <https://doi.org/10.1007/s00267-013-0066-0>
47. **Leung, Y.-F.** (2012). Recreation ecology research in East Asia's protected areas: Redefining impacts? *Journal for Nature Conservation, 20*(6), 349-356. <https://doi.org/10.1016/j.jnc.2012.07.005>
48. Miller, A., **Leung, Y.-F.**, & Lu, D.-J. (2012). Community-based monitoring of tourism resources as a tool for supporting the Convention on Biological Diversity targets: A preliminary global assessment. *PARKS: International Journal of Protected Areas and Conservation, 18*(2), 120-131.
49. Moore, R., **Leung, Y.-F.**, Matisoff, C., Dorwart, C., & Parker, A. (2012). Understanding users' perceptions of trail resource impacts and how they affect experiences: An integrated approach. *Landscape and Urban Planning, 107*, 343-350.
50. Newsome, D., Dowling, R., & **Leung, Y.-F.** (2012). The nature and management of geotourism: The case of two established iconic geotourism destinations in Australia and Taiwan. *Tourism Management Perspectives, 2-3*, 19-27.
51. Serenari, C., **Leung, Y.-F.**, Attarian, A., & Franck, C. (2012). Understanding environmentally significant behavior among whitewater and trekking guides in the Garhwal Himalaya, India. *Journal of Sustainable Tourism, 20*(5), 757-772.
52. Siderelis, C., Moore, R., **Leung, Y.-F.**, & Smith, J. (2012). A national production analysis of state park attendance in the United States. *Journal of Environmental Management, 99*, 18-26.
53. Ting, S. R., **Leung, Y.-F.**, Stewart, K., Smith, A. C., Roberts, G. L., & Dees, S. (2012). A preliminary study of career education in middle school. *Journal of Career and Technical Education, 27*(2), 84-97.
54. Walden-Schreiner, C., **Leung, Y.-F.**, Newburger, T., & Woiderski, B. (2012). Developing an accessible methodology for monitoring visitor use patterns in open landscapes at Yosemite National Park. *Park Science, 29*(1), 53-61.
55. **Leung, Y.-F.**, Newburger, T., Jones, M., Kuhn, B., & Woiderski, B. (2011). Developing a monitoring protocol for visitor-created informal trails in Yosemite National Park, USA. *Environmental Management, 47*(1), 93-106.
56. Lu, D.-J., **Leung, Y.-F.**, & Hsieh, H.-T. (2011). Research to support the establishment of a community-based monitoring program for Shih-Pan Trail in Lin-Mei Village, Taiwan ROC (in Traditional Chinese) (社區參與自然步道監測之研究--以宜蘭縣礁溪鄉林美石磐步道為例). *Quarterly Journal of Chinese Forestry (中華林學季刊)*, 44(2), 265-284.
57. Marion, J. L. & **Leung, Y.-F.** (2011). Indicators and protocols for monitoring impacts of formal and informal trails in protected areas. *Journal of Tourism and Leisure Studies, 17*(2), 215-236.

58. Chiou, C.-Y., Tsai, W.-L., & **Leung, Y.-F.** (2010). A GIS-dynamic segmentation approach to planning travel routes on forest trail networks in central Taiwan. *Landscape and Urban Planning*, 97, 221-228. <https://doi.org/10.1016/j.landurbplan.2010.06.004>
59. Lin, H.-C., **Leung, Y.-F.**, & Hsu, S.-I. (2010). A study of trail impacts and their management effectiveness (in Traditional Chinese) (鋪面步道衝擊及其管理有效性研究--以陽明山國家公園為例). *Chinese Journal of Environmental Education (環境教育學刊)*, 10, 1-19. <https://envir.utapei.edu.tw/var/file/83/1083/img/1227/213630292.pdf>
60. Monz, C., Cole, D. N., **Leung, Y.-F.**, & Marion, J. L. (2010). Sustaining visitor use in protected areas: Future opportunities in recreation ecology research based on the USA experience. *Environmental Management*, 45(3), 551-562. <https://doi.org/10.1007/s00267-009-9406-5>
61. Dorwart, C., Moore, R. L., & **Leung, Y.-F.** (2010). Visitors' perceptions of a trail environment and their effects on experiences: A model for nature-based recreation experiences. *Leisure Sciences*, 32(1), 33-54. <https://doi.org/10.1080/01490400903430863>
62. Pickering, C. P., Hill, W., Newsome, D., & **Leung, Y.-F.** (2010). Comparing hiking, mountain biking and horse riding impacts in Australian and the USA. *Journal of Environmental Management*, 91(3), 551-562. <https://doi.org/10.1016/j.jenvman.2009.09.025>
63. Siderelis, C., Naber, M., & **Leung, Y.-F.** (2010). Resource measures and demand for recreation outings: a mountain biking case study. *Journal of Leisure Research*, 42(4), 573-590. <https://doi.org/10.1080/00222216.2010.11950219>
64. Lin, H.-C., **Leung, Y.-F.**, Hsu, S.-I., & Sheu, J.-E. (2009). Factors that influence the effectiveness of trail surfacing in minimizing recreational impact: A study in Yangmingshan National Park (in Traditional Chinese) (鋪面步道對降低遊憩衝擊的影響--以陽明山國家公園為例). *Journal of National Parks (國家公園學報)*, 19(4), 65-79. [https://np.cpami.gov.tw/filesys/dl/type3/101/1687\\_add078af627e8aa0fd404d8c0643ebad.pdf](https://np.cpami.gov.tw/filesys/dl/type3/101/1687_add078af627e8aa0fd404d8c0643ebad.pdf)
65. Tien, S.-H., **Leung, Y.-F.**, & Lu, D.-J. (2009). Developing a quality evaluation tool for monitoring protocols of natural recreation areas (in Traditional Chinese) (自然遊憩區環境監測計畫之品質評估方法研究). *Quarterly Journal of Chinese Forestry (中華林學季刊)*, 42(3), 457-464. <https://doi.org/10.30064%2fQJCF.200909.0011>
66. Kline, C., Cardenas, D., **Leung, Y.-F.**, & Sanders, S. (2007). Sustainable farm tourism: Understanding and managing environmental impacts of visitor activities. *Journal of Extension*, 45(2). <https://archives.joe.org/joe/2007april/rb2.php>
67. Marion, J., **Leung, Y.-F.**, & Nepal, S. (2006). Monitoring trail conditions: New methodological considerations. *George Wright Forum*, 23(2), 36-49. <http://www.georgewright.org/232marion.pdf>
68. Monz, C. & **Leung, Y.-F.** (2006). Meaningful measures: developing indicators of visitor impact in the National Park Service Inventory and Monitoring program. *George Wright Forum*, 23(2), 17-27. <http://www.georgewright.org/232monz.pdf>
69. Newman, P., Monz, C., **Leung, Y.-F.**, & Theobald, D. (2006). Monitoring campsite proliferation and conditions: Recent methodological considerations. *George Wright Forum*, 23(2), 28-35. <http://www.georgewright.org/232newman.pdf>
70. Manning, R. E., **Leung, Y.-F.**, & Budruk, M. (2005). Research to support management of visitor carrying capacity of Boston Harbor Islands. *Northeastern Naturalist*, 12(SI-3), 201-220. <https://doi.org/10.1656/1092->

71. **Leung, Y.-F.** & Ivy, M. (2003). How useful are course websites? A study of students' perceptions. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 2(2), 15-24. <https://doi.org/10.3794/johlste.22.38>
72. **Leung, Y.-F.** & Lee, J.-H. (2003). Recreation ecology and visitor carrying capacity management: Implications for protected areas in East Asia. *Korean Journal of Ecology*, 26(2), 53-58. <https://doi.org/10.5141/JEFB.2003.26.2.053>
73. **Leung, Y.-F.**, Shaw, N., Johnson, K., & Duhaime, R. (2002). More than a database: Integrating GIS data with the Boston Harbor Islands visitor carrying capacity study. *George Wright Forum*, 19(1), 69-78. <http://www.georgewright.org/191leung.pdf>
74. **Leung, Y.-F.** (2001). Environmental impacts of tourism at China's World Heritage sites. *Tourism Recreation Research*, 26(1), 117-122. <https://doi.org/10.1080/02508281.2001.11081186>
75. Marion, J. L. & **Leung, Y.-F.** (2001). Trail resource impacts and an examination of alternative assessment techniques. *Journal of Park and Recreation Administration*, 19(3), 17-37.
76. **Leung, Y.-F.** & Marion, J. L. (1999). Assessing trail conditions in protected areas: An application of a problem-assessment method in Great Smoky Mountains National Park. *Environmental Conservation*, 26, 270-279. <https://doi.org/10.1017/S0376892999000399>
77. **Leung, Y.-F.** & Marion, J. L. (1999). Spatial strategies for managing visitor impacts in national parks. *Journal of Park and Recreation Administration*, 17(4), 20-38.
78. **Leung, Y.-F.** & Marion, J. L. (1999). Characterizing backcountry camping impacts in Great Smoky Mountains National Park, USA. *Journal of Environmental Management*, 57(3), 193-203. <https://doi.org/10.1006/jema.1999.0303>
79. **Leung, Y.-F.** & Marion, J. L. (1999). The influence of sampling interval on the accuracy of trail impact assessment. *Landscape and Urban Planning*, 43(4), 167-179. [https://doi.org/10.1016/S0169-2046\(98\)00110-8](https://doi.org/10.1016/S0169-2046(98)00110-8)
80. **Leung, Y.-F.** (1998). Using the Internet for natural resources research: Results from an online user survey. *Journal of Natural Resources and Life Sciences Education*, 27, 8-12. <https://doi.org/10.2134/jnrlse.1998.0008>
81. **Leung, Y.-F.** & Marion, J. L. (1998). Evaluating spatial qualities of visitor impacts on recreation resources: An index approach. *Journal of Applied Recreation Research*, 23(4), 367-389.
82. Lam, K.-C., **Leung, Y.-F.**, & Yao, Q. (1997). Nutrient fluxes in the Shenchong Basin, Deqing County, South China. *Catena*, 29(2), 191-209. [https://doi.org/10.1016/S0341-8162\(96\)00056-2](https://doi.org/10.1016/S0341-8162(96)00056-2)
83. **Leung, Y.-F.** & Marion, J. L. (1996). Trail degradation as influenced by environmental factors: A state-of-knowledge review. *Journal of Soil and Water Conservation*, 51(2), 130-136. <https://www.jswconline.org/content/51/2/130>
84. **Leung, Y.-F.** & Neller, R. J. (1995). Trail degradation along the Pat Sin Range: An example of environmental geomorphology. *Hong Kong Geologist*, 1, 79-87. <http://geolsoc.org.hk/hkgeologist.htm>

#### Books (2)

1. **Leung, Y.-F.**, Spenceley, A., Hvenegaard, G., & Buckley, R. (eds.) (2018). *Tourism and Visitor Management in Protected Areas: Guidelines for Sustainability*. Best Practice Protected Area Guidelines Series No. 27. Gland, Switzerland: International Union for Conservation of Nature. <https://doi.org/10.2305/IUCN.CH.2018.PAG.27.en>

(Published in multiple languages)

- Chinese (simplified Chinese characters) translated version -- forthcoming
- **English version (original version)** – <https://portals.iucn.org/library/node/47918>
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- Mongolian translated version (translator: Taad Merer) -- <https://portals.iucn.org/library/node/49060>
- Portuguese translated version (translator: Ivan Santos) – <https://portals.iucn.org/library/node/48538>
- Spanish translated version (translator: Carolina Amaya) – <https://portals.iucn.org/library/node/48354>

2. Hsu, Y.-C., **Leung, Y.-F.**, Li, Y.-H., Wang C.-P., & Lue, C.-C. (edited and translated) (2010). *An Assessment of Frameworks Useful for Public Land Recreation Planning* (in Chinese) (遊憩規劃與管理架構評估). Taipei, Taiwan ROC: Hua Li Publishing, 340p. <https://www.taaze.tw/products/11100252770.html>

#### *Book Chapters/Contributions (23)*

1. Vukomanovic, J., Walden-Schreiner, C., Hipp, J. A., & **Leung, Y.-F.** (2022). GIS&T in recreation planning and management. In: *GIS&T Body of Knowledge*. Ithaca, NY: University Consortium for Geographic Information Science. Published online March 25, 2022. <https://doi.org/10.22224/gistbok/2022.1.8>
2. Cajiao, D., & **Leung, Y.-F.** (2022). Experiencing Antarcticness: Slow tourists, fast penguins, and timeless landscapes. In: Kelman, I. (ed.), *Antarcticness: Inspirations and Imaginaries*. London: University College London Press. <https://doi.org/10.14324/111.9781800081444>
3. Magro-Lindenkamp, T. C., & **Leung, Y.-F.** (2019). Managing environmental impacts of tourism. In: McCool, S. F., & Bosak, K. (eds.), *A Research Agenda for Sustainable Tourism* (pp. 223-238). Cheltenham, UK: Edward Elgar. <https://www.e-elgar.com/shop/usd/a-research-agenda-for-sustainable-tourism-9781788117098.html>
4. Halpenny, E., Salenieks, T., Manning, R., **Leung, Y.-F.**, & Spenceley, A. (2018). Aligning management objectives with tourism impacts. In: Leung, Y.-F., Spenceley, A., Hvenegaard, G., & Buckley, R. (eds.) (2018). *Tourism and Visitor Management in Protected Areas: Guidelines for Sustainability* (pp.27-40). Best Practice Protected Area Guidelines Series No. 27. Gland, Switzerland: IUCN.
5. Hvenegaard, G., Buckley, R., Spenceley, A., & **Leung, Y.-F.** (2018). The future of protected area tourism. In: Leung, Y.-F., Spenceley, A., Hvenegaard, G., & Buckley, R. (eds.) (2018). *Tourism and Visitor Management in Protected Areas: Guidelines for Sustainability* (pp.89-95). Best Practice Protected Area Guidelines Series No. 27. Gland, Switzerland: IUCN.
6. **Leung, Y.-F.**, Spenceley, A., McCool, S. F., & Eagles, P. F. J. (2018). Tourism and visitation in protected area: The sustainability challenge. In: Leung, Y.-F., Spenceley, A., Hvenegaard, G., & Buckley, R. (eds.) (2018). *Tourism and Visitor Management in Protected Areas: Guidelines for Sustainability* (pp.1-8). Best Practice Protected Area Guidelines Series No. 27. Gland, Switzerland: IUCN.
7. **Leung, Y.-F.**, Spenceley, A., Hvenegaard, G., & Buckley, R. (2018). Promoting partnerships through the European Charter for Sustainable Tourism. In: Leung, Y.-F., Spenceley, A., Hvenegaard, G., & Buckley, R. (eds.), *Tourism and Visitor Management in Protected Areas: Guidelines for Sustainability* (p. 28). Best Practice Protected Area Guidelines Series No. 27. Gland, Switzerland: IUCN.
8. **Leung, Y.-F.**, Halpenny, E., Salenieks, T., Manning, R., Bride, I., Walden-Schreiner, C., & Buckley, R. (2018). Adaptive management for sustainable tourism. In: Leung, Y.-F., Spenceley, A., Hvenegaard, G., & Buckley, R. (eds.) (2018). *Tourism and Visitor Management in Protected Areas: Guidelines for Sustainability* (pp.41-62). Best Practice Protected Area Guidelines Series No. 27. Gland, Switzerland: IUCN.
9. Spenceley, A., Hvenegaard, G., Bushell, R., **Leung, Y.-F.**, McCool, S. F., & Eagles, P. F. J. (2018). The impacts

