

# AARON J. PATTON

## CURRICULUM VITAE

### CONTACT AND PERSONAL INFORMATION

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### EDUCATION

Ph.D. in Agronomy, Purdue University, West Lafayette, IN. December 2006.  
M.S. in Agronomy, Purdue University, West Lafayette, IN. August 2003.  
B.S. in Horticulture, Iowa State University, Ames, IA. December 2000.

### PROFESSIONAL EXPERIENCE

2013-current Associate Professor/ Turfgrass Extension Specialist, Purdue Univ., Dept. of Agronomy.  
2010-2013 Assistant Professor/ Turfgrass Extension Specialist, Purdue Univ., Dept. of Agronomy.  
2006-2010 Assistant Professor/ Turfgrass Extension Specialist, University of Arkansas, Dept. of Hort.  
2003-2006 Graduate Research, Teaching and Extension Assistant, Purdue Univ., Dept. of Agronomy.  
2001-2003 Graduate Research and Teaching Assist., Purdue Univ., Dept. of Agronomy.  
1999-2001 Undergraduate and Graduate Teaching Assistant, Iowa State University, Dept. of Hort.  
2000 Intern, Purdue University, Department of Agronomy.

#### **Assistant Professor/Turfgrass Extension Specialist, Purdue University, Department of Agronomy, July 2010 to current (60% Extension, 20% Research, 20% Teaching)**

Dr. Patton's primary responsibility is to develop and deliver educational programs to the turfgrass industry of Indiana and the Midwest. Therefore, he is also actively involved in applied research and helps to maintain a high quality undergraduate program. The core Turfgrass Science Program includes 6 faculty, 4 professional staff, 5-10 graduate students and 1 clerical staff. In addition, up to 4 more faculty and several upper level AP staff work closely with the program. As part of the Purdue Turf Team, Dr. Patton fills a role as a leader of the applied research and Extension/outreach efforts. Dr. Patton has administrative responsibility for the W.H. Daniel Turfgrass Research and Diagnostic Center. Dr. Patton supervises the Center's manager, coordinates external funding and donations for the Center and is responsible for long-term strategic planning for the facility and repair and rehabilitation funds. The Daniel Center is used by approximately 4,000 people annually including programs by academic departments, intercollegiate athletics, and industry in addition to the Extension and teaching activities of the Turf Team.

Dr. Patton is also Executive Director of the Midwest Regional Turf Foundation (MRTF), which was created in 1945 with the mission of supporting turfgrass research, Extension programming, and education at Purdue University. Dr. Patton is responsible for all operations of the MRTF, including day-to-day management, educational programming, membership recruitment, budgeting, and fundraising. The MRTF serves in an advisory capacity for the Extension programs that Dr. Patton leads in collaboration with other members of the Turf Team. Because of Purdue's relationship with the MRTF, the Foundation contributes approximately \$125,000 annually to Purdue for turfgrass research and education. This money is used to support the research programs of several members of the Turfgrass Team including Bigelow (AGRY), Gibb (ENTM), Jiang (AGRY), Latin (BTNY), Patton (AGRY), and Richmond (ENTM); and supports the operating budget of the W.H. Daniel Turfgrass Research Center. Funding is also used to pay 0.5 FTE for an executive secretary.

### WORK EXPERIENCE

2003-2006 TurfDoc Lawn Fertilization Service. Owner/Operator. Dayton, Indiana.  
2002-2003 Lafayette Elks Country Club. Pro-Shop. West Lafayette, Indiana.

2001-2002	Purdue University, Birck Boilermaker Golf Complex. Maint. Staff. West Lafayette, Indiana.
2000	Valhalla Golf Club. Louisville, Kentucky. Maintenance Staff. PGA Tournament.
2000	Martinsville Country Club. Martinsville, Indiana. Maintenance Intern.
1999	United States Golf Association, Green Section Internship. Houston, Texas.
1999	Augusta National Golf Club. Maintenance Intern. Augusta, Georgia.
1998	Muirfield Village Golf Club. Maintenance Intern. Dublin, Ohio.
1997	Indiana University Golf Course. Maintenance Intern. Bloomington, Indiana.
1994-1996	Indiana University Golf Course. Pro Shop. Bloomington, Indiana.

## EXTENSION

Indiana's professional turfgrass industry is estimated to generate in excess of \$1.4 billion in annual expenditures. This primary clientele is well-defined and includes the staff of approximately 350 golf courses; 600 professional lawn care businesses; 30+ sod producers; numerous athletic fields (university, high school, and municipal level); grounds managers of business and industrial complexes, schools, parks, cemeteries and hospitals; and industry salespeople and distributors. With such a large and diverse industry, there is great demand for information and education. The goal of Dr. Patton's Extension program is to meet that demand for education with research-based information. Dr. Patton leads eight major outreach programs. Dr. Patton produces Extension materials to meet the needs of the professional turfgrass managers who vary in their level of expertise, from those with bachelor or master's degrees with considerable expertise to novice managers new to the industry. Additionally, Dr. Patton works with Agriculture and Natural Resources (ANR) Extension educators to meet the needs of the State's homeowners. In-state, out-of-state, and international clients are served through phone calls, email, press releases, newsletters, a website and blog, and Extension publications.

### Major Programs: Directed Programs at Purdue University

- |   |                                      |
|---|--------------------------------------|
| 1. Indiana Green Expo                   | 5. Diagnostic Training               |
| 2. Midwest Regional Turf Field Day      | 6. Weed Management Seminar           |
| 3. Turf & Ornamental Seminar            | 7. Turf Tips (electronic newsletter) |
| 4. Basic Training: Turfgrass Management | 8. Industry Training Cooperative     |

### Summary of Extension Publications

Type	Number
Refereed Extension Journal Articles	3
Invited Refereed Book Chapter	1
Extension Abstracts Presented at Scientific Meetings	5
Peer Reviewed Extension Publications	49
Trade Press Articles	16
Published Newsletters (print and electronic)	153

## BOOK CHAPTER

**Patton, A.J.**, L. Trenholm, and F.C. Waltz. 2013. Turfgrass extension and outreach programming. p. 147-177. *In* J.C. Stier, B.P. Horgan and S.A. Bonos (ed.) *Agronomy Monograph 56. Turfgrass: Biology, Use, and Management*, American Society of Agronomy, Crop Science Society of America, Soil Science Society of America, Madison, WI.

## REFEREED PUBLICATIONS

1. **Patton, A.J.** and Z.J. Reicher. 2011. Patton, A.J. and Z.J. Reicher. 2011. Basic training: A one-day education module for new clientele in the turf industry. *Journal of Extension*. [On-line] 49(5):Article 5TOT6. Available at: <http://www.joe.org/joe/2011october/tt6.php>.

2. **Patton, A.J.** and J.E. Kaminski. 2010. Tracking the impact of your web-based content. *Journal of Extension*. [On-line] 48(4):Article 4TOT1. Available at: <http://www.joe.org/joe/2010august/tt1.php>.
3. **Patton, A.J.** 2009. Using bubble plots to aid in extension program planning. *Journal of Extension* [On-line] 47(5):Article 5TOT6. Available at: <http://www.joe.org/joe/2009october/tt6.php>.

#### **ABSTRACTS/PROFESSIONAL PRESENTATIONS**

1. **Patton, A.J.**, L.E. Trenholm, F.C. Waltz. 2011. Turfgrass outreach programming. In annual meetings abstracts [CD-ROM]. ASA, CSSA, and SSSA Madison, WI. Invited symposium.
2. **Patton, A.J.**, and D.V. Weisenberger. 2011. Survey of spreader calibration and application practices of Indiana lawn care operators. In annual meetings abstracts [CD-ROM]. ASA, CSSA, and SSSA Madison, WI.
3. **Patton, A.J.**, and Z.J. Reicher. 2010. Basic training: A one-day education module for new clientele. In annual meetings abstracts [CD-ROM]. ASA, CSSA, and SSSA Madison, WI.
4. **Patton, A.J.** 2008. Using bubble plots to aid in extension program planning. In annual meetings abstracts [CD-ROM]. ASA, CSSA, and SSSA Madison, WI.
5. Kaminski, J.A., and **A.J. Patton**. 2008. Tracking the impact of your web-based content. In annual meetings abstracts [CD-ROM]. ASA, CSSA, and SSSA Madison, WI.

#### **EXTRAMURAL FUNDING**

##### **Grants submitted but not funded**

Since 2007, 5 different grant proposals (3 as PD, and 2 as Co-PI) were submitted but not funded to 5 different agencies (EPA – Environmental Education Grants; Southern Region Risk Management Education Center; Lawn Institute; University of Arkansas; Purdue University) with a total request for funding of \$93,366 with \$46,136 as the portion for my program.

#### **PUBLICATIONS**

1. **Patton, A.J.**, F. Whitford, D. Weisenberger, G. Hardebeck, and J. Trappe. 2013. Calibrating ride-on pesticide sprayers and fertilizer spreaders: Keys to accurate application. Purdue University Extension Publication. PPP-104. *In press*.
2. **Patton, A.J.** and D.V. Weisenberger. 2013. Controlling Yellow Nutsedge. Purdue University Extension Publication. AY-19-W.
3. **Patton, A.J.** and D.V. Weisenberger. 2013. Sedge Control for Turf Professionals. Purdue University Extension Publication. AY-338-W.
4. **Patton, A.J.** and D.V. Weisenberger. 2013 Turfgrass Weed Control for Professionals. Purdue University Extension Publication. AY-336. 2nd revision.
5. Whitford, F., P. Hipkins, D. Nowaskie, D. Linscott, A. Martin, J. Obermeyer, **A. Patton**, S. Gabbard, G. Beestman, and K.L. Smith. 2012. Measuring Pesticides: Overlooked Steps To Getting the Correct Rate. Purdue University Extension Publication. PPP-96.
6. **Patton, A.J.** 2012. Establishing a lawn from sod. Purdue University Extension Publication. AY-28.
7. Young, J., and **A.J. Patton**. 2010. A guide to fungicide resistance in turf systems. University of Arkansas Cooperative Extension Publication. FSA-6146.
8. **Patton, A.J.**, and J.W. Boyd. 2010. 2010 Turfgrass weed control for professionals. University of Arkansas Cooperative Extension Publication. MP-370.
9. Brosnan, J.T., G.K. Breeden, and **A.J. Patton**. 2010. The turfgrass industry officially loses MSMA. University of Arkansas Cooperative Extension (FSA-6145) and University of Tennessee Extension Publication (W243).
10. Moseley, D., **A.J. Patton**, R. Bateman, and T. Kirkpatrick. 2010. Controlling nematodes on golf courses. University of Arkansas Cooperative Extension Publication. MP-481.
11. Young, J., and **A.J. Patton**. 2010. Managing anthracnose on golf course putting greens. University of Arkansas Cooperative Extension Publication. FSA-6144.
12. **Patton, A.J.**, D. Moseley, R. Bateman, and T. Kirkpatrick. 2009. Nematode management in lawns. University of Arkansas Cooperative Extension Publication. FSA-6141.
13. **Patton, A.J.** 2009. Busting the most common lawn myths and misconceptions. University of Arkansas

- Cooperative Extension Publication. FSA-6142.
14. **Patton, A.J.** 2009. Building a backyard putting green. University of Arkansas Cooperative Extension Publication. FSA-6143.
  15. **Patton, A.J.** 2009. Establishing seeded zoysiagrass on golf courses and lawns. University of Arkansas Cooperative Extension Publication. MP-476.
  16. **Patton, A.J.** 2009. Establishing seeded bermudagrass on golf courses, lawns and athletic fields. University of Arkansas Cooperative Extension Publication. MP-477.
  17. **Patton, A.J.**, and S. Vann. 2008. Pythium diseases of turfgrass. University of Arkansas Cooperative Extension Publication. FSA-7565.
  18. Rainey, R., Robbins, J., **A. Patton**, and T. Ellison. 2008-2009 Arkansas Green Industry Wholesale Producers. Leaflet.
  19. **Patton, A.J.** 2008. Practical Math for the Turfgrass Professional. University of Arkansas Cooperative Extension Publication. CDHORT-200.
  20. **Patton, A.J.** and J.W. Boyd. 2008. Lawn Care Calendar: Bermudagrass. University of Arkansas Cooperative Extension Publication. FSA-6121.
  21. **Patton, A.J.** and J.W. Boyd. 2008. Lawn Care Calendar: Centipedegrass. University of Arkansas Cooperative Extension Publication. FSA-6120.
  22. **Patton, A.J.** and J.W. Boyd. 2008. Lawn Care Calendar: St. Augustinegrass. University of Arkansas Cooperative Extension Publication. FSA-6119.
  23. **Patton, A.J.** and J.W. Boyd. 2008. Lawn Care Calendar: Zoysiagrass. University of Arkansas Cooperative Extension Publication. FSA-6122.
  24. **Patton, A.J.** and J.W. Boyd. 2008. Lawn Care Calendar: Tall Fescue. University of Arkansas Cooperative Extension Publication. FSA-6118.
  25. **Patton, A.J.** 2008. Growing Turfgrass in Shade. University of Arkansas Cooperative Extension Publication. FSA-6140.
  26. Trappe, J.M., and **A.J. Patton**. 2008. Thatch Prevention and Control. University of Arkansas Cooperative Extension Publication. FSA-6139.
  27. **Patton, A.J.**, J.M. Trappe, and J.W. Boyd. 2008. 2008 Arkansas Sod Source Directory. University of Arkansas Cooperative Extension Publication. FSA-6136.
  28. **Patton, A.J.** and J.W. Boyd. 2008. Lawns. In Master Gardener Training Manual. University of Arkansas Cooperative Extension Publication. MP-316.
  29. Vann, S., T. Spurlock, and **A.J. Patton**. 2007. Take all root rot. University of Arkansas Cooperative Extension Publication FSA-7560.
  30. **Patton, A.J.**, and S. Vann. 2007. Brown patch of tall fescue lawns. University of Arkansas Cooperative Extension Publication FSA-7558.
  31. Vann, S., and **A.J. Patton**. 2007. Rust of Arkansas turfgrasses. University of Arkansas Cooperative Extension Publication FSA-7559.
  32. **Patton, A.J.**, and J. Boyd. 2007. Mowing a lawn. University of Arkansas Cooperative Extension Publication FSA-6023.
  33. **Patton, A.J.**, and J.W. Boyd. 2007. Establishing a lawn from sod. University of Arkansas Cooperative Extension Service Publication FSA-2042.
  34. **Patton, A.J.** 2007. Fertilizing your lawn. University of Arkansas Cooperative Extension Service Publication FSA-2114.
  35. **Patton, A.J.** 2007. Liming your lawn. University of Arkansas Cooperative Extension Service Publication FSA-6134.
  36. **Patton, A.J.**, and J.W. