



## PROFESSIONAL RECORD

**DATE PREPARED:** April 15, 2007

**DATE REVISED:** August 6, 2013

**NAME:** Daniel M. Kashian

**OFFICE ADDRESS:** 3107 Biological Sciences  
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**DEPARTMENT/COLLEGE:** Biological Sciences, College of Liberal Arts and Sciences

**PRESENT RANK & DATE OF RANK:** Associate Professor, 2012

**WSU APPOINTMENT HISTORY:** Appointed Associate Professor August 2012  
Appointed Assistant Professor August 2006

**CITIZEN OF:** United States of America

### EDUCATION

**Baccalaureate:** 1993 University of Michigan, Ann Arbor, MI  
B.S. in Natural Resources

**Graduate:** 1998 University of Michigan, Ann Arbor, MI  
M.S. in Forest Ecology/Natural Resources  
(Advisor: Dr. Burton V. Barnes)

2002 University of Wisconsin, Madison, WI  
Ph.D. in Zoology/Forest Ecology and Management  
(Advisor: Dr. Monica G. Turner)

### Post Graduate (postdoctoral):

2003-06, Colorado State University, Fort Collins, CO  
Postdoctoral Associate (Advisors: Drs. William H. Romme, Michael G. Ryan)

### PROFESSIONAL SOCIETY MEMBERSHIPS:

Xi Sigma Pi (University of Michigan, 1991)  
Michigan Academy of Science, Arts, and Letters (1997-present)  
Society of American Foresters (1997-present)  
Gamma Sigma Delta (University of Wisconsin, 2000)  
Ecological Society of America (2002-present)  
International Association for Landscape Ecology, U.S. Chapter (2002-Present)

**HONORS AND AWARDS**

- 2012 Adjunct Professor, Department of Biology, Central Michigan University
- 2010 College of Liberal Arts and Sciences Teaching Award (Wayne State University)
- 2007 University Research Award (Wayne State University)
- 2002 John Jefferson Davis Research Award (University of Wisconsin)
- 2002 Agriculture and Life Sciences Alumni Award (University of Wisconsin)
- 2001 NASA/Michigan State University Professional Enhancement Award
- 2001 Edward A. and Anna G. Birge Research Award (University of Wisconsin)
- 2001 John T. Emlen Fund for Undergraduate Mentoring (University of Wisconsin)
- 2001 Vilas Graduate Fellowship (University of Wisconsin)
- 2000 University of Wyoming/National Park Service Research Station Fellowship
- 1998 Outstanding Graduate Student Instructor Award (University of Michigan)
- 1997 Superior Teaching Award (University of Michigan)

**I. TEACHING**

**Years at Wayne State:** 7 (2006-present)

**Years at Other Colleges/Universities:** None

**Courses Taught at Wayne State:**

1. Undergraduate:
  - BIO 1500-Basic Life Diversity – 4 credits  
(F09, W11, F11, W13); Enrollment in 2  
sections = 296/93, 223/37, 232/93, 242/20
  - BIO 4130-General Ecology – 4 credits  
(W08, W09); Enrollment = 24, 44
2. Graduate:
  - BIO 8000-Advanced Topics in Biology – 1 credit  
“Foundations of Ecology” (F07 as  
overload); Enrollment = 4
3. Undergraduate/Graduate:
  - BIO 5180-Field Studies in Biology – 4 credits  
“Biology of Trees and Shrubs” (F07, F08);  
Enrollment = 10, 10
  - BIO 5440/7440-Terrestrial Ecology - 4 credits  
(F10, F12); Enrollment = 21, 25
  - BIO 5540/7540-Ecosystem/Landscape Ecol – 3  
credits (W10, W12); Enrollment = 22, 17

**Essays/Theses/Dissertations Directed:****Ph.D.**

1. Jordan Sinclair, Ph.D., 2012. Co-advisor.  
“Dioecious plants: evolution and sex ratio and the effects of drought on aspen growth and vigor.”
2. Victoria Schneider, Ph.D., expected 2013. Advisor.

- “Effects of emerald ash borer-caused tree mortality on amphibian communities in southeastern Michigan”
3. William Dodge, Ph.D., expected 2014. Advisor.  
“Ecology of coyotes across an urban landscape in southeastern Michigan”
  4. Carly Collins, Ph.D., expected 2015. Committee member.  
“Biological mechanisms of Great Lakes contaminants on aquatic invertebrates”
  5. Heather Siersma, Ph.D., expected 2016. Committee member.