- of protected area tourism. In: Leung, Y.-F., Spenceley, A., Hvenegaard, G., & Buckley, R. (eds.) (2018). *Tourism and Visitor Management in Protected Areas: Guidelines for Sustainability* (pp.9-26). Best Practice Protected Area Guidelines Series No. 27. Gland, Switzerland: IUCN.
10. Walden-Schreiner, C., Miller, A. B., & **Leung, Y.-F.** (2018). Monitoring of visitor use and impact indicators in Yosemite National Park (USA). In: Leung, Y.-F., Spenceley, A., Hvenegaard, G., & Buckley, R. (eds.) (2018). *Tourism and Visitor Management in Protected Areas: Guidelines for Sustainability* (p. 46). Best Practice Protected Area Guidelines Series No. 27. Gland, Switzerland: IUCN.
  11. Smith, C., Walden-Schreiner, C., & **Leung, Y.-F.** (2016). Participatory GIS in recreation resource planning. In: Baas, J., & Burns, R. (eds.), *Outdoor Recreation Planning* (pp. 102-109). Champaign, IL: Sagamore Publishing.
  12. **Leung, Y.-F.**, Hsu, Y.-C., & Lue, C. C. (2010). Visitor experience and resource protection (VERP): A planning and management framework for visitor impacts and carrying capacity of national parks (in Chinese). In: Hsu, Y.-C., Leung, Y.-F., Li, Y.-H., Wang C.-P., & Lue, C.-C. (eds. and trans.), *An Assessment of Frameworks Useful for Public Land Recreation Planning* (pp. 152-183). Taipei, Taiwan ROC: Hua Li Publishing.
  13. Li, Y.-H., Hsu, Y.-C., & **Leung, Y.-F.** (2010). Establishing indicators and standards for management zones in Tatajia (in Chinese). In: Hsu, Y.-C., Leung, Y.-F., Li, Y.-H., Wang C.-P., & Lue, C.-C. (eds. and trans.), *An Assessment of Frameworks Useful for Public Land Recreation Planning* (pp. 218-253). Taipei, Taiwan ROC: Hua Li Publishing.
  14. Hsu, Y.-C., **Leung, Y.-F.**, Li, Y.-H., Wang, C.-P., & Lue, C.-C. (2010). Experiences and lessons learned from applying VERP to Yushan National Park (in Chinese). In: Hsu, Y.-C., Leung, Y.-F., Li, Y.-H., Wang C.-P., & Lue, C.-C. (eds. and trans.), *An Assessment of Frameworks Useful for Public Land Recreation Planning* (pp. 270-295). Taipei, Taiwan ROC: Hua Li Publishing.
  15. Supak, S., **Leung, Y.-F.**, & Stewart, K. (2010). Geotourism potential in North Carolina: Perspectives from interpretation at state parks. In: Newsome, D. & Dowling, R. (eds.), *Geotourism: The Tourism of Geology and Landscape* (pp. 172-183). Oxford, UK: Goodfellow Publishers.
  16. **Leung, Y.-F.**, Marion, J. L., & Farrell, T. A. (2008). Recreation ecology in sustainable tourism and ecotourism: a strengthening role. In McCool, S. F. & Moisey, N. (eds), *Tourism, Recreation and Sustainability: Linking Culture and the Environment (2<sup>nd</sup> Ed)* (pp. 19-37). Wallingford, UK: CABI Publishing.
  17. **Leung, Y.-F.**, Marafa, L., & Chau, K. C. (2006). Embracing or overstretching the concept of urban ecotourism: The case of Hong Kong. In: Jim, C. Y. & Corlett, R. T. (eds.), *Sustainable Management of Protected Areas for Future Generations* (pp. 389-400). Gland, Switzerland and Hong Kong: IUCN-WCPA and Friends of Country Parks.
  18. **Leung, Y.-F.** & Marion, J. L. (2004). Management impacts of camping. In: Buckley, R. (ed.), *Environmental Impacts of Ecotourism* (pp. 245-258). Wallingford, UK: CABI Publishing.
  19. Marion, J. L. & **Leung, Y.-F.** (2004). Environmentally sustainable trail management. In: Buckley, R. (ed.), *Environmental Impacts of Ecotourism* (pp. 229-243). Wallingford, UK: CABI Publishing.
  20. **Leung, Y.-F.** (2003). Resource management. In: Jenkins, J. & Pigram, J. (eds), *Encyclopedia of Leisure and Outdoor Recreation* (pp. 434-435). London and New York: Routledge.
  21. **Leung, Y.-F.**, Marion, J. L., & Farrell, T. A. (2001). The role of recreation ecology in sustainable tourism and ecotourism. In: McCool, S. F. & Moisey, N. (eds), *Tourism, Recreation and Sustainability: Linking Culture and Environment* (pp. 21-39). Oxon, UK: CABI Publishing.
  22. Marion, J. L. & **Leung, Y.-F.** (1998). International impact research and management. In: Hammitt, W. E. &

Cole, D. N., *Wildland Recreation: Ecology and Management (2<sup>nd</sup> Ed.)* (pp. 329-346). New York, NY: John Wiley.

23. Marion, J. L. & **Leung, Y.-F.** (1998). Campsite survey implications for managing designated campsites at Great Smoky Mountains National Park. In: Kulhavy, D. L. & Legg, M. H. (eds.), *Wilderness and Natural Areas in Eastern North America: Research, Management and Planning* (pp. 146-155). Nacogdoches, TX: SFASU Center for Applied Studies in Forestry.

#### *Other Articles (12)*

1. **Leung, Y.-F.** (2023). Impacts of tourism in Antarctica. *IUCN Issues Brief*. Published online June 5, 2023 at <https://www.iucn.org/resources/issues-brief/impacts-tourism-antarctica>
2. Nielsen, H., Cajiao, D., Roldan, G., Benayas, J., Herbert, A., **Leung, Y.-F.**, Tejado, P., & Dinica, V. (2022). Is COVID-19 helping or hindering effective management of Antarctic Tourism? *Polar Perspectives*, No. 10, 17 pp.
3. Pickering, C., & **Leung, Y.-F.** (2016). Editorial for the special issue of the Journal of Outdoor Recreation and Tourism on mountain biking. *Journal of Outdoor Recreation and Tourism*, 15, iii-iv.
4. **Leung, Y.-F.**, & Catts, G. (2013). The joy of bioresources: Sustainable forest-recreation connections (invited editorial). *BioResources*, 8(1), 1-2.
5. Clark, A. & **Leung, Y.-F.** (2007). Getting out, going green: Outdoor recreation is linked to pro-environmental attitudes and behaviors, *Parks and Recreation*, 42(8), 26-31.
6. **Leung, Y.-F.** & Monz, C. (2006). Visitor impact monitoring: Old issues, new challenges (special issue introduction). *George Wright Forum*, 23(2), 7-10. <http://www.georgewright.org/232leung.pdf>
7. Naber, M. D. & **Leung, Y.-F.** (2006). Technology lends a helping hand: Recreation managers are learning the benefits of using geospatial technologies in resource management. *Parks and Recreation*, 41(7), 24-30.
8. Dorwart, C., **Leung, Y.-F.**, & Moore, R. (2004). Managing visitors' perceptions. *Parks and Recreation*, 39(5), 24-31.
9. **Leung, Y.-F.** (2004). Leisure matters to the environment: The era of ecoleisure. *Australasian Parks and Leisure*, 7(2), 20.
10. Wirsching, A., **Leung, Y.-F.**, & Attarian, A. (2003). Swatting little bugs: what agencies can do to decrease depreciative visitor behavior. *Parks and Recreation*, 38(11), 16-22.
11. **Leung, Y.-F.** & Attarian, A. (2003). Frontcountry visitor information/education programs: are there lessons for wilderness? *International Journal of Wilderness*, 9(1), 32-33.
12. **Leung, Y.-F.** (1997). Natural resources research on the Internet: Possibilities and pitfalls. *Natural Areas Journal*, 17(1), 69-74.

#### *Conference Proceedings Papers (21)*

1. Helmer, M., Miller, A., Barborak, J., McCool, S., & **Leung, Y.-F.** (2020). Global dimensions: Trends, lessons and collaborative learning. In Selin, S., Cerveny, L., Blahna, D., & Miller, A. (ed.), *Igniting Research for Outdoor Recreation: Linking Science, Policy, and Action* (pp. 133-147). General Technical Report PNW-987. Portland, OR: USDA Forest Service, Pacific Northwest Research Station.
2. McArdle, K., Oliphant, E., Walden-Schreiner, C., Edwards, M., **Leung, Y.-F.**, Blank, G., Seekamp, E., &

- Duerden, M. (2017). Evaluating diverse trail projects using standardized assessment tools: Conservation Corps example. In: Weber, S. (ed.), *Connections across People, Place, and Time: Proceedings of the 2017 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites* (pp. 103-108). Hancock, MI: George Wright Society.
3. **Leung, Y.-F.** (2010). Recreation ecology in East Asia: Redefining impact? In: Hsu, Y.-C. (ed.), *Proceedings of the Conference on the Issues Confronting the Management of World's National Parks, August 2010 – Volume I* (pp. 243-252). Taipei, Taiwan ROC: Hua Li Publishing.
  4. Hsu, Y.-C., **Leung, Y.-F.**, & Wang, C.-P. (2009). VERP project in Yu-Shan National Park: Research and application (in Chinese). *Proceedings of the Leave No Trace and Environmental Impact Management Conference, May 2009* (pp. 20-37). Taipei, Taiwan ROC: Forestry Bureau.
  5. Hsu, Y.-C. & **Leung, Y.-F.** (2008). Applying VERP in Yu-Shan National Park: opportunities and challenges (in Chinese). In Hsu, Y.-C. (eds), *Recreational Use and Resource Protection in National Parks: Symposium Proceedings* (pp. 1-18). Hualien, Taiwan ROC: Dong Hwa University.
  6. **Leung, Y.-F.** (2008). Research foundations of the VERP framework: a synopsis. In Hsu, Y.-C. (eds), *Recreational Use and Resource Protection in National Parks: Symposium Proceedings* (pp. i-xvii). Hualien, Taiwan ROC: Dong Hwa University, Institute of Tourism and Recreation Management.
  7. Lin, H.-C., **Leung, Y.-F.**, & Hsu, S.-I. (2008). A study of trail impacts and surfacing effectiveness in Yangmingshan National Park (in Chinese). *Proceedings of the 2008 Outdoor Recreation Research Symposium* (pp. 732-744). Taiwan ROC: Outdoor Recreation Research Association.
  8. Lu, D.-J., **Leung, Y.-F.**, Xie, S.-T. Xie, & Chen, Z.-Y. (2008). Community-based trail monitoring: a case study of Shih-Pan Trail at Linmei, Ilan (in Chinese). *Proceedings of the 2008 Symposium on Community Forestry* (pp. 59-76) Taipei, Taiwan ROC: Forestry Bureau.
  9. Dorwart, C., Moore, R. L., & **Leung, Y.-F.** (2007). Visitor employed photography (VEP): Its potential and use in evaluating visitors' perceptions of resource impacts on trail and park settings. In Burns, R. & Robinson, K. (comps.), *Proceedings of the 2006 Northeastern Recreation Research Conference* (pp. 307-315). Gen. Tech. Rep. NRS-P-14. Newtown Square, PA: USDA Forest Service, Northeastern Experimental Station.
  10. Robinson, J., **Leung, Y.-F.**, & Eagles, P. F. J. (2006). Making your visitors count: Collecting and archiving visitation data in U.S. protected areas. In: Harmon, D. (ed.), *People, Places, and Parks: Proceedings of the 2005 George Wright Society Conference on Parks, Protected Areas and Cultural Sites* (pp. 236-241). Hancock, MI: George Wright Society.
  11. Monz, C., Young, E., & **Leung, Y.-F.** (2005). Monitoring the impacts of visitors to shorebird populations in the NPS Coastal and Barrier Islands Network areas. In: Bricker, K. (ed.), *Proceedings of the 2004 Northeastern Recreation Research Conference* (pp. 373-377). General Technical Report NE-326. Newtown Square, PA: USDA Forest Service, Northeastern Experiment Station.
  12. Bloyer, J., Gustke, L., & **Leung, Y.-F.** (2004). Indicators for sustainable tourism development: crossing the divide from definitions to actions. In: Pineda, F. D. & Brebbia, C. A. (eds.), *Sustainable Tourism* (pp. 109-115). Southampton, UK: Wessex Institute of Technology Press.
  13. Ingle, C., **Leung, Y.-F.**, Monz, C., & Bauman, H. (2004). Monitoring visitor impacts in coastal national parks: A review of techniques. In: Harmon, D., Kilgore, B. M., & Vietzke, G. E. (eds.) *Protecting Our Diverse Heritage: The Role of Parks, Protected Areas, and Cultural Sites -- Proceedings of George Wright Society/National Park Service Joint Conference; April 14-18, 2003; San Diego, CA* (pp. 228-233). Hancock, MI: George Wright Soc.
  14. **Leung, Y.-F.** & Meyer, K. (2004). Soil compaction as indicated by penetration resistance: A comparison of two



types of penetrometers. In: Harmon, D., Kilgore, B. M., & Vietzke, G. E. (eds.) *Protecting Our Diverse Heritage: The Role of Parks, Protected Areas, and Cultural Sites -- Proceedings of George Wright Society/National Park Service Joint Conference; April 14-18, 2003; San Diego, CA* (pp. 370-375). Hancock, MI: George Wright Society.

15. Monz, C., **Leung, Y.-F.**, Ingle, M. C., & Bauman, H. (2004). Visitor impact monitoring in the Coastal and Barrier Island Network. In: Harmon, D., Kilgore, B. M., & Vietzke, G. E. (eds.) *Protecting Our Diverse Heritage: The Role of Parks, Protected Areas, and Cultural Sites -- Proceedings of George Wright Society/National Park Service Joint Conference; April 14-18, 2003; San Diego, CA* (pp. 135-139). Hancock, MI: George Wright Society.
16. **Leung, Y.-F.** & Farrell, T. A. (2002). Visitor impact knowledge is basic. In: *Portfolio of Statements and Presentations - The World Ecotourism Summit; May 19-22, 2002; Quebec City, Canada*.
17. **Leung, Y.-F.**, Marion, J. L., & Cole, D. N. (2002). Visitor impact assessment and monitoring systems: evolution and current development. In: Bondrup-Nielsen, S. & Munro, N. (ed.), *Managing Protected Areas in a Changing World: Proceedings of the 4<sup>th</sup> Int'l Conference on Science and Management of Protected Areas; May 14-19, 2000; Waterloo, ON, Canada* (pp. 213-220). Wolfville, NS: SAMPAA.
18. **Leung, Y.-F.** (2002). Recreation ecology and visitor carrying capacity management: Implications for protected areas in East Asia. In: Hodgkiss, J. (ed.), *Challenge of Nature Conservation in the Face of Development Pressure: Proceedings of the IUCN World Commission on Protected Areas - East Asia Conference, June 2001, Hong Kong* (pp. 67-73). Hong Kong: Agriculture, Fisheries and Conservation Department and Friends of the Country Parks.
19. **Leung, Y.-F.** & Marion, J. L. (2000). Recreation impacts and management in wilderness: a state-of-knowledge review. In: Cole, D. N., McCool, S. F., Borrie, W. T., & O'Loughlin, J. (comps.), *Wilderness Science in a Time of Change Conference - Volume 5: Wilderness Ecosystems, Threats, and Management; May 23-27, 1999; Missoula, MT* (pp. 23-48). Proc. RMRS-P-15-VOL-5. Ogden, UT: USDA Forest Service, Rocky Mountain Research Station.
20. **Leung, Y.-F.** & Marion, J. L. (2000). Wilderness campsite conditions under an unregulated camping policy: An Eastern example. In: Cole, D. N., McCool, S. F., Borrie, W. T., & O'Loughlin, J. (comps.), *Wilderness Science in a Time of Change Conference - Volume 5: Wilderness Ecosystems, Threats, and Management; May 23-27, 1999; Missoula, MT* (pp. 148-152). Proc. RMRS-P-15-VOL-5. Ogden, UT: USDA Forest Service, Rocky Mountain Research Station.
21. **Leung, Y.-F.** & Marion, J. L. (1997). River recreation impacts: A survey of day and overnight whitewater use sites along five West Virginia rivers. In *Proceedings of the 3<sup>rd</sup> Biennial Symposium on River Management and Planning* (pp. 135-143). Missoula, MT: River Management Society.

#### Technical Reports (46)

1. **Leung, Y.-F.**, Cheung, S., & Smith, J. (2023). *Statistical Report of State Park Operations: 2020-2021*. Final report submitted to National Association of State Park Directors.
2. **Leung, Y.-F.**, Cheung, S., & Smith, J. (2022). *Statistical Report of State Park Operations: 2019-2020*. Final report submitted to National Association of State Park Directors.
3. **Leung, Y.-F.**, Cheung, S., & Smith, J. (2021). *Statistical Report of State Park Operations: 2018-2019*. Final report submitted to National Association of State Park Directors.
4. **Leung, Y.-F.**, Cheung, S., & Smith, J. (2019). *Statistical Report of State Park Operations: 2017-2018*. Final report submitted to National Association of State Park Directors.

5. Edwards, M. B., Walden-Schreiner, C., Oliphant, E., Blank, G., **Leung, Y.-F.**, Seekamp, E., & McArdle, K. (2018). 2017 Public Lands Service Coalition Habitat Evaluation Report. Final report submitted to Conservation Legacy.
6. Edwards, M. B., Walden-Schreiner, C., Oliphant, E., **Leung, Y.-F.**, Seekamp, E., Blank, G., & McArdle, K. (2018). 2017 Public Lands Service Coalition Trail Evaluation Report. Final report submitted to Conservation Legacy.
7. **Leung, Y.-F.**, Walden-Schreiner, C., Miller, A., & Smith, J. (2018). Statistical Report of State Park Operations: 2016-2017. Final report submitted to National Association of State Park Directors.
8. **Leung, Y.-F.**, Miller, A., Walden-Schreiner, C., & Smith, J. (2017). Statistical Report of State Park Operations: 2015-2016. Final report submitted to National Association of State Park Directors.
9. Edwards, M., **Leung, Y.-F.**, Seekamp, E., Blank, G., & Duerden, M., Walden-Schreiner, C., McArdle, K., & Oliphant, E. (2016). 2016 Public Lands Service Coalition Trail Evaluation Report. Final report submitted to Conservation Legacy.
10. Engels, B., **Leung, Y.-F.**, & Nikolaeva, E. (2016). Tourism and Protected Areas Specialist Group at the 2016 IUCN World Conservation Congress: A Summary Report. Reported submitted to IUCN World Commission on Protected Areas, Tourism and Protected Areas Specialist Group.
11. **Leung, Y.-F.**, Smith, J., & Miller, A. (2016). Statistical Report of State Park Operations: 2014-2015. Final report submitted to National Association of State Park Directors.
12. Walden-Schreiner, C., Tsai, W.-L., & **Leung, Y.-F.** (2015). Geospatial Analysis of Pack Stock Movement and Grazing Patterns Pilot Study in Subalpine Meadows at Yosemite National Park. Final report submitted to USDI National Park Service.
13. **Leung, Y.-F.**, Smith, J., & Miller, A. (2015). Statistical Report of State Park Operations: 2013-2014. Final report submitted to National Association of State Park Directors.
14. Floyd, M. F., McHale, M. R., **Leung, Y.-F.**, Tsai, W.-L., & Baran, P. K. (2014). Understanding Urban and Community Forests Contributions to Physical Activity and Health. Technical Report submitted to USDA Forest Service, National Urban and Community Forestry Advisory Council.
15. Thompson, E., Whitlow, M., Li, J., Méley, A., Bitsura-Meszaros, K., **Leung, Y.-F.**, & Barbieri, C. (2014). Tourism Promotion for UNESCO World Heritage Sites: An Evaluation of Government Websites from Four Countries. Unpublished report submitted to USDI National Park Service, Office of International Affairs.
16. **Leung, Y.-F.**, Smith, J., Miller, A., & Serenari, C. (2014). Statistical Report of State Park Operations: 2012-2013. Final report submitted to National Association of State Park Directors.
17. **Leung, Y.-F.**, Siderelis, C., & Miller, A. (2013). Statistical Report of State Park Operations: 2011-2012. Final report submitted to National Association of State Park Directors.
18. **Leung, Y.-F.**, Bushell, R., & Barborak, J. (2012). Sustainable Practices and Approaches: Good Conservation Outcomes from Tourism and Visitation to Protected and Environmentally Sensitive Areas (IUCN World Conservation Congress Workshop #762; Jeju, South Korea). Workshop Summary and Notes submitted to the IUCN-WCPA Tourism and Protected Areas Specialist Group.
19. **Leung, Y.-F.**, Siderelis, C., & Miller, A. (2012). Statistical Report of State Park Operations: 2010-2011. Final report submitted to National Association of State Park Directors.

20. Monz, C., Marion, J., & **Leung, Y.-F.** (2012). Final report on the International Recreation Ecology Workshop at Griffith University, Australia. Report for Aldo Leopold Wilderness Research Institute.
21. Leung, Y.-F. (2013). Enhancing protected area management and stewardship education through participatory monitoring: prototype development for North Carolina Coastal Reserves: Final Report.
22. **Leung, Y.-F.**, Bigsby, K., & Kollar, C. (2011). Developing Methods for Integrated Analysis of Meadow Condition and Informal Trail Data in Yosemite National Park. Technical report submitted to USDI National Park Service, Yosemite National Park.
23. **Leung, Y.-F.**, Siderelis, C., & Kollar, C. (2011). Statistical Report of State Park Operations: 2009-2010. Final report submitted to National Association of State Park Directors.
24. Hockett, K., Clark, A., **Leung, Y.-F.**, Marion, J. L., & Park, L. (2010). Deterring off-trail hiking in protected natural areas: Evaluating options with surveys and unobtrusive observation. Technical report submitted to USDI National Park Service, C&O Canal National Historic Park. Blacksburg, VA: USGS Patuxent Wildlife Research Center, Virginia Tech Field Unit.
25. **Leung, Y.-F.**, Siderelis, C., & Serenari, C. (2010). Annual Information Exchange 2010: A Statistical Report of State Park Operations in 2008-2009. Raleigh, NC: National Association of State Park Directors (NASPD).
26. **Leung, Y.-F.**, Siderelis, C., & Hoffbeck, D. (2009). Annual Information Exchange 2009: A Statistical Report of State Park Operations in 2007-2008. Raleigh, NC: NASPD.
27. **Leung, Y.-F.**, Siderelis, C., & Hoffbeck, D. (2008). Annual Information Exchange 2008: A Statistical Report of State Park Operations in 2006-2007. Raleigh, NC: NASPD.
28. **Leung, Y.-F.** (2008). Developing Social Trails Monitoring and Analysis Protocol for Yosemite National Park VERP Monitoring Program. Yosemite, CA: Yosemite National Park.
29. Flood, J., **Leung, Y.-F.**, & Davis, J. (2007). Book of Abstracts -- The 29th Annual Southeastern Recreation Research (SERR) Conference; Feb. 25-27, 2007; Asheville, NC. Raleigh, NC: NC State University, Department of Parks, Recreation and Tourism Management.
30. **Leung, Y.-F.**, Siderelis, C., & Chelf, S. (2007). Annual Information Exchange 2007: A Statistical Report of State Park Operations in 2005-2006. Raleigh, NC: NASPD.
31. Seher, V., Lisius, S., Thompson, S., Bacon, J., & **Leung, Y.-F.** (2007). VERP Indicator Report: Wildlife Exposure to Human Food. Yosemite, CA: Yosemite National Park.
32. Bacon, J., Elliot, C., Putnam, R., Brown, T., Canapary, E., & **Leung Y.-F.** (2006). VERP Formal and Social Trail Assessments for the Tuolumne Meadows Area. Yosemite, CA: Yosemite National Park.
33. **Leung, Y.-F.**, Robinson, J., & Flood, J. (2006). Book of Abstracts -- The 28th Annual Southeastern Recreation Research (SERR) Conference; Feb. 26-28, 2006; Wilmington, NC. Raleigh, NC: NC State University, Department of Parks, Recreation and Tourism Management.
34. **Leung, Y.-F.** (2005). Recreation Ecology and Visitor Impact Research: An Annotated Bibliography. Final report submitted to Aldo Leopold Institute of Wilderness Research.
35. **Leung, Y.-F.** & Meyer, K. (2004). Research to Support Development of Resource Indicators and Standards for the Visitor Experience and Resource Protection (VERP) Implementation on Boston Harbor Islands. Final report submitted to USDI National Park Service.

36. **Leung, Y.-F.** & Attarian, A. (2003). Evaluating the Effectiveness of the Leave No Trace Program in the City of Durango, Colorado. Final report submitted to the Leave No Trace, Inc.
37. Monz, C. & **Leung, Y.-F.** (2003). National Park Service Coastal Visitor Impact Monitoring: Phase II Project Report. Report Submitted to National Park Service, Northeast Coastal and Barrier Network.
38. Monz, C. & **Leung, Y.-F.** (2003). National Park Service Coastal Visitor Impact Monitoring: Phase I Project Report. Report Submitted to National Park Service, Northeast Coastal and Barrier Network.
39. **Leung, Y.-F.** (2002). Forest Tourism and Ecotourism Development in Natural Forest Protection Program (NFPP) Pilot Demonstration Sites. Consultancy report submitted to the Chinese Academy of Forestry Sciences and the United Nations Development Program, Beijing, PR China.
40. **Leung, Y.-F.**, & Marion, J. L. (1998). A Survey of Whitewater Recreation Sites on Fiver West Virginia Rivers. Blacksburg, VA: USGS Biological Resources Division, Virginia Tech Cooperative Park Studies Unit.
41. **Leung, Y.-F.** (1998). Existing Recreational Uses on Water Supply Lands of New York City (Final Consulting Report). Shokan, NY: New York City Department of Environmental Protection.
42. **Leung, Y.-F.** (1998). Impacts of Recreational Use on Water Quality: A Synthesis of Literature (Final Consultancy Report). Shokan, NY: New York City Department of Environmental Protection.
43. **Leung, Y.-F.** (1998). Impacts of Recreational Use on Water Quality: An Annotated Bibliography (Final Consultancy Report). Shokan, NY: New York City Department of Environmental Protection.
44. **Leung, Y.-F.** (1998). Alternative Recreational Opportunities in or within Easy Drive of New York City's Watersheds (Final Consultancy Report). Shokan, NY: New York City Dept. of Environmental Protection.
45. Marion, J. L., & **Leung, Y.-F.** (1997). An Assessment of Campsite Conditions in Great Smoky Mountains National Park (Research/Resources Management Report). Atlanta, GA: USDI National Park Service, Southeast Regional Office.
46. **Leung, Y.-F.**, & Marion, J. L. (1995). A Survey of Campsite Conditions in Eleven Wilderness Areas of the Jefferson National Forest. Blacksburg, VA: USDI National Biological Service, Virginia Tech Cooperative Park Studies Unit.

#### **INVITED PRESENTATIONS** (48)

1. Cardenas, S., **Leung, Y.-F.**, & Feyers, S. (November 2021). The IUCN WCPA Motion on Tourism and Next Steps. Invited presentation at the *Crisis Response and Recovery: Nature-based Tourism, Biodiversity, and Livelihoods* (Virtual). November 17, 2021.
2. Tejedo, P., Benayas, J., Cajiao, D., **Leung, Y.-F.**, De Filippo, D., & Liggett, D. (November 2021). Complexity of assessing the impacts of human presence (tourism) on Antarctica. Invited keynote presentation at the *PT-REPAIR Matchmaking and Information Event*. The Dutch Research Council (Virtual). November 4, 2021.
3. **Leung, Y.-F.** (April 2021). Research and monitoring of visitor use and impacts in global protected areas: Recent trends and future needs. Invited International Earth Day presentation for the Luso-American Webinars series, the University of the Azores and American Corners Portugal. (Virtual)
4. **Leung, Y.-F.** (March 2020). Towards best practices of tourism and visitor management in global protected areas. Invited keynote speech at the 3<sup>rd</sup> Estonian Nature Tourism and Nature Conservation Conference; Tartu, Estonia.

5. Dinan, M., Franchini, A., Haas, E., Pedozo, C., Rogers, A., Cajiao, D., & **Leung, Y.-F.** (December 2018). Indicator development for Galápagos National Park's Tourist Use & Impact Monitoring: A collaborative class project at NC State. Invited talk at the USDI National Park Service, Office of International Affairs; Washington, DC.
6. **Leung, Y.-F.** (August 2018). Are we loving our protected areas to death? Global challenges, local solutions. Invited presentation at the Galapagos National Park, Puerto Ayora, Ecuador.
7. **Leung, Y.-F.** (August 2018). Visitor use/impact monitoring in protected areas: U.S. examples with implications for the Galapagos National Park. Invited presentation at the Galapagos National Park, Puerto Ayora, Ecuador.
8. **Leung, Y.-F.** (April 2018). Recreation ecology: Research to support sustainable visitor use in parks and protected areas. Invited presentation at the *2018 Federal Energy Regulatory Commission Recreation Management Workshop*, Auburn, Alabama.
9. **Leung, Y.-F.** (February 2018). Cultural considerations in managing Chinese tourists in national parks. Invited presentation at the *Yellowstone National Park Chinese Tourism Workshop*, West Yellowstone, MT.
10. **Leung, Y.-F.** (January 2018). From long-term agency data reporting to emerging big-data analytics. Invited presentation at the *European Commission Global Visitor Data Working Group Meeting*, Ispra, Italy.
11. **Leung, Y.-F.** (November 2017). Are we loving our (country) parks to death? Global challenges, local solutions. Invited presentation at *Public Lecture Series for the Hong Kong Country Park 40<sup>th</sup> Anniversary*, Hong Kong SAR.
12. **Leung, Y.-F.** (July 2017). Research on trail corridors: A multidisciplinary review. Invited presentation at *Scale and Linkage: International Symposium on Ecological Corridor and Trail Management in Shallow Mountain Ecosystem*, Taipei, Taiwan ROC.
13. **Leung, Y.-F.** (May 2017). Visitor management in protected areas: Some international experiences. Invited presentation at Galápagos National Park, Puerto Ayora, Ecuador.
14. **Leung, Y.-F.** (May 2017). Developing indicators and monitoring protocols: Examples from U.S. National Parks. Invited presentation at Galápagos National Park, Puerto Ayora, Ecuador.
15. **Leung, Y.-F.** (November 2016). Trail science: An international overview. Invited paper presented at the *Trail Science and Management Symposium*; Hong Kong SAR.
16. **Leung, Y.-F.** (May 2016). Research to support visitor impact monitoring in protected areas: Some international trends. Invited paper presented at the *2<sup>nd</sup> International Symposium on Tourism and Protected Areas in Brazil*; Brasilia, Brazil.
17. **Leung, Y.-F.** (December 2015). The multi-faceted nature of capacity management in urban protected areas. Invited presentation at the *International Conference on Conservation and Management of Urban Protected Areas*; Taipei, Taiwan ROC.
18. **Leung, Y.-F.** (November 2015). Indicator-based frameworks and indicator development: A quick tour. Invited presentation at the *Workshop on Visitor Capacity Management in Protected Areas*. Taichung, Taiwan ROC.
19. **Leung, Y.-F.** (November 2015). Human dimensions of natural resources: A collaborative learning and research model. Invited seminar presentation at the Department of Geography and Resource Management. The Chinese University of Hong Kong. Hong Kong SAR, PR China.

20. **Leung, Y.-F.** (March 2015). Participatory monitoring to support protected area conservation: Local examples, global trends, and future outlooks. Invited presentation at the *2015 International Symposium of Community-based Conservation*, Taipei, Taiwan ROC.
21. **Leung, Y.-F.**, Smith, J., & Miller, A. (November 2014). U.S. state parks visitation data from the NASPD Annual Information Exchange project. Invited presentation at the *IUCN World Parks Congress*, Sydney, Australia.
22. Marion, J. L., **Leung, Y.-F.**, & Eagleston, H. (October 2014). A state-of-knowledge review of 50 years of wilderness recreation ecology research: Past, present, and future. Invited presentation at the *National Wilderness Conference*; Albuquerque, New Mexico, USA.
23. **Leung, Y.-F.**, Kollar, C., & Miller, A. (August 2014). Environmental impacts of mountain biking in the U.S. protected areas. Invited presentation at the *Workshop on Tourism and the Environment: Models of Development*. Lisbon, Portugal.
24. **Leung, Y.-F.** (August 2014). Developing indicators of visitor impacts for protected areas: Coastal examples and exercise. Invited presentation at the *Workshop on Protected Area Management and Tourism with Practical Case Study*. Penghu Natural Reserves, Penghu, Taiwan ROC.
25. **Leung, Y.-F.** (August 2014). Sustainable visitor management in protected areas: Concepts, frameworks and principles. Invited presentation at the *Workshop on Protected Area Management and Tourism with Practical Case Study*. Penghu Natural Reserves, Penghu, Taiwan ROC.
26. **Leung, Y.-F.** (June 2014). Participatory monitoring to support sustainable visitor management in protected areas. Invited presentation at the Headquarters of the International Union for Conservation of Nature (IUCN). Gland, Switzerland.
27. **Leung, Y.-F.** (March 2014). Protocol development and field implementation of trail inventory, assessment and monitoring for protected areas. Invited presentation at the *USFS-ICMBio Workshop on Public Use Management in Protected Areas*. Chapada dos Veadeiros National Park, Brazil.
28. **Leung, Y.-F.**, Walden-Schreiner, C., & Conlon, K. (November 2013). Geospatial approaches to understanding and management of visitor use and impacts in geoparks and other protected areas: Some recent examples. Invited presentation at the *CUHK-Harvard Joint Workshop on Geodesign and VGE: Alternative Futures for the Hong Kong Global Geopark*. Hong Kong SAR, PR China.
29. **Leung, Y.-F.** (November 2013). Recreation ecology and visitor impact research: Current trends. Invited presentation at the Department of Landscape Studies, College of Architecture and Urban Planning, Tongji University, Shanghai, PR China.
30. **Leung, Y.-F.** (July 2013). Best practice guidelines for sustainable tourism in protected areas: An overview and example highlights. Invited presentation at the *Workshop for Human Impact and Recreation Management in Protected Areas*. Taipei, Taiwan ROC.
31. **Leung, Y.-F.** (July 2013). Indicator example: Informal trails in Yosemite National Park. Invited presentation at the *Workshop for Human Impact and Recreation Management in Protected Areas*. Taipei, Taiwan ROC.
32. **Leung, Y.-F.**, Magro, T., Moreira, J., & Miller, A. (April 2013). Monitoring visitor impacts in protected areas: A collaborative learning model. Invited presentation at the *IUFRO Conference on Protected Areas and Place Making*. Foz do Iguaçu, Brazil.
33. Walden-Schreiner, C., Floyd, M. & **Leung, Y.-F.** (March 2013). Incorporating Physical Activity Measures into Environmental Monitoring of National Parks: An Example from Yosemite. Invited presentation at the *2013 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites*. Denver, Colorado.

34. **Leung, Y.-F.** (November 2011). Contextualizing recreation ecology research: A conceptual framework. Invited presentation at the *People and Parks: Managing the Environmental Impacts of Visitors*. Gold Coast, Queensland, Australia.
35. **Leung, Y.-F.** (July 2011). Streamlining indicator-based frameworks. Invited presentation at the *Forestry Bureau Workshop on Protected Areas and Tourism Management*. Taipei, Taiwan ROC.
36. **Leung, Y.-F.** (July 2011). Recent examples of recreation management in U.S. protected areas. Invited presentation at the *Forestry Bureau Workshop on Protected Areas and Tourism Management*. Taipei, Taiwan ROC.
37. **Leung, Y.-F.** (August 2010). Recreation ecology in East Asia: Redefining impacts? Invited presentation at the *Conference on the Issues Confronting the Management of World's National Parks*. Hualien, Taiwan ROC.
38. **Leung, Y.-F.** & Attarian, A. (August 2009). Building capacity for managing protected areas: Experiences from the U.S. state parks. Invited presentation at the *Workshop of Capacity Building for Protected Area Management*. Taipei, Taiwan ROC.
39. **Leung, Y.-F.** (July 2009). Management challenges of U.S. national parks: Visitor capacity and emerging activity issues. Invited presentation at the Agriculture, Fisheries and Conservation Department, Hong Kong SAR Government. Sai Kung, Hong Kong SAR, PR China.
40. **Leung, Y.-F.** (November, 2008). Research foundations of the VERP framework: A synopsis. Invited keynote presentation at the *Symposium on Recreational Use and Resource Protection in National Parks*, Yu Shan National Park, Nantou County, Taiwan ROC.
41. **Leung, Y.-F.** (May, 2008). Research to support visitor impact monitoring in protected areas: Status and prospects. Invited seminar presentation at the School of Environmental Science, Murdoch University, Western Australia, Australia.
42. Bacon, J., **Leung, Y.-F.**, & Newman, P. (June 2006). Integrated and adaptive management: putting carrying capacity frameworks into practice in Yosemite National Park USA. Invited presentation at the *11<sup>th</sup> International Symposium on Society and Resource Management*. Vancouver, BC, Canada.
43. **Leung, Y.-F.** (May 2006). Recreation ecology: What is it? How can it help recreation resource planners and managers? Invited presentation and field workshop presented at the *26<sup>th</sup> Annual Conference of National Association of Recreation Resource Planners*. Nashville, Tennessee.
44. **Leung, Y.-F.** (February 2004). China's forest tourism development: Global influences and local responses - Perspectives from case studies. Invited presentation at the *2004 Duke University LAS/SIDG Spring Conference*. Durham, North Carolina.
45. **Leung, Y.-F.** (April 2003). Recreation ecology research at the international level: Recent growth and future opportunities. Invited presentation at the *12<sup>th</sup> George Wright Society Conference on Resource Management in Parks and on Public Lands*. San Diego, California.
46. Manning, R. E., **Leung, Y.-F.**, & Budruk, M. (October 2003). Research to support management of visitor carrying capacity on Boston Harbor Islands. Invited presentation at the *Boston Harbor Islands Science Symposium*. Boston, Massachusetts.
47. Manning, R. E., **Leung, Y.-F.**, Newman, P., & Budruk, M. (November 2001). Informing carrying capacity decision making in national parks. Invited poster at the *21<sup>st</sup> Annual Earthwatch Institute Conference*. Waltham, Massachusetts.

48. **Leung, Y.-F.** (October 1998). The natural resources research information pages (NRRIPS). Invited panelist in the “Web Resources and Environmental Reporting” Panel Session, the 8<sup>th</sup> *National Conference of the Society of Environmental Journalists*. Chattanooga, Tennessee.

## **PROFESSIONAL AFFILIATIONS**

- 2020–Present, The Scientific Committee for Antarctica Research (SCAR), International Science Council (ISC)
  - Co-Lead, SCAR Tourism Action Group (Ant-TAG), 2021-Present
  - Member, Standing Committee on the Humanities and Social Sciences (SC-HASS), 2020-Present
- 2005–Present, Founding Member, *Recreation Ecology Research Network*
- 2003–Present, Invited Member, *IUCN World Commission on Protected Areas*
  - Expert Delegate, IUCN Delegation to the Antarctic Treaty Consultative Meetings (ATCM), 2022-Present
  - Coordinator (elected), Biodiversity Working Group, Tourism & Protected Areas Specialist Group, 2017-Present
  - Member: Tourism and Protected Areas Specialist Group
  - Member: Urban Protected Areas Specialist Group
  - Member: Wilderness Specialist Group
- 2002–Present, Charter Member, *The Leave No Trace Center for Outdoor Ethics*
- 1998–Present, Member, *George Wright Society for Park and Protected Area Professionals*

## **HONORS/AWARDS**

- 2020, Individual Service Award, Society of Outdoor Recreation Professionals
- 2016, Finalist, NCSU Outstanding Graduate Mentor Award
- 2015, Recipient of the “Sparkling Award” (best forum paper), *Tourism Tribune* (PR China)
- 2008, Visiting Fellow, School of Environmental Science, Murdoch University, WA, Australia
- 2007–2008, International Scholar Exchange Fellowship, National Science Council, Taiwan ROC
- 2006, Outstanding Teacher Award, Dept. of Parks, Recreation and Tourism Management, NCSU
- 2003, Inducted into Sigma Iota Rho Honor Society for International Studies
- 1999, Leave No Trace Master, National Leave No Trace Outdoor Ethics Program
- 1997, Outstanding Graduate Student Award, College of Natural Resources, Virginia Tech
- 1995, Inducted into Xi Sigma Pi Forestry Honors Society
- 1995, Inducted into Phi Kappa Phi Honors Society
- 1992, Academic Creativity Award, The Chinese University of Hong Kong



## UNIVERSITY SERVICE

### *University Level*

- 2020, Internal Reviewer, NCSU Master of International Studies Program Review
- 2019–2020, NCSU Asia Strategy Task Force (Member)
- 2018–Present, Faculty Advisor, National Parks Club of NC State
- 2018–2020, University Reappointment, Promotion and Tenure Committee (Member)
- 2011–2012, NCSU University Standing Committee on the Physical Environment (Member)
- 2010–2011, President, Sigma Iota Rho: The Honor Society for International Studies, NCSU (Eta) Chapter
- 2009–2012, NCSU University Standing Committee on International Programs (Member)
- 2009–2010, NCSU Campus Environmental Sustainable Team, Land Use Group
- 2007–2019, NCSU Confucius Institute Faculty Advisory Board (Member)
- 2011–2019, NCSU Lake Raleigh Woods Advisory Panel (Member)
- 2000–2006, NCSU Libraries, Departmental Library Representative

### *College/Center Level*

- 2021–Present, College Reappointment, Promotion and Tenure Committee (Member)
- 2019, Teaching Assistant/Associate Professor Search Committee, NCSU Center for Geospatial Analytics (Member)
- 2016–2017, CNR Graduate Education Committee (Member/Sub-committee Chair)
- 2012–2018, College Reappointment, Promotion and Tenure Committee (Member 2012-2017; Chair 2017-2018)
- 2007, CNR Hill Forest Outdoor Recreation Plan Task Force (Member)
- 2005, CNR Honorifics Committee (Member)
- 2004–2010, CNR Research Committee (Member)
- 2001–2002, CNR International Programs Task Force (Member)

### *Departmental Level*

- 2022, Member, Henderson Distinguished Professorship Search Committee
- 2019, PRTM Department Head 5-Year Review Committee (Member)
- 2015–2016, PRTM GIS and Human Dimension Faculty Search Committee (Member)
- 2014–Present, Director of Graduate Programs, Department of Parks, Recreation and Tourism Management

- 2013, PRTM Social Sciences and GIS Faculty Search Committee (Chair)
- 2012, PRTM Tourism Research and Extension Faculty Search Committee (Member)
- 2012–Present, PRTM Reappointment, Promotion and Tenure Committee (Chair 2012-14, 2016-17)
- 2011–Present, PRTM Professional Master’s Program Committee (Member)
- 2011–2012, PRTM Peer Review of Teaching Committee (Member)
- 2010–2014, Co-convenor, PRTM Human Dimensions of Natural Resources Research Circle
- 2009–Present, NCSU PRTM Graduate Program Advisory Committee (Chair 2009-2011; Member since 2011)
- 2005–2006, Task Force on PRTM Departmental Reappointment, Promotion and Tenure Policy
- 2004–2009, PRTM Graduate Admissions Committee (Member)
- 2003–2005, PRTM PhD Program Review Committee (Member)

## **PROFESSIONAL SERVICE**

### *Editorial Service*

- 2022–Present, Associate Editor, *Frontiers in Sustainable Tourism* (Ecotourism Section)
- 2021–Present, Editorial Board Member, *International Journal of Geoheritage and Parks*
- 2019–Present, Member of International Scientific Committee, *Anais Uso Público em Unidades de Conservação (Proceedings of Public Use in Conservation Units)* (In Portuguese, Brazil)
- 2018–Present, Editorial Board Member, *Journal of Leisure Research*
- 2015–2018, Editorial Board Member, *Tourism Tribune (旅游学刊)* (In simplified Chinese, PR China)
- 2014–Present, Associate Editor, *Journal of Outdoor Recreation and Tourism*
- 2014–2016, Guest co-editor, Special issue on mountain biking research (Volume 15), *Journal of Outdoor Recreation and Tourism* (Elsevier)
- 2013–Present, Associate Editor, *Journal of Outdoor Recreation Study (戶外遊憩研究)* (Taiwan ROC)
- 2013–2018, Editor-in-Chief, *IUCN Best Practice Guidelines on Sustainable Tourism in Protected Areas*
- 2005–Present, Associate Editor, *Journal of Park and Recreation Administration*
- 2006–Present, Associate Editor, *International Journal of Wilderness*
- 2005–2006, Guest co-editor, Special issue on visitor impact monitoring (Volume 23, Issue 2), *George Wright Forum* (George Wright Society)

### *Professional Memberships*

- 2023–Present, Member, Travel and Tourism Research Association
- 2023–Present, Member, The Academy of Leisure Sciences
- 2001–Present, Member, George Wright Society
- 2000–Present, Member, Leave No Trace Center for Outdoor Ethics

*Other Service*

- 2023–Present, Member, Protected Areas Management Effectiveness Evaluation Team, Parks and Wildlife Finland
- 2021–Present, Co-lead, Tourism Action Group, Standing Committee on the Humanities and Social Sciences (SC-HASS), Scientific Committee on Antarctic Research (SCAR) <https://www.scar.org/science/ant-tag/home/>
- 2021–Present, Co-lead, Resolution 130 Task Force: Strengthening sustainable tourism’s role in biodiversity conservation and community resilience. Motion approved at the 2021 IUCN World Conservation Congress. <https://www.iucncongress2020.org/motion/130>
- 2021–Present, Expert Delegate, IUCN Delegation to the Antarctic Treaty Consultative Meeting (ATCMs), XLIII (Paris, France-Virtual) and XLIV (Berlin, Germany)
- 2021, Academic Planning Committee, 2021 Conference of Standing Committee on Humanities and Social Sciences, Scientific Committee on Antarctic Research
- 2021, Chair of the Panel “Collaborative Approach to Developing a Research Agenda for Antarctic Tourism”, 2021 Conference of the SCAR Standing Committee on the Humanities and Social Sciences (SC-HASS), Kobe, Japan (Virtual)
- 2020, External Review Panel, Bachelor of Social Sciences in Global and Environmental Studies Program, Educational University of Hong Kong, Hong Kong SAR, PR China
- 2017–Present, International Steering Committee, International Conference on Monitoring and Management of Visitors in Recreational and Protected Areas (member and abstract reviewer)
- 2017, Expert reviewer for 2017 IUCN World Heritage Outlook Assessments
- 2016–Present, Tourism and Biodiversity Working Group, IUCN WCPA Tourism and Protected Areas Specialist Group (Elected Coordinator)
- 2015–2016, Coordinator, proposals submitted by WCPA Tourism and Protected Areas Specialist Group to the 2016 IUCN World Conservation Congress; Honolulu, Hawaii
- 2015, Session Chair, 2015 George Wright Society Conference; Oakland, California
- 2014–Present, Invited Proposal Reviewer, Hong Kong Research Grants Council, Hong Kong SAR, PR China
- 2014–Present, External Reviewer, Taiwan Forestry Bureau’s 5-year Conservation Plan
- 2014–2015, Organizing Committee, the 2015 International Symposium on Community-based Conservation, Taipei, Taiwan ROC

- 2014, Organizer and Co-host, Sustainable Tourism Best Practice Guidelines book launch session, the IUCN World Parks Congress, Sydney, Australia
- 2014, Scientific Committee, the 20<sup>th</sup> International Symposium on Society and Resource Management, Hannover, Germany
- 2014, Invited Proposal Reviewer, European Cooperation in Science & Technology, COST Action IS1204, Bern, Switzerland
- 2013-Present, Invited Proposal Reviewer, National Center of Science and Technology Evaluation, Ministry of Education and Science, Kazakhstan
- 2013–2015, Co-chair, 2014-2015 Southeastern Recreation Research Conference, Asheville, NC
- 2013–2014, Convener, organized session entitled ‘Participatory Monitoring of Visitor Use and Impacts in Parks and Protected Areas’. 2014 International Symposium of Society and Resource Management, Hannover, German
- 2013, Invited Proposal Reviewer, Netherlands Organization for Scientific Research, Council for the Earth and Life sciences, The Netherlands
- 2013, Program Committee Member, Joint Workshop on Geodesign and VGE, Hong Kong SAR, PR China
- 2013, Convener, US-Brazil panel on the collaborative learning network for visitor impact monitoring in protected areas. 2013 George Wright Society Conference; Denver, Colorado
- 2012, Convener, organized session entitled ‘Recreational Trails and Fragmentation of Protected Landscapes’ at the 6<sup>th</sup> International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas; August 2012; Stockholm, Sweden
- 2012–2013, International Scientific Committee and Abstract Reviewer, IUFRO Conference on Protected Areas and Place Making, Foz do Iguaçu, Brazil
- 2011–2012, Co-organizer, session on Best Practices Guidelines for Sustainable Tourism in Protected Areas. IUCN World Conservation Congress; Jeju Island, South Korea
- 2011, Organizer and Session Chair, invited paper session on ‘Recreation and Resource Impacts: Ecological and Human Dimensions’ at the 2011 George Wright Society Conference; New Orleans, Louisiana
- 2010–2011, Organizing Committee, International Recreation Ecology Research Workshop; November 2011; Gold Coast, Australia
- 2009–2010, Convener/Co-convener, organized sessions on ‘Recreation Ecology and Visitor Impact Research: International Perspectives’ and ‘Applying Indicator-based Visitor Management Frameworks: International Experiences’ at the 5<sup>th</sup> International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas; Wageningen, the Netherlands
- 2008, External reviewer for faculty tenure and promotion, Murdoch University, Australia
- 2008, External reviewer for USGS Patuxent Wildlife Research Center technical reports
- 2007–2008, Convener, panel session on ‘Progress in Recreation Ecology Research and Thought’ at the 4<sup>th</sup> International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas; Montecatini Terme, Italy

- 2007, Organizer and Session Chair, organized session on ‘Visitor Impact Monitoring Protocols as Applied to Yosemite National Park’ at the 2007 George Wright Society Conference; St. Paul, MN
- 2006–2007, Co-Chair, Steering Committee, Southeastern Recreation Research Conference
- 2006, Convener, Panel session on ‘Recreation Ecology: Past, Present and Future’ at the 3<sup>rd</sup> International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas; Rapperswil, Switzerland.
- 2006, Peer Reviewer, Abstracts for the 3<sup>rd</sup> International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas; Rapperswil, Switzerland.
- 2005–Present, Peer Reviewer, Abstracts submitted to Southeastern Recreation Research Conferences
- 2005–2018, Member, Global Park Attendance Working Group (integrating visitation data with the World Database of Protected Areas)
- 2005–Present, Ad hoc IUCN-WCPA reviewer for UNESCO World Heritage Site nominations
  - Reviewed 3 World Heritage Site nominations
- 2005–Present, External Ph.D. thesis examiner
  - Arctic University of Norway, Norway (1 PhD)
  - Griffith University, QUE, Australia (1 PhD)
  - Curtin University, WA, Australia (1 PhD)
  - Murdoch University, WA, Australia (3 PhD’s)
  - Edith Cowen University, WA, Australia (1 PhD)
- 2005–2006, Steering Committee of the 2006 Southeastern Recreation Research Conference (Chair)
- 2005, External reviewer for Aldo Leopold Wildlife Research Institute technical reports
- 2005, Session Chair at the 2005 George Wright Society Conference, Philadelphia, Pennsylvania
- 2004, Book reviewer for Routledge Publishing, NY
- 2003, External reviewer for USDI National Park Service technical reports
- 2000–Present, Regular book reviewer for *CHOICE: Current Review for Academic Libraries* (monthly magazine of the American Library Association)
- 1999–Present, Anonymous reviewer for 28 peer-reviewed scientific journals [journal title (# of reviews)]: *Ambio* (1); *Applied Vegetation Science* (1); *Biological Conservation* (1); *Catena* (1); *Environmental Management* (multiple); *George Wright Forum* (1); *International Journal of Geoheritage and Parks* (1); *International Journal of Wilderness* (multiple); *Journal of Ecotourism* (1); *Journal of Environmental Management* (multiple); *Journal of Great Lakes Research* (1); *Journal of Leisure Research* (multiple); *Journal of Mountain Science* (1); *Journal of Nature Conservation* (2); *Journal of Outdoor Recreation and Tourism* (multiple); *Journal of Park and Recreation Administration* (multiple); *Journal of Protected Mountain Areas Research (Eco.mont)* (2); *Journal of Sustainable Tourism* (1); *Journal of Tourism and Leisure Studies* (1); *Land Degradation and Development* (1); *Landscape and Urban Planning* (multiple); *Leisure Sciences* (1); *Mountain Research and Development* (1); *Parks* (2); *Park Science* (multiple); *Scholarship* (1); *Space and Culture* (1); *Tourism Management Perspectives* (1)

**CONFERENCE PRESENTATIONS** (189)

1. Leung, Y.-F., Bricker, K., & Reas, J. 2022. What biodiversity information protected area managers need for visitor management? Highlights from a global online survey. Poster presented at the *2022 International Association for Society and Natural Resources Conference; San Jose, Costa Rica.*
2. Reas, J., & Leung, Y.-F. 2022. What do tour guides and ambassadors of protected areas have in common? A conceptual exploration. Paper presented at the *2022 International Association for Society and Natural Resources Conference; San Jose, Costa Rica.*
3. Deutsch, K., Hipp, A., & Leung, Y.-F. 2022. Assessment of the potential efficacy improvements of the implementation of data envelopment analysis in recreation and park planning for the prioritization of future facility projects. Poster presented at the *2022 Southeast Environment and Recreation Research Conference; March 2022; Asheville, NC.*
4. Leung, Y.-F. 2021. Developing an Antarctic tourism research agenda: A two-step horizon scanning (HS) approach. Paper presented at the *2021 SCAR SC-HASS Biennial Conference; November 2021. (Virtual).*
5. Cajiao, D., Leung, Y.-F., Larson, L., Tejedo, P., Benayas, J., & Reas, J. 2021. Characterization of Antarctic tourists pertaining to two different tourism modalities. Paper presented at the *2021 SCAR SC-HASS Biennial Conference; November 2021. (Virtual)*
6. Wu, C., Pan, W., Leung, Y.-F., & Cajiao, D. 2021. Towards a better understanding of Chinese Antarctic tourism: Characteristics revealed by an online tourist survey. Paper presented at the *2021 SCAR SC-HASS Biennial Conference; November 2021 (Virtual)*
7. Rogers, A., & Leung, Y.-F. 2021. Smartphones in wilderness: Avenue for access or inherently incompatible? Presentation at the *2021 National Wilderness Workshop; November 2021. (Virtual).*
8. Miller, A., Blahna, D., Leung, Y.-F., Morse, W., & Rowland, M. 2021. The recreation ecosystem: A social-ecological systems application for recreation ecology highlighting wildlife. Paper presented at the *10th International Conference on Monitoring and Management of Visitors in Recreational and Protected Areas; August 2021. (Virtual)*
9. Cajiao, D., Leung, Y.-F., Larson, L., Tejedo, P., & Benayas, J. 2021. Exploring the association of trip characteristics and motivations with pro-environmental outcomes of Antarctic tourists: An analysis based on PRE and POST surveys. Paper presented at the *10th International Conference on Monitoring and Management of Visitors in Recreational and Protected Areas; August 2021. (Virtual)*
10. Leung, Y.-F. 2021. Some observations from international collaborations on recreation ecology topics. Paper presented at the *2021 International Association for Society and Natural Resources Conference; June 2021. (Virtual)*
11. Jouzi, Z., Leung, Y.-F., Nelson, S. 2021. Mapping the associations between protected areas and child malnutrition. Poster presented at the *2021 Annual Meeting of the American Association of Geographers; April 2021. (Virtual)*
12. Jouzi, Z., Leung, Y.-F., Nelson, S. 2020. Examining the association of child malnutrition with socio-economic and biophysical factors across scales in Sub-Saharan Africa. Poster presented at the *8<sup>th</sup> Annual International Conference on Sustainable Development (ICSD). (Virtual)*
13. Jouzi, Z., Leung, Y.-F., Nelson, S. 2020. Exploring the strength of association between vegetation cover and malnutrition in Sub-Saharan Africa. Paper presented at the *26th Annual International Society of Tropical Foresters (ISTF) Conference; New Haven, Connecticut.*

14. Jouzi, Z., Nelson, S., Leung, Y.-F. 2019. A proposed remote-sensing approach to analyzing the association between environmental changes and human health in Sub-Saharan Africa. Paper presented at the *Annual Meeting of the American Association of Geographers; April 2019; Washington DC.*
15. Reas, J., Leung, Y.-F., Cajiao, D. 2019. Developing and evaluating a camera-trap method for visitor use monitoring in the Galapagos Islands. Poster presented at the *State of North Carolina Undergraduate Research and Creativity Symposium; November 23, 2019; Durham, North Carolina.*
16. Leung, Y.-F., Miller, A. B., Conlon, K., Guo, J., & Cajiao, D. 2019. Camera-based approaches to monitoring and evaluating visitor use and impacts in protected areas: Progress and prospects. Paper presented at the *2019 International Conference on Tourism and Sustainable Development Goals; May 16-17, 2019; Hong Kong SAR, PR China.*
17. Rogers, A., & Leung, Y.-F. 2019. Long-distance hiking in the digital age: Where are they going? -- A proposed exploration of AT long-distance hiker decision-making. Poster presented at the *2019 National Outdoor Recreation Conference; May 6-9, 2019; Rapid City, South Dakota.*
18. Zeynab, J., Nelson, S., & Leung, Y.-F. 2019 A proposed remote-sensing approach to analyzing the association between environmental changes and food security in Sub-Saharan Africa. Paper presented at the *2019 American Association of Geographers Annual Meeting; April 5-8, 2019; Washington, DC.*
19. Rogers, A., Pedrozo, C., Dinan, M., Franchini, A., Cajiao, D., & Leung, Y.-F. 2019. Testing indicators for Galápagos National Park's Tourist Monitoring Program: A "Local Class-Global Park" collaborative learning model. Poster presented at the *2019 Southeastern Recreation Research Conference; March 24-26, 2019; Athens, Georgia.*
20. Cunda, A., Magro-Lindenkamp, T. C., Pimentel, D., & Leung, Y.-F. 2018. Recreation ecology in Brazil: A preliminary review. Paper presented at the *9<sup>th</sup> International Conference on Monitoring and Management of Visitors in Recreational and Protected Areas; August 28-31, 2018; Bordeaux, France.*
21. Ng, S.-L., Cheung, S.-Y., Leung, Y.-F., & Fang, W. 2018. Trail degradation and organized sporting events in Hong Kong. Paper presented at the *9<sup>th</sup> International Conference on Monitoring and Management of Visitors in Recreational and Protected Areas; August 28-31, 2018; Bordeaux, France.*
22. Rossi, S., Barros, A., Pickering, C., Leung, Y.-F., & Walden-Schreiner, C. 2018. Assessing visitor spatial behaviour in mountain protected areas with crowdsourced photos: Examples from Argentina and Australia. Paper presented at the *9<sup>th</sup> International Conference on Monitoring and Management of Visitors in Recreational and Protected Areas; August 28-31, 2018; Bordeaux, France.*
23. Schagner, J. P., Arnberger, A., Eagles, P. F. J., Kajala, L., Leung, Y.-F., Spenceley, A., Deguignet, M., Gosal, A., Sigorello, G.; Engelbauer, M., Bertzky, B., & Engels, B. 2018. Visitor numbers for protected and nature areas: A global data sharing initiative. Paper presented at the *9<sup>th</sup> International Conference on Monitoring and Management of Visitors in Recreational and Protected Areas; August 28-31, 2018; Bordeaux, France.*
24. Cajiao, D., Reck, G., Castro, K., Izurieta, J. C., Casafont, M., Cardenas, S., & Leung, Y.-F. 2018. A new tourism monitoring protocol for Galapagos visitor sites: From science to management. Paper presented at the *3<sup>rd</sup> Galápagos Annual Conservation and Research Symposium; June 27, 2018; San Cristol, Galapagos Islands, Ecuador.*
25. Oliphant, E., McArdle, K., Walden-Schreiner, C, Edwards, M., Blank, G., Seekamp, E., & Leung, Y.-F. 2018. Establishing project evaluation standards for youth conservation corps' habitat restoration efforts on U.S. protected lands. Paper presented at the *2018 International Symposium on Society and Resource Management; June 17-22, 2018; Snowbird, Utah.*

26. Oliphant, E., Fry, E., Bahtiar, A., Baptistella Vedovello, M., & Leung, Y.-F. 2018. Mapping and characterizing informal trails in a high-use urban natural areas in central North Carolina. Poster presented at the *2018 International Symposium on Society and Resource Management; June 17-22, 2018; Snowbird, Utah.*
27. Cajiao, D., Reck, G., Casafont, M., Cardenas, S., Leung, Y.-F., Izurieta, J. C., Walden-Schreiner, C., & Farias, M. 2017. Tourism monitoring for decision making process: Lessons learned and challenges from the Galápagos National Park. Poster presented at *the 4<sup>th</sup> International Marine Protected Areas Congress; September 4-8, 2017; La Serena, Chile.*
28. Walden-Schreiner, C., & Leung, Y.-F. 2017. Exploring seasonal patterns of visitation in protected areas with VGI for conservation planning and management. Paper presented at the *Participatory Mapping/GIS 2017 Conference; July 31-August 3, 2017; San Luis Obispo, California.*
29. Leung, Y.-F., Miller, A., Walden-Schreiner, C., & Smith, J. 2017. Long-term Monitoring of State Park Operations in the U.S.: The Annual Information Exchange (AIX) Survey Project. Poster presented at the *2017 International Symposium on Society and Resource Management; June 19-22, 2017; Umeå, Sweden.*
30. Walden-Schreier, C., & Leung, Y.-F. 2017. GPS accuracy assessment of smartphones in protected natural areas. Paper presented at the *2017 International Symposium on Society and Resource Management; June 19-22, 2017; Umeå, Sweden.*
31. Walden-Schreiner, C., McArdle, K., Oliphant, E., Edwards, M., Blank, G., Leung, Y.-F., Seekamp, E., & Duerden, M. 2017. Developing standardized protocols for evaluating habitat improvement projects: A collaborative partnership in the U.S.. Poster presented at the *2017 International Symposium on Society and Resource Management; June 19-22, 2017; Umeå, Sweden.*
32. Leung, Y.-F., Walden-Schreiner, C., Miller, A., Burroughs, K., & Hastings, C. 2017. Exploring new methods and technologies in trail use and impact monitoring for protected areas. Paper presented at the *2017 George Wright Society Conference; April 2-5, 2017; Norfolk, Virginia.*
33. McArdle, K., Oliphant, E., Walden-Schreiner, C., Edwards, M., Leung, Y.-F., Blank, G., Seekamp, E., & Duerden, M. 2017. Evaluating diverse trail projects using standardized assessment tools: Conservation Corps example. Paper presented at the *2017 George Wright Society Conference; April 2-5, 2017; Norfolk, Virginia.*
34. Oliphant, E., Walden-Schreiner, C., McArdle, K., Blank, G., Edwards, M., Leung, Y.-F., & Seekamp, E. 2017. Evaluating Conservation Corps Habitat Projects: Forest fuels and invasive species management. Poster presented at the *2017 George Wright Society Conference; April 2-5, 2017; Norfolk, Virginia.*
35. Walden-Schreiner, C., Leung, Y.-F., Kuhn, T., Newburger, T., & Tsai, W.-L. 2017. Monitoring the unobservable: Classifying behaviors and use distributions with GPS Tracking. Paper presented at the *2017 George Wright Society Conference; April 2-5, 2017; Norfolk, Virginia.*
36. Savage, A., Carrillo, B., Ghahramani, L., Guo, J., & Leung, Y.-F. 2017. Visitor use and perception of Lake Raleigh: Development and tests of monitoring protocols. Poster presented at the *2017 Southeastern Recreation Research Conference; March 19-21, 2017; Asheville, North Carolina.* (second place of the conference best poster award)
37. Edwards, M., Walden-Schreiner, C., McArdle, K., Oliphant, E., Blank, G., Leung, Y.-F., & Seekamp, E. 2017. Environmental stewardship evaluation. Presentation at *The Corps Network Conference; February 2017; Washington, DC.*
38. Walden-Schreiner, C., McArdle, K., Oliphant, E., Edwards, M., Leung, Y.-F., Seekamp, E., Blank, G., & Duerden, M. 2016. Addressing challenges to evaluate and monitor impact of environmental stewardship corps.



Paper presented at the *2016 Corporation for National and Community Service Research Summit; December 14-15, 2016; Washington, DC.*

39. Smith, J. W., & Leung, Y.-F. 2016. Temporal trends in the operating inefficiencies of U.S. state park systems. Poster presented at the *2016 Society of American Foresters' National Convention; November 2-6, 2016; Madison, Wisconsin.*
40. Walden-Schreiner, C., & Leung, Y.-F. 2016. Incorporating the digital footprints of visitors in protected area use and impact monitoring: Case studies from the USA and Australia. Paper presented at the *8<sup>th</sup> International Conference on Monitoring and Management of Visitors in Recreational and Protected Areas; September 26-30, 2016; Novi Sad, Serbia.*
41. Walden-Schreiner, C., McArdle, K., Edwards, M., Leung, Y.-F., Seekamp, E., Blank, G., & Duerden, M. 2016. Evaluating Youth Conservation Corps trail improvement projects: Sampling and data collection protocols. Poster presented at the *8<sup>th</sup> International Conference on Monitoring and Management of Visitors in Recreational and Protected Areas; September 26-30, 2016; Novi Sad, Serbia.*
42. Pickering, C., & Leung, Y.-F. 2016. What's the latest research on mountain biking in protected areas?: Results from the special issue of the *Journal of Outdoor Recreation and Tourism*. Paper presented at the *8<sup>th</sup> International Conference on Monitoring and Management of Visitors in Recreational and Protected Areas; September 26-30, 2016; Novi Sad, Serbia.*
43. Leung, Y.-F. 2016. Building a community of best practices: A guidelines approach to sustainable tourism. Paper presented at the *IUCN World Conservation Congress; September 1-10, 2016; Honolulu, Hawaii.*
44. Edwards, M., Leung, Y.-F., Seekamp, E., Blank, G., Duerden, M., Walden-Schreiner, C., & McArdle, K. 2016. Evaluating diverse conservation projects using standardized assessment tools: USA Conservation Corps example. Poster presented at the *IUCN World Conservation Congress; September 1-10, 2016; Honolulu, Hawaii.*
45. Miller, A., Kays, R., & Leung, Y.-F. 2016. Evaluating the impacts of trail building on wildlife: A before-after control-impact experiment using camera traps. Paper presented at the *2016 Ecological Society of America Annual Meeting; August 7-12; Fort Lauderdale, Florida.*
46. Burroughs, K., Leung, Y.-F., Moore, R. L., & Blank, G. 2016. Assessing and evaluating important characteristics of human-created trail drainage features. Poster accepted for presentation at the *River Management Symposium and National Outdoor Recreation Conference; May 16-19, 2016; Boise, Idaho.*
47. McArdle, K., Hastings, C., & Leung, Y.-F. 2016. Assessing sustainable practices and their communication to visitors in two North Carolina state parks. Poster presented at the *38<sup>th</sup> Southeastern Recreation Research Conference; March 20-22, 2016; Asheville, North Carolina.*
48. Bitsura-Mezzaros, K., Smith, J. W., & Leung Y.-F. 2015. Projected impacts to the production of outdoor recreation opportunities across US state park systems due to the adoption of a domestic climate change mitigation policy. Paper presented at the *2015 International Symposium on Sustainable Resource Management; June 13-18, 2015; Charleston, South Carolina.*
49. Miller, A., Leung, Y.-F., & Kays, R. 2015. Assessing the impacts of trail building on wildlife: A before-during-after control-impact experimental design using camera traps. Paper presented at the *2015 International Symposium on Society and Research Management; June 13-18, 2015; Charleston, South Carolina.*
50. Miller, A., Leung, Y.-F., & Kays, R. 2015. Long-term visitor use monitoring: Using camera traps to quantify trail activity. Poster presented at the *2015 International Symposium on Society and Research Management; June 13-18, 2015; Charleston, South Carolina.*

51. Ng, S. L., Leung, Y.-F., Lin, H., Burroughs, K., & Lui, A. S. K. 2015. Assessing the impacts of mountain biking and hiking on an ancient trail in Hong Kong. Paper presented at the *International Conference on Sustainable Tourism and Resilient Communities; May 6-8, 2015; Hong Kong SAR, PR China.*
52. Newburger, T., Kuhn, T., Walden-Schreiner, C., Tsai, W.-L., & Leung, Y.-F. 2015. An integrated approach to assessing pack stock behavior and resource use in Yosemite's high-elevation meadows. Paper presented at the *2015 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; March 29-April 3, 2015; Oakland, California.*
53. Smith, J. W., & Leung, Y.-F. 2015. Projected impacts of climate change mitigation on recreation opportunities across US state park systems. Paper presented at the *2015 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; March 29-April 3, 2015; Oakland, California.*
54. Burroughs, K., Fisher, S., Halim, M., & Leung, Y.-F. 2015. University forests: The balance between research and recreation. Poster presented at the *2015 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; March 29-April 3, 2015; Oakland, California.*
55. Walden-Schreiner, C., Leung, Y.-F., Newburger, T., Kuhn, T., & Tsai, W.-L. 2015. Geospatial methods and tools for integrating resource use and environmental data at multiple scales for protected area conservation. Poster presented at the *Summit on Science for Parks, Parks for Science: The Next Century; March 25-27, 2015; Berkeley, California.*
56. Burroughs, K., Fisher, S., Halim, M., & Leung, Y.-F. 2015. Lake Raleigh Woods trail assessment in support of a sustainable management plan. Paper presented at the *37<sup>th</sup> Southeastern Recreation Research Conference; March 22-24, 2015; Asheville, North Carolina.*
57. Leung, Y.-F., Spenceley, A., Hvenegaard, G., & Buckley, R. 2014. The IUCN Sustainable Tourism Best Practice Guidelines. Presentation at the *IUCN World Parks Congress; November 12-19 2014; Sydney, Australia.*
58. Tsai, W.-L., Shedd, J., Smith, C., Miller, A., Walden-Schreiner, C., Leung, Y.-F., & Smith, J. 2014. ArcGIS Online and Collector for ArcGIS mobile app. Paper presented at the *NC Coastal Reserves Workshop on Using Technology in the Field for Education and Natural Resource Protection; October 15, 2014; Wilmington, North Carolina.*
59. Miller, A., & Leung, Y.-F. 2014. Designing sustainable recreational trails for wildlife: GIS analysis of physical and biotic factors. Paper presented at *Pathways Conference: Integrating Human Dimensions into Fish and Wildlife Management; October 5-9, 2014; Estes Park, Colorado.*
60. Leung, Y.-F., von Ruschkowski, E., Pickering, C., Mendes, R. M. N., & Kollar, C. 2014. Assessing technical trail features for mountain biking: Examples from four countries. Paper presented at the *7<sup>th</sup> International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas; August 21-25, 2014; Tallinn, Estonia.*
61. Conlon, K., & Leung, Y.-F. 2014. Exploring the applicability of the camera trap method for monitoring visitor use and behavior. Paper presented at the *20<sup>th</sup> International Symposium of Society and Natural Resources; June 8-13, 2014; Hannover, Germany.*
62. Leung, Y.-F., Walden-Schreiner, C., & Miller, A. 2014. Participatory monitoring to support sustainable visitor management in protected areas. Paper presented at the *20<sup>th</sup> International Symposium of Society and Natural Resources; June 8-13, 2014; Hannover, Germany.*
63. Miller, A., & Leung, Y.-F. 2014. Don't feed the animals: Monitoring recreation impacts on wildlife with camera traps. Paper presented at the *20<sup>th</sup> International Symposium of Society and Natural Resources; June 8-13, 2014; Hannover, Germany.*

64. Tsai, W.-L., Floyd, M., Leung, Y.-F., McHale, M., & Reich, B. 2014. Exploring the scale dependence of urban forest-human health relationships. Paper presented at the 20<sup>th</sup> *International Symposium of Society and Natural Resources*; June 8-13, 2014; Hannover, Germany.
65. Serenari, C., Peterson, N., Stowhas, P., Leung, Y.-F., Wallace, T., & Sills, E. 2014. Assessing cultural difference in the context of Patagonian large-scale private protected area conservation and development. Paper presented at the 2014 *Annual Meeting of the Association of American Geographers*; April 8-12, 2014; Tampa, Florida.
66. Xu, S., Barbieri, C., & Leung, Y.-F. 2014. Residents' attitudes toward with wine-trails: The case of Haw River. Paper presented at the 26<sup>th</sup> *Northeastern Recreation Research Conference*; April 6-8, 2014; Cooperstown, New York.
67. Conlon, K., & Leung, Y.-F. 2014. Exploring the relationship between environmental conditions and user behavior on trails. Paper presented at the 36<sup>th</sup> *Southeastern Recreation Research Conference*; March 30-April 1, 2014; Asheville, North Carolina.
68. Conlon, K., Mayer, J., Adams, B., Walden-Schreiner, C., Crouse, E., Guo, T., Leung, Y.-F., Smith, J., & Seekamp, E. 2014. Comparing perceptions of trail impacts using 2-D and 3-D imagery. Paper presented at the 36<sup>th</sup> *Southeastern Recreation Research Conference*; March 30-April 1, 2014; Asheville North Carolina.
69. Bitsura-Meszáros, K., Whitlow, M., Li, J., Méley, A., Thompson, E., Leung, Y.-F., & Barbieri, C. 2014. Tourism promotion for UNESCO World Heritage Sites: An evaluation of government websites from four countries. Paper presented at the 36<sup>th</sup> *Southeastern Recreation Research Conference*; March 30-Aprill, 2014; Asheville North Carolina.
70. Walden-Schreiner, C., & Leung, Y.-F. 2014. Identifying current research and manager perceptions of emerging outdoor recreation activities. Poster presented at the 36<sup>th</sup> *Southeastern Recreation Research Conference*; Asheville NC; March 30-April 1, 2014; Asheville, North Carolina.
71. Leung, Y.-F., Lu, D.-J., & Hsu, Y.-C. 2013. Developing a best practice guideline for global protected areas: Input from Asia. Paper presented at the 1<sup>st</sup> *Asia Parks Congress*; November 13-17, 2013. Sendai, Japan.
72. Tsai, W.-L., Leung, Y.-F., McHale, M. R., & Floyd, M. F. 2013. Linking the effects of urban forest fragmentation to human health. Poster presented at the 2013 *Society of American Foresters National Convention*; Charleston, South Carolina.
73. Xu, S., Barbieri, C., & Leung, Y.-F. 2013. Spatial understanding of themed touring routes through wine trails: Residents' perceived benefits. Paper presented at the 2013 *Travel and Tourism Research Association Annual Conference*; June 2013. Kansas City, Missouri.
74. Tsai, W.-L., Leung, Y.-F., McHale, M., & Floyd, M. F. 2013. A multidisciplinary approach to linking urban forest characteristics and human health. Paper presented at the 2013 *National Outdoor Recreation Conference and the IUFRO Conference on Forests for People*; May 2013. Traverse City, Michigan.
75. Tsai, W.-L., Leung, Y.-F., McHale, M., & Floyd, M. 2013. Linking urban forests and human health: A conceptual model. Paper presented at the 25<sup>th</sup> *Northeastern Recreation Research Conference*; April 7-9, 2013. Cooperstown, New York.
76. Xu, S., Barbieri, C., & Leung, Y.-F. 2013. Themed touring routes: A geospatial-tourism typology of wine trails in North Carolina. Poster presented at the 25<sup>th</sup> *Northeastern Recreation Research Conference*; April 7-9, 2013. Cooperstown, New York.

77. Leung, Y.-F., Magro, T., Moreira, J., & Miller, A. 2013. Developing a collaborative learning network for visitor impact monitoring in protected areas. Paper presented at the *2013 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; March 11-15, 2013. Denver, Colorado.*
78. Leung, Y.-F., Hvenegaard, G., Spenceley, A., & Buckley, R. 2013. IUCN Best Practice Guidelines for Sustainable Tourism in Protected Areas (3<sup>rd</sup> Edition): Project updates. Paper presented at the *2013 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; March 11-15, 2013. Denver, Colorado.*
79. Miller, A., & Leung, Y.-F. 2013. The role of state parks in providing recreation opportunities: Visitation trends in difficult economic times. Poster presented at the *2013 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; March 11-15, 2013. Denver, Colorado.*
80. Walden-Schreiner, C., & Leung, Y.-F. 2013. Monitoring group distribution and behavior in open landscapes of Yosemite National Park with geospatial technology. Paper presented at the *2013 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; March 11-15, 2013. Denver, Colorado.*
81. Walden-Schreiner, C., Floyd, M., & Leung, Y.-F. 2013. Incorporating physical activity measures into environmental monitoring of national parks: An example from Yosemite. Paper presented at the *2013 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; March 11-15, 2013. Denver, Colorado.*
82. Adams, B., Conlon, K., Sayre-McCord, R., Crouse, E., & Leung, Y.-F. 2013. Measuring and evaluating the effects of signage on off-trail walking in a university forest, North Carolina. Poster presented at the *35<sup>th</sup> Southeastern Recreation Research Conference; February 24-26, 2013. Athens, Georgia.*
83. Conlon, K., Walden-Schreiner, C., Leung, Y.-F., & Miller, A. 2013. Monitoring off-leash dog walking behavior in protected areas: Development and testing of a protocol. Paper presented at the *35<sup>th</sup> Southeastern Recreation Research Conference; February 24-26, 2013. Athens, Georgia.*
84. Leung, Y.-F., Walden-Schreiner, C., Conlon K., & Miller, A. 2013. Enhancing visitor impact management and stewardship education at NC Coastal Reserves through participatory monitoring: Project updates. Paper presented at the *North Carolina Coastal Training Program, Managing Visitor Use on Coastal Public Lands Workshop; January 23-24, 2013. Beaufort, North Carolina.*
85. Leung, Y.-F., Miller, A., Smith, C., Walden-Schreiner, C., & Conlon, K. 2012. Citizen monitoring of park use and impacts: Exploring options. Paper presented at the *2012 North Carolina Recreation and Park Association Annual Conference; November 11-13, 2012. Greenville, North Carolina.*
86. Leung, Y.-F., Buckley, R., Hvenegaard, G., & Spenceley, A. 2012. Best Practice Guidelines for Sustainable Tourism in Protected Areas (3<sup>rd</sup> Edition): An overview and discussion. Paper presented at the *2012 IUCN World Conservation Congress; September 6-15, 2012. Jeju Island, South Korea.*
87. Leung, Y.-F., Pickering, C. P., & Cole, D. N. 2012. Informal trails and fragmentation effects: A conceptual and research overview. Paper presented at the *6<sup>th</sup> International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas; August 21-25, 2012. Stockholm, Sweden.*
88. Walden-Schreiner, C., Leung, Y.-F., & Miller, A. 2012. Integrating geospatial technology with behavior mapping method in monitoring visitor use in open landscapes. Paper presented at the *6<sup>th</sup> International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas; August 21-25, 2012. Stockholm, Sweden.*
89. Miller, A., & Leung, Y.-F. 2012. Community-based monitoring of tourism in protected areas: Typology of programs and preliminary review. Poster presented at the *2012 Public Participation in Scientific Research Conference; August 4-5, 2012. Portland, Oregon.*

90. Tsai, W.-L., Leung, Y.-F., McHale, M., & Floyd, M. 2012. Developing a conceptual model and landscape metrics to link urban forest fragmentation and human health. Paper presented at the *18<sup>th</sup> International Symposium on Society and Resource Management; June 17-22, 2012. Edmonton, Alberta, Canada.*
91. Walden-Schreiner, C., Leung, Y.-F., & Newburger, T. 2012. Exploring the spatial relationship between visitor use and informal trails in Yosemite Valley meadows. Paper presented at the *2012 Northeastern Recreation Research Conference; April 1-3, 2012. Cooperstown, New York.*
92. Leung, Y.-F., Siderelis, C., Miller, A., & Walden-Schreiner, C. 2012. A long-term state park operations database for academic research: Examples and suggestions. Poster presented at the *34<sup>th</sup> Southeastern Recreation Research Conference; February 26-28, 2012. Auburn, Alabama.*
93. Miller, A., Matisoff, C., McFadden, K., LaGuardia, C., & Leung, Y.-F. 2012. Towards development of a sustainable recreation strategy for university forests: A southeastern U.S. example. Poster presented at the *34<sup>th</sup> Southeastern Recreation Research Conference; February 26-28, 2012. Auburn, Alabama.*
94. Leung, Y.-F., Walden-Schreiner, C., Miller, A., Smith, C., & Tsai, W.-L. 2012. A geospatial approach to monitoring recreational use and impacts in open landscapes: Applications for managers and community volunteers. Paper presented at the *Managing Recreational Use of Publicly Accessible Protected Lands Workshop; January 2012. Beaufort, North Carolina.*
95. Tsai, W.-L., Bruton, C., Leung, Y.-F., McHale, M., Baran, P., & Floyd, M. 2011. Exploring the relationship between urban forest characteristics and human health. Paper presented at the *2011 Society of American Foresters Annual Convention; November, 2011. Honolulu, Hawaii.*
96. Leung, Y.-F., Ting, S. R., & Stewart, K. 2011. Integrating geospatial technology with conservation education: Some lessons learned from a middle-school geoscience program. Paper presented at the *40<sup>th</sup> Annual Conference of the North American Association for Environmental Education; October, 2011. Raleigh, North Carolina.*
97. Tsai, W.-L., Leung, Y.-F., McHale, M., & Floyd, M. 2011. Classifying urban forests and greenspace as physical health resources using Google Earth and Landsat imagery. Paper presented at the *17<sup>th</sup> International Symposium on Society and Resource Management; June, 2011. Madison, Wisconsin.*
98. Kollar, C, Leung, Y.-F., Moore, R., & Blank, G. 2011. Characterizing mountain biking impacts: A case study of a montane and a coastal plain site in the USA. Paper presented at the *2011 Northeastern Recreation Research Conference; April 2011. Bolton Landing, New York.*
99. Leung, Y.-F., Newburger, T., Ballenger, L., Bigsby, K., & Kollar, C. 2011. Establishing the ecological significance of informal trail indicator in Yosemite National Park through an integrated meadow analysis. Paper presented at the *2011 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; March 14-18 2011. New Orleans, Louisiana.*
100. Matisoff, C., Walden-Schreiner, C., & Leung, Y.-F. 2011. Media content analysis as a method for examining environmental concerns of emerging outdoor recreation activities: A case of disc golf. Poster presented at the *33<sup>rd</sup> Southeastern Recreation Research Conference; February 27-March 1, 2011. Boone, North Carolina.*
101. Santucci, D., L. Dern and Y.-F. Leung. 2011. Disc golf, frof, or frisbee golf: Investigating user experience at a popular urban course in North Carolina. Paper presented at the *33<sup>rd</sup> Southeastern Recreation Research Conference; February 27-March 1, 2011. Boone, North Carolina.*
102. Tsai, W.-L., Y.-F. Leung and C.-Y. Chiou. 2011. Generating trail information to promote physical activity: A GIS approach. Paper presented at the *33<sup>rd</sup> Southeastern Recreation Research Conference; February 27-March 1, 2011. Boone, North Carolina.*

103. Leung, Y.-F., C. Kollar and D. Cade. 2010. Sustainable mountain biking: Issues and prospects. Paper presented at the *2010 NC Recreation and Park Association Annual Conference; November 2010. Raleigh, North Carolina.*
104. Leung, Y.-F., S. Supak, K. Stewart and R. Ting. 2010. Fostering environmental literacy through a middle-school geosciences outreach program in North Carolina. Poster presented at the *Ecology and Education Summit; October 14-15, 2010. Washington, DC.*
105. Marion, J. L. and Y.-F. Leung. 2010. Indicators and protocols for monitoring formal and informal trails in protected area. Paper presented at the *Conference on the Issues Confronting the Management of World's National Parks; August 3, 2010. Hualien, Taiwan ROC.*
106. Li, Y.-H., Y.-C. Hsu and Y.-F. Leung. 2010. Indicator development for Yu Shan National Park: An adaptive process. Paper presented at the *5<sup>th</sup> International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas; June 2010. Wageningen, the Netherlands.*
107. Lin, H.-C., Y.-F. Leung and S.-I. Hsu. 2010. Evaluating trail surfacing effectiveness in Yangmingshan National Park, Taiwan ROC: An index approach. Paper presented at the *5<sup>th</sup> International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas; June 2010. Wageningen, the Netherlands.*
108. Lu, D.-J., Y.-F. Leung and H.-T. Hsieh. 2010. Community-based trail monitoring as a mechanism for capacity and partnership building: Lessons learned from Linmei Village, Taiwan ROC. Paper presented at the *5<sup>th</sup> International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas; June 2010. Wageningen, the Netherlands.*
109. Hockett, K, J. Marion and Y.-F. Leung. 2010. The efficacy of educational messaging and site management actions in discouraging off-trail hiking. Paper presented at the *2010 Spotlight on National Park Resources; April 20, 2010. Frederick, Maryland.*
110. Kollar, C. and Y.-F. Leung. 2010. Assessing and understanding environmental impacts of mountain biking technical trail features in urban-proximate parks. Paper presented at the *Emerging Issues along Urban-Rural Interfaces 3: Linking Science and Society; April 11-14, 2010. Atlanta, Georgia.*
111. Leung, Y.-F. and T. Newburger. 2010. Methods for monitoring informal trails in protected areas: Current progress and research needs. Paper presented at the *Visitor Impact and Monitoring Symposium; April 7, 2010. Yosemite National Park, California.*
112. Leung, Y.-F. and Y.-C. Hsu. 2010. Indicators of visitor impacts for high-use park areas: Perspectives from East Asia. Paper presented at the *Visitor Impact and Monitoring Symposium; April 7, 2010. Yosemite National Park, California.*
113. Banks, C., Y.-F. Leung and S. Tomas. 2010. Disentangling the influence of community and place attachment on resident attitudes toward tourism development. Paper presented at the *32<sup>nd</sup> Southeastern Recreation Research Conference; February 21-23, 2010. Greenville, South Carolina.*
114. Leung, Y.-F., S. Supak, R. Ting and K. Stewart. 2010. Nature deficit reduction, scientific discovery and stewardship education: Can we do them all? Experiences from a science outreach program. Poster presented at the *32<sup>nd</sup> Southeastern Recreation Research Conference; February 21-23, 2010. Greenville, South Carolina.*
115. Supak, S., Y.-F. Leung and K. Stewart. 2010. Geotourism potential in North Carolina: Perspectives from interpretation at state parks. Poster presented at the *32<sup>nd</sup> Southeastern Recreation Research Conference; February 21-23, 2010. Greenville, South Carolina.*
116. Stewart, K., R. Ting and Y.-F. Leung. 2009. Starting early: Geoscience literacy and career exploration for middle school students. Poster presented at the *2009 Annual Meeting of Geological Society of America; October 18-21,*

2009. Portland, Oregon.

117. Lu, D.-J., Y.-F. Leung and H.-T. Hsieh. 2009. Community-based trail monitoring scheme - A case study of Shihpan Trail in Linmei. Paper presented at the *2009 International Conference on GIS in the Humanities and Social Sciences; October, 2009. Taipei, Taiwan ROC.*
118. Hsu, Y.-C., Y.-F. Leung and C.-C. Lue. 2009. Eastern harmony? Applying the VERP framework to Yu Shan National Park, Taiwan. Paper accepted for presentation at the *15<sup>th</sup> International Symposium on Society and Resource Management; July 5-8, 2009. Vienna, Austria.*
119. Hockett K., J. L. Marion, Y.-F. Leung, A. Clark and D. Hoffbeck. 2009. Off-trail hiking: Who does it, why, and what works to reduce it. Paper presented at the *2009 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; March 2-6, 2009. Portland, Oregon.*
120. Leung Y.-F. and C. Pickering. 2009. Classifying approaches to visitor impact assessment in U.S. and Australian protected areas. Paper presented at the *2009 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; March 2-6, 2009. Portland, Oregon.*
121. Newburger T., J. Roche, Y.-F. Leung, J. Middleton, B. Meldrum and T. Seher. 2009. Long-term user capacity monitoring programs: Lessons learned in Yosemite National Park. Paper presented at the *2009 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; March 2-6, 2009. Portland, Oregon.*
122. Newburger T., Y.-F. Leung, B. Meldrum, M. J. Messick and B. Woiderski. 2009. Assessing and monitoring habitat fragmentation from informal trail networks in Yosemite meadows. Poster presented at the *2009 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; March 2-6, 2009. Portland, Oregon.*
123. Banks, C., N. Halubka and Y.-F. Leung. 2009. Perception of and attitudes toward environmental sustainable practices in parks: A case study of an organically maintained athletic field. Poster presented at the *31<sup>st</sup> Southeastern Recreation Research Conference; February 22-24, 2009. Athens, Georgia.*
124. Leung Y.-F., D. Maddalena, E. Hain, R. S. Ting and K. Stewart. 2009. Learning natural resources and geology through GIS/GPS: Highlights of a middle school program in Wake County. Poster presented at the *2009 North Carolina GIS Conference; February 19-20, 2009. Raleigh, North Carolina.*
125. Leung, Y.-F., Y.-C. Hsu, C.-C. Lue and D.-J. Lu. 2008. Does recreation ecology have a place in East Asia? Some insights from Taiwan. Paper Presented at the *4<sup>th</sup> International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas; October 14-19, 2008. Montecatini Terme, Italy.*
126. Hockett, K., J. Marion, L. Park, A. Clark and Y.-F. Leung. 2008. The efficacy of educational messaging and site management actions in discouraging off-trail hiking. Paper presented at *14<sup>th</sup> International Symposium on Society and Resource Management; June 10-14, 2008. Burlington, Vermont.*
127. Naber, M., Y.-F. Leung, A. Attarian and C. Siderelis. 2008. Integrating trail condition assessment with recreation demand modeling of mountain bikers. Paper presented at *14<sup>th</sup> International Symposium on Society and Resource Management; June 10-14, 2008. Burlington, Vermont.*
128. Clark, A., Y.-F. Leung, J. L. Marion and K. Hockett. 2008. Exploring the influence of place attachment and experience use history on visitors' attitudes and self-reported off-trail walking behavior. Paper presented at the *30<sup>th</sup> Southeastern Recreation Research Conference; February 24-26, 2008. Savannah, Georgia.*
129. Naber, M., Y.-F. Leung, A. Attarian and C. Siderelis. 2007. The influence of site quality attributes on choice of mountain biking trails in the Research Triangle, North Carolina. Paper presented at *13<sup>th</sup> International Symposium on Society and Resource Management; June 17-21, 2007. Park City, Utah.*

130. Seher, V. and Y.-F. Leung. 2007. Keeping wildlife wild: Addressing human-wildlife interactions in Yosemite National Park. Paper presented at the *2007 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; April 16-20, 2007. St. Paul, Minnesota.*
131. Elliot, C., J. Roche and Y.-F. Leung. Protection and restoration of riparian corridor integrity through monitoring riverbank stability and plant communities. Poster presented at the *2007 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; April 16-20, 2007. St. Paul, Minnesota.*
132. Elliot, C., J. Weaser, E. Canapary, J. Bacon and Y.-F. Leung. 2007. Happy trails! Combining natural resource preservation and visitor use in Yosemite National Park. Paper presented at the *2007 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; April 16-20, 2007. St. Paul, Minnesota.*
133. Leung, Y.-F. 2007. Using indices to characterize impacts of informal trails: review and research agenda. Paper presented at the *2007 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; April 16-20, 2007. St. Paul, Minnesota.*
134. Newman, P., D. Pettebone, Y.-F. Leung and J. Bacon. 2007. Monitoring visitor use and experiential conditions in Yosemite National Park: A case study of successes and lessons learned. Paper presented at the *2007 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites; April 16-20, 2007. St. Paul, Minnesota.*
135. Clark, A., D. Justice, F. Fletcher and Y.-F. Leung. 2007. Linking trail use, non-compliant behavior and resource conditions in the Museum Park, North Carolina Museum of Art. Poster presented at the *29<sup>th</sup> Southeastern Recreation Research Conference; February 25-27, 2007. Asheville, North Carolina.*
136. Dorwart, C., Y.-F. Leung and R. Moore. 2006. "Appreciation of the small details": Using visitor employed photography to evaluate visitors' perceptions of trail environment and their effects on experiences. Paper presented at the *2006 NRPA Leisure Research Symposium; October 10-14, 2006. Seattle, Washington.*
137. Leung, Y.-F. 2006. Recreation ecology in East Asia: Redefining impacts? Paper presented at the *3<sup>rd</sup> International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas; September 13-17, 2006. Rapperswil, Switzerland.*
138. Pettebone, D., P. Newman, P., D. Theobald and Y.-F. Leung. 2006. Developing spatially-balanced sampling protocols for visitor impact monitoring in protected areas. Paper presented at the *3<sup>rd</sup> International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas; September 13-17, 2006. Rapperswil, Switzerland.*
139. Robinson, J. and Y.-F. Leung. 2006. Visitor use and impact monitoring: An adaptive design model. Poster presented at the *3<sup>rd</sup> International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas; September 13-17, 2006. Rapperswil, Switzerland.*
140. Robinson, J. and Y.-F. Leung. 2006. Adaptive monitoring of visitor use and impacts: Conceptual model and a research agenda. Poster presented at *11<sup>th</sup> International Symposium on Society and Resource Management; June 3-8, 2006. Vancouver, BC, Canada.*
141. Leung, Y.-F., K. Levin, S. Freeman, T. Thompson and I. Smith. 2006. Examining the emerging concept of urban ecotourism and its applicability to central North Carolina. Poster presented at the *28<sup>th</sup> Southeastern Recreation Research Conference; February 26-28, 2006. Wilmington, North Carolina.*
142. Leung, Y.-F. and J. Robinson. 2005. Environmental effects of high impact and emerging recreational activities: An international comparison of research and a discussion of proactive management approaches. Paper presented at the *14<sup>th</sup> National Outdoor Conference; July 3-6, 2005. Gold Coast, Queensland, Australia.*
143. Budruk, M., Leung, Y.-F. and R. E. Manning. 2005. A multidisciplinary approach to developing indicators of



sustainable visitor use for urban protected areas: U.S. examples and implications to East Asia. Paper presented at the 5<sup>th</sup> IUCN/WCPA East Asia Conference; June 2005. Hong Kong SAR.

144. Leung, Y.-F., M. Naber, L. Steider and M. Smith. 2005. Applying geospatial technologies to assess and monitor social trails in national parks: Recent examples. Paper presented at the 13<sup>th</sup> George Wright Society Conference on Resource Management in Parks and on Public Lands; March 14-18, 2005. Philadelphia, Pennsylvania.
145. Monz, C. and Y.-F. Leung. 2005. Developing indicators for visitor-wildlife interactions: Value, feasibility and limitations. Paper presented at the 13<sup>th</sup> George Wright Society Conference on Resource Management in Parks and on Public Lands; March 14-18, 2005. Philadelphia, Pennsylvania.
146. Newman, P., D. Theobald, Y.-F. Leung, L. Bloyers and M. Fincher. 2005. Using GIS to develop a spatially balanced monitoring protocol for resource and experiential Indicators in Yosemite National Park. Paper presented at the 13<sup>th</sup> George Wright Society Conference on Resource Management in Parks and on Public Lands; March 14-18, 2005. Philadelphia, Pennsylvania.
147. Dorwart, C., R. Moore and Y.-F. Leung. 2005. Research on visitor perceptions and resource impacts: Benefits, status, challenges, and recommendations. Paper presented at the 13<sup>th</sup> George Wright Society Conference on Resource Management in Parks and on Public Lands; March 14-18, 2005. Philadelphia, Pennsylvania.
148. Leung, Y.-F., M. Naber, J. Robinson and A. Downs. 2005. Monitoring natural resource conditions of disc golf courses: Preliminary results from central North Carolina. Paper presented at the 27<sup>th</sup> Southeastern Recreation Research Conference; February 27-March 1, 2005. Savannah, Georgia.
149. Schuster, G., M. Trink, A. Head and Y.-F. Leung. 2005. Should safety compromise sustainability: A study of a properly built trail system and the emergency access lines that intersect it. Paper presented at the 27<sup>th</sup> Southeastern Recreation Research Conference; February 27-March 1, 2005. Savannah, Georgia.
150. Payne, S., Y.-F. Leung and C. Smith. 2004. Geocache: Treasure or trash? Paper presented at the 2004 Annual Meeting of North Carolina Parks and Recreation Association; November 15-17 2004. Hickory, North Carolina.
151. Monz, C., Y.-F. Leung and C. Dorwart. 2004. Integrating social science approaches into long-term monitoring of visitor resource impacts in national parks: A proposal. Paper presented at the 10<sup>th</sup> International Symposium on Society and Resource Management; June 2-5, 2004. Keystone, CO.
152. Ingle, C. and Y.-F. Leung. 2004. Visitor-horse interactions at Assateague Island National Seashore: Development and testing of a behavior observation procedure. Paper presented at the 26<sup>th</sup> Southeastern Recreation Research Conference; February 8-10, 2004. Charleston, South Carolina.
153. Jaite, L., C. Snow, M. Tynan, G. Wainwright and Y.-F. Leung. 2004. Towards an understanding of geocaching: An examination of participant characteristics, environmental Impacts and benefits in Wake County, North Carolina. Poster presented at the 26<sup>th</sup> Southeastern Recreation Research Conference; February 8-10, 2004. Charleston, South Carolina.
154. Meyer, K. and Y.-F. Leung. 2004. Estimating vegetative and bare ground cover as visitor impact indicators: A comparison of three methods. Paper presented at the 26<sup>th</sup> Southeastern Recreation Research Conference; February 8-10, 2004. Charleston, South Carolina.
155. Smith, C., M. Smith and Y.-F. Leung. 2003. Recreational GPS for work and play. Workshop presented at the 2003 Annual Meeting of North Carolina Parks and Recreation Society; November 3, 2003. Durham, North Carolina.
156. Meyer, K. and Y.-F. Leung. 2003. Evaluating soil compaction and ground cover indicator measures for visitor use planning on Boston Harbor Islands. Poster presented at the Boston Harbor Islands Science Symposium; October

7, 2003. Boston, Massachusetts.

157. Leung, Y.-F., C. Monz, C. Ingle and H. Bauman. 2003. Establishing visitor impact monitoring programmes for seven coastal protected areas in the eastern United States: First-year experiences. Poster presented at the *5th International Conference on Science and the Management of Protected Areas; May 11-16, 2003. Victoria, BC, Canada.*
158. Budruk, M., P. Newman, W. Valliere, J. Bacon, D. Laven, R. Manning and Y.-F. Leung. 2003. Incorporating Earthwatch volunteers into park and protected area research. Poster presented at the *12<sup>th</sup> George Wright Society Conference on Resource Management in Parks and on Public Lands; April 14-18, 2003. San Diego, California.*
159. Leung, Y.-F., M. Budruk and R. Manning. 2003. Assessing and monitoring physical and social impacts of vandalism: Results from the Boston Harbor Islands National Recreation Area. Paper presented at the *12<sup>th</sup> George Wright Society Conference on Resource Management in Parks and on Public Lands; April 14-18, 2003. San Diego, California.*
160. Monz, C., Y.-F. Leung, C. Ingle and H. Bauman. 2003. Visitor impact concerns in the NPS Coastal and Barrier Islands Network areas. Paper presented at the *12<sup>th</sup> George Wright Society Conference on Resource Management in Parks and on Public Lands; April 14-18, 2003. San Diego, California.*
161. Ingle, C., Y.-F. Leung, C. Monz and H. Bauman. 2003. Monitoring visitor impacts in coastal national parks: A review of techniques. Poster presented at the *12<sup>th</sup> George Wright Society Conference on Resource Management in Parks and on Public Lands; April 14-18, 2003. San Diego, California.*
162. Leung, Y.-F., K. Johnson and K. Meyer. 2003. Developing visitor impact monitoring indicators and procedures for Boston Harbor Islands National Park Area. Paper presented at the *12<sup>th</sup> George Wright Society Conference on Resource Management in Parks and on Public Lands; April 14-18, 2003. San Diego, California.*
163. Smith, M. and Y.-F. Leung. 2003. Mapping resource impacts on park trails with GPS: A test of procedures. Poster presented at the *2003 North Carolina GIS Conference; February 20-21, 2003. Winston-Salem, North Carolina.*
164. Holden, T., C. Ingle, K. Meyer and Y.-F. Leung. 2003. Poster signs preferred over footprints, but both reduce social trail use. Poster presented at the *25<sup>th</sup> Southeastern Recreation Research Conference; February 19-21, 2003. Asheville, North Carolina.*
165. Peterson, S., A. Parker, C. Jacobson, D. Bradsher, E. Hunter, A. Lacombe, M. Smith, Y.-F. Leung and R. L. Moore. 2003. Visitors' perceptions of trail impacts: How accurate are they and how do they affect experiences? Paper presented at the *25<sup>th</sup> Southeastern Recreation Research Conference; February 19-21, 2003. Asheville, North Carolina.*
166. Kline, C., D. Cardenas and Y.-F. Leung. 2002. An exploratory study of farm tourism impact zones. Paper presented at the *NET 2002-National Extension Tourism Conference; September 16-19, 2002. Traverse City, Michigan.*
167. Leung, Y.-F., R. E. Manning, M. Budruk and K. Johnson. 2002. Integrating resource and social analysis in the evaluation of visitor carrying capacity of campsites on Boston Harbor Islands. Paper presented at the *9<sup>th</sup> International Symposium on Society and Resource Management; June 2-5, 2002. Bloomington, Indiana.*
168. Newman, P., M. Budruk, R. E. Manning and Y.-F. Leung. 2002. Volunteerism and research in the national parks: A tale of two studies. Paper presented at the *9<sup>th</sup> International Symposium on Society and Resource Management; June 2-5, 2002. Bloomington, Indiana.*
169. Johnson, K. and Y.-F. Leung. 2002. Developing visitor impact indicators and monitoring procedures for recreation sites on Boston Harbor Islands. Poster presented at the *Boston Harbor Islands Biodiversity Seminar;*

May 30, 2002. Cambridge, Massachusetts.

170. Leung, Y.-F. 2002. Developing sustainability indicators for visitor use in protected areas: An U.S. example with implications to East Asia. Paper presented at the 4<sup>th</sup> Conference on Protected Areas of East Asia and The Working Session of the IUCN-WCPA; March 18-23, 2002. Taipei, Taiwan ROC.
171. Leung, Y.-F. and M. Ivy. 2002. The influence of student characteristics in their evaluation of a park planning course web site. Poster presented at the 4<sup>th</sup> Biennial Conference on University Education in Natural Resources; March 14-17, 2002. Raleigh, North Carolina.
172. Holden, T., Y.-F. Leung, and A. Attarian. 2002. Knowledge of Leave No Trace practices on the Animas River Trail, Durango, Colorado. Paper presented at the 24<sup>th</sup> Southeastern Recreation Research Conference; February 20-22, 2002. Athens, Georgia.
173. Shaw, N., K. Johnson, Y.-F. Leung and R. Duhaime. 2001. More than a database: Boston Harbor Islands resource and visitor analysis. Paper presented at the Spatial Odyssey 2001 - The National Park Service GIS Conference; December 3-7, 2001. Primm, Nevada.
174. Leung, Y.-F. 2001. Social trails in national parks and protected areas: Conceptual and assessment issues. Paper presented at the 11<sup>th</sup> George Wright Society Conference on Resource Management in Parks and on Public Lands; April 16-20, 2001. Denver, Colorado.
175. Wirsching, A., Y.-F. Leung and A. Attarian. 2001. A study of visitor preference of Leave No Trace poster designs. Paper presented at the 23<sup>th</sup> Southeastern Recreation Research Conference. February 21-23, 2001; Asheville, North Carolina.
176. Lui, P. L.-T., E. Tse, and Y.-F. Leung. 2001. The construction of an integrated policymaking model for the formulation of a competitive tourism policy. Paper presented at the 1<sup>st</sup> Joint Conference in Hospitality and Tourism; January 12-14, 2001. Hong Kong SAR, PR China.
177. Leung, Y.-F. and J.-H. Lee. 2000. Trends in visitor and resource management: East Asian perspectives from Hong Kong and South Korea. Paper presented at the Trends 2000 -- 5<sup>th</sup> Outdoor Recreation and Tourism Trends Symposium; September 16-20, 2000. Lansing, Michigan.
178. Leung, Y.-F. 2000. Hiking and trail networks impacts. Invited paper presented at the First National Mountain Conference; September 14-16, 2000. Golden, Colorado.
179. Leung, Y.-F. and J. L. Marion. 1999. Solving recreation carrying capacity problems without use reductions: Some empirical examples. Paper presented at the 1999 Congress on Recreation and Resource Capacity; November 29-December 2, 1999. Snowmass Village, Colorado.
180. Leung, Y.-F., J. L. Marion and T. A. Farrell. 1998. The role of recreation ecology in sustainable tourism and ecotourism. Paper presented at the Colloquium on Sustainable Tourism, the 7<sup>th</sup> International Symposium on Society and Resource Management; May 27-31, 1998. Columbia, Missouri.
181. Leung, Y.-F. and J. L. Marion. 1998. Spatial strategies for minimizing visitor impacts in national parks: A backcountry camping example. Poster presented at the 94<sup>th</sup> Annual Meeting of the Association of American Geographers; March 25-29, 1998. Boston, Massachusetts.
182. Marion, J. L. and Y.-F. Leung. 1997. Factors affecting trail degradation in Great Smoky Mountains National Park. Paper presented at the 5<sup>th</sup> National Conference on Scenic and Historic Trails; April 12-16, 1997. Orlando, Florida.
183. Leung, Y.-F. 1996. Natural resources research on the Internet: Possibilities and pitfalls. Paper presented at the 6<sup>th</sup>

*International Symposium of Society and Resource Management; May 18-23, 1996. State College, Pennsylvania.*

184. Leung, Y.-F. 1996. Redefining recreation ecology: Beyond the impact paradigm. Paper presented at the 92<sup>nd</sup> Annual Meeting of the Association of American Geographers; April 10-13, 1996. Charlotte, North Carolina.
185. Marion, J. L. and Y.-F. Leung. 1996. Development and application of a camping management classification system to the National Park Service. Paper presented at the 18<sup>th</sup> Southeastern Recreation Research Conference; February 7-9, 1996, Savannah, Georgia.
186. Leung, Y.-F. 1995. Resource impacts of backcountry campsites and their spatial patterns in Great Smoky Mountains National Park. Paper presented at the 91<sup>st</sup> Annual Meeting of the Association of American Geographers; March 14-18, 1995. Chicago, Illinois.
187. Leung, Y.-F. and J. L. Marion. 1994. Resource conditions of backcountry trails in Great Smoky Mountains National Park. Paper presented at the 16<sup>th</sup> Southeastern Recreation Research Conference; February 7-9, 1994. Helen, Georgia.
188. Lam, K.-C., C.-H. Choi, Y.-F. Leung and S.-H. Luk. 1990. Nutrient fluxes in the Shenchong Basin. Paper presented at the IDRC Soil Erosion Project Workshop; May 1990. Guangzhou, PR China.
189. Lam, K.-C., M.-K. Woo, Y.-F. Leung and M. Sioh. 1988. Transport of nitrogen and phosphorus in streamflow and slope surface runoff, Shenchong Basin. Paper presented at the IDRC Soil Erosion Project Workshop; November 1988. Toronto, Canada.