**M.S.**

1. Jacob Korte, M.S., 2012. Advisor.  
“Landscape characteristics of upland sandpiper habitat in Michigan”
2. Rebecca Jackson, M.S., expected 2013. Advisor.  
“Effects of insect outbreaks on the carbon balance of subalpine landscapes”
3. Madelyn Tucker, M.S., expected 2013. Advisor.  
“Pre-settlement vs. modern landscape coverage of young jack pine in northern Lower Michigan”
4. Travis White, M.S., expected 2013. Committee member.  
“Litter layer of *Phragmites australis* suppresses the seed bank of native species in Great Lakes coastal wetlands.”
5. Caroline Addis, M.S., expected 2013. Committee member.  
“Examining the effects of firefighting foams on invasive Dreissenid mussels”
6. Bridget Cullinane-Anthony, M.S., expected 2013. Committee member (at Central Michigan University).  
“Bird diversity and use of biological legacies in Michigan jack pine forests”

**B.S.**

1. Jennifer Fugaban, B.S., 2012. (McNair Scholar). Advisor.  
“Potential effects of emerald ash borer-caused tree mortality: Leaf litter decomposition in ephemeral ponds”
2. Saly Kato, B.S. with Honors, 2011. Advisor.  
“Variation in plant growth as determined from herbarium specimens”
3. Benjamin Spei, B.S., 2011. Advisor.  
“Structure of a disjunct black spruce forest in southeastern Michigan”
4. Lisa Kyle, B.S., 2011. (Wayne State Undergraduate Research Award Recipient).  
Co-advisor.  
“Determination of the pesticide Imidacloprid in the pollen of injected ash trees”
5. Jacob Korte, B.S., 2010. (Wayne State Undergraduate Research Award Recipient).  
Advisor.  
“Effects of urbanization on wildlife populations in southeastern Michigan: Variations in color morph proportions of the eastern gray squirrel along an urban gradient”

### **Course or Curriculum Development:**

Biology 1500 – Basic Life Diversity – developed 20 new lectures for the course and designed three new laboratory activities to supplement the current curriculum for the laboratory component. Developed three separate versions of the course that were taught as three 1-hour lectures per week, two 1.5-hour lectures per week, and one 3-hour lecture per week.

Biology 4130 – General Ecology – redesigned the entire course syllabus to update and broaden course coverage and better represent the entire field of ecology. Designed six new laboratories, including three taught in the field. Re-designed the writing component for this writing-intensive course. This course began an upward trend in enrollment after its re-development in 2008.

Biology 5180 – Biology of Tree and Shrubs – developed the course to provide students with knowledge of basic woody plant biology, including 20 lectures on morphology, classification, physiology, and ecology of woody plants. Laboratories include 15 six-hour labs taught in the field in southeastern Michigan each week that emphasized plant identification and site-species relationships. The course also included the development and maintenance of a 24-hour study lab throughout the term and the collection and development of a course herbarium. The course serves as an elective for both biology and environmental science majors.

Biology 5440/7440 – Terrestrial Ecology – developed the course to provide students with a field ecology course emphasizing the interaction of physiography, soil, and vegetation in forests and grasslands that was previously unavailable in the biology curriculum. The course currently serves as a required course for environmental science majors, an elective for biology majors, and a core course option for biology graduate students. It includes 22 lectures and 12 five-hour field labs taught each week across southeastern Michigan in contrasting terrestrial ecosystems.

Biology 5540/7540 – Ecosystem and Landscape Ecology – developed this lecture course as a conceptual course in ecology reviewing the sub disciplines of ecosystem and landscape ecology. The course currently serves as an elective course for environmental science and biology majors, and a core course option for biology graduate students. Course includes 20 lectures, 10 discussion sessions, and 10 computer labs.

Biology 8000 – Foundations of Ecology – developed this graduate seminar emphasizing classic papers in the field of ecology.

### **Other Teaching Activities:**

1. Advisor for two University-funded Undergraduate Research students (Korte, Kyle) and one McNair Scholar (Fugaban).
2. Directed study advisor for twelve students since 2006: (Cucz, Bryson, Busick, Gerardi, Haji-Hassan, Kajy, Korte, Marengo, Sieloff, Spei, Sosin, Yousif); total credits = 31.

3. Wrote 58 letters of recommendation since 2006: graduate school (n=23; Alleman, Becker (2), Busick, Cummings, Dabney, Dodge, Jackson, Korte, Landry, Lipari, Michayluk, Nelson, Rose, Sawnick, Spei (2), Szczepanski, Tepe, Tucker (2), West, Whelan); medical school (n=11; Akhdar, Buscemi, Frailing, Kajy, McCall, Palmer, Rashidi, Schafer, Sieloff, Singh, Sugar); employment (n=12; Busick (2), Cross, Gorgaes, Lyons (2), Orabi, Schneider, Szczepanski, Tepe, Whelan); fellowships (n=12; Collins, Dabney, Dodge (3), Fugaban, Korte, Kyle, Schneider (3), Tepe).

## II. RESEARCH

### Research in Progress

1. Study of disturbance (fire, insects) effects on forest structure, regeneration, and carbon cycling on western forest landscapes
2. Study of post-fire effects and structure of jack pine barrens and forests in the Upper Great Lakes region
3. Study of implications of invasive species on forest structure
4. Development of studies of urban wildlife and ecology in southeastern Michigan

### Funded Research in Last Five Years (current in bold):

1. Department of Energy National Institute for Climate Change Research (PI)  
*Carbon storage responses of subalpine forests to mountain pine beetle outbreaks under current and altered climate regimes in western North America*  
04/08 – 03/11                      \$306,296 (Total costs to DMK; 100% effort)
2. USDA Forest Service – (Co-PI with J.B. Bradford)  
*Drought-related mortality and growth decline in aspen forests*  
06/09 – 05/14                      \$96,397 (78% to DMK; \$75,200 total costs; 90% effort )
3. US Fish and Wildlife Service – (Co-PI with R.G. Corace)  
*A multi-scaled geographic assessment of upland sandpiper occupancy and habitat use*  
05/10 – 12/13                      \$65,000 (Total costs to DMK, 100% effort)
4. Joint Fire Sciences Program – (Co-PI with R.G. Corace, P.C. Goebel, and E. Toman)  
*Integrating fuels reductions, barrens restoration, and plantation structural enhancement in endangered Kirtland's warbler habitat management*  
06/10 – 12/13                      \$214,532 (49% to DMK; \$104,464 total costs; 60% effort)
5. USDA Forest Service – (Co-PI with L. Bauer and T. Poland)  
*Evaluating the impact of emerald ash borer and biological control on ash mortality, health, and recovery in southeastern Michigan*  
05/12 – 04/17                      \$10,000 (Total costs to DMK, 100% effort)
6. U.S. Department of Agriculture – (Co-PI with D.F. Jacobs, E. Gustafson, B. Sturtevant, and H. Zhang)  
*Forecasting carbon storage of eastern forests: Can American chestnut restoration improve carbon storage potential in an uncertain future?*  
04/11 – 12/13                      \$815,415 (Co-PI as consulting role only; 5% effort)

*Not Funded:*

1. Joint Fire Sciences Program – (Lead PI, with co-PIs R.G. Corace and P.C. Goebel)  
*Assessing effectiveness of fuel treatments for meeting restoration needs in forest mosaics of the northern Lake States*  
09/13 – 08/16           \$333,346 (88% to DMK; \$293,867 total costs; 90% effort)
2. USDA Forest Service – (Co-PI with L. Bauer and T. Poland)  
*Long-term monitoring of ash plots in Michigan: evaluating the impact of biological control on tree condition and regeneration*  
05/13 – 04/16           \$167,459 (90% to DMK; \$150,713 total costs; 95% effort)
3. Joint Fire Sciences Program – (Lead PI with co-PIs P.C. Goebel, S. Matthews, and R.G. Corace)  
*Post-fire recovery of vegetation and fuels in non-forested patterned peatlands of the northern Lake States.*  
06/12 - 06/15           \$329,536 (Total costs)
4. US Department of Agriculture/Animal and Plant Health Inspection Service – (PI)  
*Impacts of emerald ash borer ash mortality on native plant and animal community diversity in southeastern Michigan*  
05/08 – 12/10           \$99,161 (Total costs)
5. US Department of Energy – (PI)  
*Human disturbance effects on carbon storage potential of upland forests in Michigan: land use legacies and alternative stable states*  
09/10 – 09/15           \$806,296 (Total costs)
6. National Science Foundation – (Co-PI with J.B. Bradford)  
*Exploring the importance of disturbance legacies for carbon storage potential of upland forests in Michigan: long-term effects on carbon of alternative stable states in forests*  
05/11 – 05/15           \$626,850 (Total costs)

**III. PUBLICATIONS****Journal Articles Published (Refereed Journals); \*= corresponding author;***Publications at WSU (August 2006 - present)**(# citations, 2010 ISI impact factor, 5-yr impact factor)*

1. Kulakowski, D., M.W. Kaye, and D.M. Kashian. 2013. Long-term aspen cover change in the western US. *Forest Ecology and Management* 299: 52-59. (*n/a*, 1.992, 2.507)
2. Kashian, D.M.\*, W.H. Romme, D.B. Tinker, M.G. Turner, and M.G. Ryan. 2013. Post-fire changes in forest carbon storage over a 300-year chronosequence of *Pinus contorta*-dominated forests. *Ecological Monographs* 83: 49-66. (*n/a*, 5.938, 8.827)
3. Kashian, D.M.\*, R.G. Corace, L.M. Shartell, D. Donner, and P. Huber. 2012. Variability and persistence of post-fire biological legacies in jack pine-dominated forests of northern Lower Michigan. *Forest Ecology and Management* 263: 148–158. (*n/a*, 1.992, 2.507)
4. Corace, R.G., L.M. Shartell, L.A. Schulte, W.L. Brininger, M.K.D. McDowell, and D.M. Kashian\*. 2012. An ecoregional context for forest management on National

- Wildlife Refuges of the Upper Midwest, U.S.A. *Environmental Management* 49: 359-371. (DMK contributed 40%; analyzed data and assisted with writing and editing the manuscript) (*n/a*, 1.503, 1.895)
5. Hicke, J.A., C.D. Allen, A.R. Desai, M.C. Dietze, R.J. Hall, E.T. Hogg, D.M. Kashian, D. Moore, K. Raffa, R. Sturrock, and J. Vogelmann. 2012. Effects of biotic disturbances on forest carbon cycling in the United States and Canada. *Global Change Biology* 18: 7-34. (DMK contributed 10%; assisted with writing and editing the manuscript) (*n/a*, 6.346, 7.814)
  6. Kashian, D.M.\*, R.M. Jackson, and H.D. Lyons. 2011. Forest structure altered by mountain pine beetle outbreaks affects subsequent attack in a Wyoming lodgepole pine forest, USA. *Canadian Journal of Forest Research* 41: 2403-2412. (*n/a*, 1.574, 2.0)
  7. Kashian, D.M.\*, and J.A. Witter. 2011. Assessing the potential for ash canopy tree replacement via current regeneration following emerald ash borer-caused mortality on southeastern Michigan landscapes. *Forest Ecology and Management* 261: 480-488. (0, 1.992, 2.507)
  8. Smithwick, E.A.H., D.M. Kashian, M.G. Ryan, and M.G. Turner. 2009. Long-term nitrogen storage and soil nitrogen availability in post-fire lodgepole pine ecosystems. *Ecosystems* 12: 792-806. (DMK contributed 40%; collected all data and assisted with writing and editing the manuscript) (8, 3.679, 4.735)
  9. Smithwick, E.A.H., M.G. Ryan, D.M. Kashian, W.H. Romme, D.B. Tinker, and M.G. Turner. 2009. Modeling the effects of fire and climate change on carbon and nitrogen storage in lodgepole pine (*Pinus contorta*) stands. *Global Change Biology* 15: 535-548. (DMK contributed 30%; collected all data and assisted with writing and editing the manuscript) (16, 6.346, 7.814)
  10. Kashian, D.M.\*, W.H. Romme, and C.M. Regan. 2007. Reconciling divergent interpretations of quaking aspen decline on the northern Colorado Front Range. *Ecological Applications* 17: 1296-1311. (8, 4.276, 5.067)

*Publications prior to WSU (Michigan, Wisconsin, and Colorado State)*  
 (# citations, 2010 ISI impact factor, 5-yr impact factor)

11. Binkley, D., D.M. Kashian, S. Boyden, M.W. Kaye, J.B. Bradford, M.A. Arthur, P.J. Fornwalt, and M.G. Ryan. 2006. Patterns of growth dominance in forests of the Rocky Mountains, U.S.A. *Forest Ecology and Management* 236: 193-201. (DMK contributed 15%; collected and analyzed data and assisted with writing the manuscript) (7, 1.992, 2.507)
12. Schoennagel, T., M.G. Turner, D.M. Kashian, and A. Fall. 2006. Influence of fire regimes on lodgepole pine stand age and density across the Yellowstone National Park (USA) landscape. *Landscape Ecology* 21:1281-1296. (DMK contributed 5%) (8, 3.200, 3.648)
13. Kashian, D.M.\*, W.H. Romme, D.B. Tinker, M.G. Turner, and M.G. Ryan. 2006. Carbon storage on landscapes with stand-replacing fires. *Bioscience* 56: 598-606. (52, 5.51, 6.335)
14. Kashian, D.M.\*, M.G. Turner, W.H. Romme, and C.G. Lorimer. 2005. Variability and convergence in stand structural development on a fire-dominated subalpine landscape. *Ecology* 86: 643-654. (32, 5.073, 6.218)

15. Kashian, D.M.\*, M.G. Turner, and W.H. Romme. 2005. Variability in leaf area and stemwood increment along a 300-year lodgepole pine chronosequence. *Ecosystems* 8: 48-61. (19, 3.679, 4.735)
16. Kashian, D.M.\*, D.B. Tinker, M.G. Turner, and F.L. Scarpace. 2004. Spatial heterogeneity of lodgepole pine sapling densities following the 1988 fires in Yellowstone National Park, Wyoming, U.S.A. *Canadian Journal of Forest Research* 34: 2263-2276. (22, 1.574, 2.0)
17. Turner, M.G., D.B. Tinker, W.H. Romme, D.M. Kashian, and C.M. Litton. 2004. Landscape patterns of sapling density, leaf area, and aboveground net primary production in postfire lodgepole pine forests, Yellowstone National Park (USA). *Ecosystems* 7: 751-775. (DMK contributed 20%; collected and analyzed data and assisted with writing the manuscript) (59, 3.679, 4.735)
18. Kashian, D.M.\*, B.V. Barnes, and W.S. Walker. 2003. Ecological species groups of landform-level ecosystems dominated by jack pine in northern Lower Michigan, USA. *Plant Ecology* 166: 75-91. (17, 1.88, 2.184)
19. Walker, W.S., B.V. Barnes, and D.M. Kashian. 2003. Landscape ecosystems of the Mack Lake burn, northern Lower Michigan, and the occurrence of the Kirtland's warbler. *Forest Science* 49: 119-139. (DMK contributed 25%; helped conceive the ideas for the manuscript and collected and analyzed data) (14, 1.196, 1.590)
20. Kashian, D.M.\*, B.V. Barnes, and W.S. Walker. 2003. Landscape ecosystems of northern Lower Michigan and the occurrence and management of the Kirtland's warbler. *Forest Science* 49: 140-159. (19, 1.196, 1.590)
21. Kashian, D.M.\*, and B.V. Barnes. 2000. Landscape influence on the spatial and temporal distribution of the Kirtland's warbler at the Bald Hill burn, northern Lower Michigan, U.S.A. *Canadian Journal of Forest Research* 30: 1985-1904. (11, 1.574, 2.0)

#### **Journal Articles Submitted (to Refereed Journals):**

1. Sinclair, J.P., D.M. Kashian, J.B. Bradford, and D.C. Freeman. Is fractal dimension of annual growth an indicator of health in trees? Submitted to *Ecoscience*, June 2013. (DMK contributed 20%; helped analyze data and write the manuscript)
2. Corace III, R.G., J.L. Korte, L.M. Shartell, and D.M. Kashian\*. Open land conservation and restoration scenarios in the context of upland sandpiper occurrence in Michigan. Submitted to *Ecoscience*, June 2013. (DMK contributed 60%; helped conceive the original idea for the project, analyze data, and wrote half the manuscript)
3. Corace III, R.G., L.M. Shartell, P.C. Goebel, D.M. Kashian, and I. Drobyshev. Effects of forest restoration on bird communities in mixed pine forests of Upper Michigan. Submitted to *Restoration Ecology*, June 2013. (DMK contributed 20%; helped analyze data and write the manuscript)
4. Dodge, W.B., and D.M. Kashian\*. Recent distribution of coyotes across an urban landscape in southeastern Michigan. Submitted to *Journal of Fish and Wildlife Management*, June 2013. (DMK contributed 50%; helped conceive the original idea for the project, analyze data, and wrote half the manuscript)
5. Schneider, V.P., and D.M. Kashian\*. Effects of prescribed burns on herpetofauna in wetlands in southeastern Michigan. Submitted to *Ecological Restoration*, April 2013. (DMK contributed 40%; helped conceive the original idea for the project, analyzed data, and helped write the manuscript)

### **Paper Published in Conference Proceedings:**

1. Battaglia, M.A., K.N. Nelson, D.M. Kashian, and M.G. Ryan. 2010. Forest biomass and tree planting for fossil fuel offsets in the Colorado Front Range. Pp. 81-93 in: Jain T.B., R.T. Graham, and J. Sandquist, tech. eds. Integrated management of carbon sequestration and biomass utilization opportunities in a changing climate: Proceedings of the 2009 National Silviculture Workshop; 2009 June 15-18; Boise, ID. Proceedings RMRS-P-61. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 351 pp.

### **Technical Documents:**

1. Kaufmann, M.R., G.H. Aplet, M. Babler, W.L. Baker, B. Bentz, M. Harrington, B.C. Hawkes, L.S. Huckaby, M.J. Jenkins, D.M. Kashian, R.E. Keane, D. Kulakowski, W. McCaughy, J. Negron, J. Popp, W.H. Romme, T. Schoennagel, W. Shepperd, F.W. Smith, E.M. Sutherland, D. Tinker, and T.T. Veblen. 2009. The status of our understanding of lodgepole pine and mountain pine beetles – a focus on forest ecology and potential fire behavior. Colorado Forest Restoration Institute, Fort Collins, CO.
2. Ryan, M.G., Kashian D.M., Smithwick E.A.H., W.H. Romme, M.G. Turner, and D.B. Tinker. 2008. Final Report, Carbon cycling at the landscape scale: the effect of changes in climate and fire frequency on age distribution, stand structure, and net ecosystem production. JFSP Project Number: 03-1-1-06
3. Comer, P.J., D.A. Albert, H.A. Wells, B.L. Hart, J.B. Raab, D.L. Price, D.M. Kashian, R.A. Corner, and D.W. Schuen. 1995. Michigan's presettlement vegetation, as interpreted from the General Land Office Surveys 1816-1856. Report to the US EPA Water Division and the Wildlife Division, Michigan Department of Natural Resources. Michigan Natural Features Inventory, Lansing, MI. 76 pp.

### **Book Reviews:**

1. Kashian, D.M. 2012. Distilling a complex subdiscipline down for introductory students. *Landscape Ecology* 27: 921-923.
2. Kashian, D.M. 2005. Considering forest sustainability on modern landscapes. *Landscape Ecology* 20: 1025-1027.
3. Kashian, D.M. 2005. Defending against the alien invaders. *Plant Ecology* 180: 275-277.
4. Kashian, D.M. 2004. Managing the forest matrix to conserve biodiversity. *Landscape Ecology* 19: 703-704.

### **Papers Presented:**

*Papers presented while at WSU (August 2006 - present)*

1. Miesel, J.R., P.M. Nelson, P.C. Goebel, R.G. Corace III, and D.M. Kashian. 2012. Forest fuels and vegetation in wildfire-regenerated jack pine (*Pinus banksiana* Lamb.) forests: informing ecological forestry in the Lake States region. Ecological Society of America (ESA) Annual Meeting, August 5-10, Portland, OR
2. Korte, J.L., R.G. Corace III, and D.M. Kashian. 2012. A multi-scaled characterization of upland sandpiper breeding habitat in Michigan. U.S. Chapter of the International

- Association for Landscape Ecology (US-IALE) Annual Meeting, April 8-12, Newport, RI.
3. Kashian, D.M. 2012. Will ash persist in the presence of emerald ash borer? Evidence from field studies in southeastern Michigan. US-IALE Annual Meeting, April 8-12, Newport, RI.
  4. Corace, R.G. III, P.C. Goebel, D.M. Kashian, and T. Pypker. 2012. Research-management partnerships and fire-dependent ecosystem restoration: Case studies from Seney National Wildlife Refuge, Upper Michigan. Stewardship Network Annual Conference, January 20-21, East Lansing, MI.
  5. Kashian, D.M. 2012. Evidence for persistence of ash a decade after the introduction of emerald ash borer in southeastern Michigan. Stewardship Network Annual Conference, January 20-21, East Lansing, MI.
  6. Schneider, V.P., and Kashian, D.M. 2011. Indirect effects of ash tree mortality on wood frog (*Lithobates sylvatica*) desiccation. Joint Meeting of Ichthyologists and Herpetologists, July 6-11, Minneapolis, MN.
  7. Kashian, D.M., R.G. Corace, L.M. Shartell, D. Donner, and P. Huber. 2011. Variation and longevity of biological legacies in wildfire-regenerated jack pine forests, northern Lower Michigan. US-IALE Annual Meeting, April 3-8, Portland, OR.
  8. Fugaban, J., and D.M. Kashian. 2011. Potential effects of invasive species on ephemeral ponds. National Conference for Undergraduate Research, March 31-April 2, Ithaca, NY. (poster)
  9. Kashian, D.M., and R.M. Jackson. 2010. Carbon storage responses of subalpine forests to mountain pine beetle outbreaks in the Greater Yellowstone Ecosystem. Ecological Society of America (ESA) Annual Meeting, August 1-6, Pittsburgh, PA
  10. Schneider, V.P., and Kashian, D.M. 2010. Effects of Emerald Ash Borer-caused tree mortality on amphibian populations in southeastern Michigan. ESA Annual Meeting, August 1-6, Pittsburgh, PA (Invited speaker to Organized Symposium)
  11. Kyle, L., and D.M. Kashian. 2010. Determination of the pesticide imidacloprid in the pollen of injected ash trees. National Conference of Undergraduate Research, April 15-17, Missoula, MT. (poster)
  12. Schneider, V.P., and Kashian, D.M. 2009. Potential effects of emerald ash borer-caused tree mortality on forest amphibian communities in southeastern Michigan. USDA-APHIS Emerald Ash Borer Research & Development Meeting. October 20-21, Pittsburgh, PA
  13. Kashian, D.M. 2009. Carbon storage responses of subalpine forests to mountain pine beetle outbreaks in the Greater Yellowstone Ecosystem. ESA Annual Meeting, August 7-12, Albuquerque, NM. (poster)
  14. Schneider, V.P., and Kashian, D.M. 2009. Effects of ash tree mortality on amphibian populations. ESA Annual Meeting, August 7-12, Albuquerque, NM. (poster)
  15. Kashian, D.M., and J.A. Witter. 2008. Spatial variability in ash regeneration as a predictor of ash recovery following mortality caused by the emerald ash borer in southeastern Michigan. US-IALE Annual Meeting, April 6-10, Madison, WI.
  16. Kashian, D.M., and J.A. Witter. 2007. Regenerative capacity of ash following mortality of canopy trees caused by the emerald ash borer. USDA-APHIS Research and Development Meeting, October 21-23, Pittsburgh, PA.

*Papers presented prior to WSU (Michigan, Wisconsin, and Colorado State)*

17. Kashian, D.M., M.G. Ryan, and W.H. Romme. 2006. Stand-replacing fires and carbon storage: Effects of stand age and density on carbon storage in lodgepole pine ecosystems. ESA Annual Meeting, August 5-11, Memphis, TN.
18. Kashian, D.M., M.G. Ryan, W.H. Romme, D.B. Tinker, and M.G. Turner. 2006. Potential effects of altered fire frequency on carbon cycling on coniferous landscapes. US-IALE Annual Meeting, March 28-April 1, San Diego, CA.
19. Kashian, D.M., M.G. Ryan, W.H. Romme, D.B. Tinker, and M.G. Turner. 2005. Carbon cycling at the landscape scale: the effect of changes in climate and fire frequency on age distribution, stand structure, and net ecosystem production. Joint Fire Sciences Program Principal Investigator's Meeting, November 1-3, San Diego, CA.
20. Kashian, D.M., M.G. Ryan, W.H. Romme, D.B. Tinker, and M.G. Turner. 2005. Effects of changes in climate and fire frequency on landscape-scale carbon cycling in coniferous forests. ESA Annual Meeting, August 7-13, Montreal, Quebec, Canada.
21. Kashian, D.M., W.H. Romme, and C.M. Regan. 2004. Variable trajectories of aspen succession and decline in the northern Colorado Front Range. ESA Annual Meeting, August 1-6, Portland, OR.
22. Kashian, D.M., W.H. Romme, and C.M. Regan. 2004. Diverse trends of aspen decline in the northern Front Range of Colorado. US-IALE Annual Meeting, March 30-April 2, Las Vegas, NV.
23. Kashian, D.M., and D.B. Tinker. 2004. Structure-age relationships along a 300-year chronosequence of lodgepole pine in Yellowstone National Park. US-IALE Annual Meeting, March 30-April 2, Las Vegas, NV.
24. Kashian, D.M., M.G. Turner, and W.H. Romme. 2002. Variability and change in stand function in Yellowstone National Park: How do large, infrequent fires affect the spatial heterogeneity of forest ecosystem processes? ESA Annual Meeting, August 4-9, Tucson, AZ.
25. Kashian, D.M., and M.G. Turner. 2001. Spatial heterogeneity and long-term forest stand development: Do fire-created landscape legacies persist? ESA Annual Meeting, August 5-9, Madison, WI.
26. Kashian, D.M., and M.G. Turner. 2001. The persistence of landscape legacies following catastrophic fire in Yellowstone National Park. US-IALE Annual Meeting, April 25-29, Tempe, AZ.
27. Kashian, D.M., M.G. Turner, and W.H. Romme. 2000. Long-term development of stand structure following catastrophic fire in Yellowstone National Park: Do landscape legacies persist? ESA Annual Meeting, August 6-10, Snowbird, UT.
28. Kashian, D.M., W.S. Walker, and B.V. Barnes. 1998. Landscape ecosystems of the High Plains of northern Lower Michigan and the occurrence of the Kirtland's warbler. National Convention of the Society of American Foresters, September 19-23, Traverse City, MI.
29. Kashian, D.M., and B.V. Barnes. 1998. The influence of physiographic features of the landscape on the occurrence of the Kirtland's warbler in northern Lower Michigan. US-IALE Annual Meeting, March 17-21, East Lansing, MI.

### **Invited Seminars or Lectures Presented:**

1. Michigan Botanical Society, Huron Valley Chapter, May 2012.  
“Are there visible reasons for the demonstrable variation of UMBS forests?”
2. Lake States Fire Science Consortium (webinar), February 2012.  
“Variability and persistence of post-fire biological legacies in jack pine forests.”
3. University of Michigan-Dearborn, Department of Biology, October 2011.  
“Kirtland’s warbler management: The hazards of successful endangered species conservation (and other musings)”
4. University of Michigan-Dearborn, Department of Biology, March 2011.  
“The only constant is change: A primer on plant and forest succession.”
5. University of Michigan Biological Station, June 2010.  
“Forest and landscape ecology in northern Lower Michigan.”
6. Eastern Michigan University, Department of Biology, February 2009.  
“A primer on ecology and environmental issues in forests.”
7. University of Windsor, Department of Biology, March 2008.  
“Disturbances shaping Rocky Mountain forests and their implications for global change.”
8. The Stewardship Network, East Lansing, Michigan, January 2008.  
“Major forested habitats in Michigan: Restoration opportunities.”
9. Michigan State University, Department of Forestry, June 2007.  
“Growing towards the light: Understanding interactions of wildfire, stand structure, and carbon storage to shape 20<sup>th</sup> century silviculture.”
10. University of Michigan, School of Natural Resources and Environment, March 2007.  
“Playing with fire: Implications of climate change for disturbances that shape Rocky Mountain forests.”
11. Woods Hole Research Center, September 2006.  
“Stand dynamics, fire frequency, and carbon storage across lodgepole pine forests of the Rocky Mountains.”

## **IV. SERVICE**

### **Committee Assignments:**

#### **University Committee Membership**

1. Southeastern Michigan Junior Science and Humanities Symposium Advisory Board (2008-2013)
2. Judge and moderator for Southeastern Michigan Science and Humanities Forum (2006, 2007, 2008, 2009, 2010, 2011, 2012)

#### **College/Department Committee Membership**

1. Environmental Science Program Steering Committee (2006 - present)
2. Curator of Wayne State University Museum of Natural History (2007 – present)
3. Undergraduate Committee, Department of Biological Sciences (2007 - 2008)

4. Chair, *ad hoc* Committee on revising Introductory Biology Laboratories, Department of Biological Sciences (2008)
5. Faculty Retreat Planning Committee, Department of Biological Sciences (2009-2010)
6. Policy Committee, Department of Biological Sciences (2009-2010, 2012-present)
7. Evolution and Organismal Biology Division Head, Department of Biological Sciences (2009-2010, 2012 - present)
8. CLAS Teaching Award Selection Committee (2011)
9. Salary Committee, Department of Biological Sciences (2011)
10. CLAS Assessment Learning Community, Assessment Coordinator for the Environmental Science Program (2011)

**Professional Consultation:**

1. Developed model to predict forest carbon sequestration for Coalition for the Upper South Platte (2005-2006)
2. Public presentation to US Senate Staff in Washington D.C. as expert in forest ecology regarding HR4200 (2006)
3. Forest consultant for Wabigama County Club, Elk Rapids, MI (2010)
4. Research Committee, Kirtland's Warbler Recovery Team (2011 – present)
5. Advisory Committee and co-PI, Lake States Fire Science Consortium (2013-present)

**Journal/Editorial Activity:**

1. Editorial Board member for Forest Ecology and Management, and International Journal of Forest Research.
2. Reviewed 62 manuscripts since 2006 (9-10 per year) for: African Environmental Review, American Midland Naturalist, Arid Lands Research and Management, Association for Fire Ecology, Canadian Journal of Forest Research, Carbon Balance and Management, Conservation Biology, Ecological Applications, Ecological Modelling, Ecoscience, Environmental Management, Environmental Research Letters (2), Forest Ecology and Management, Forest Science, Frontiers of Ecology and the Environment, Functional Ecology, Global Change Biology, Journal of Biogeography, Journal of Ecology, Journal of Fish and Wildlife Management, Journal of Forestry, Journal of Wildlife Management, Journal of the Torrey Botanical Society, Landscape Ecology, Natural Areas Journal, Oecologia, Plant Ecology, PLoS ONE, Scandinavian Journal of Forestry, Silva Fennica, and Trees: Structure and Function.
3. Critical reviews for the Central Hardwoods Conference Proceedings and the Michigan Natural Features Inventory.
4. Internal reviews for Michigan Natural Features Inventory, USDA Forest Service, the University of Michigan, and the University of Wyoming.

**Other Professionally Related Service:**

1. Judge for Wayne State University Department of Biological Science Graduate Poster Symposium (2006)

2. Proposal reviewer for National Science Foundation (2007, 2008)
3. Co-organizer for one-day public conference on global climate change held at Wayne State University (2008)
4. Interview on local public radio (WDET-FM) on research relating to insect outbreaks and climate change (2008)
5. Panel reviewer for UDSA/EPA proposal solicitation (2009)
6. Reviewer for USDA Forest Service Assessment of the Shoshone National Forest (2009)
7. Panel/proposal reviewer for US Department of Defense-SERDP proposal solicitation (2010)
8. Interview and article published in Detroit Free Press on coyote research (2010)
9. Coyote research featured on Michigan Public Radio's Environmental Report (2011)
10. Gave invited introductory presentation to incoming Wayne State University freshmen students in the Community of Scholars program (2011)
11. Presented invited public talk given as part of Wayne State's "Science Under the Dome" series (2011)
12. Panel reviewer for Department of Energy proposal solicitation (2012)

## V. APPENDICES

### **Journal Articles in Preparation (for Refereed Journals):**

1. Kashian, D.M. Evidence for ash persistence a decade after the introduction of emerald ash borer in southeastern Michigan. To be submitted to Ecology, August 2013.
2. Spei, B., and D.M. Kashian\*. Structure of a disjunct black spruce forest in southeastern Michigan. To be submitted to Michigan Botanist, September 2013.
3. Schneider, V.P., and D.M. Kashian\*. Amphibian desiccation in response to canopy mortality created by the emerald ash borer in southeastern Michigan. To be submitted to Copeia, September 2013.
4. Kashian, D.M.\*. Changes in forest carbon storage following mountain pine beetle outbreaks in the Greater Yellowstone Ecosystem. To be submitted to Ecology, October 2013.
5. Jackson, R.M., and D.M. Kashian\*. Effects of insect outbreaks on the carbon balance of subalpine landscapes. To be submitted to Landscape Ecology, August 2014.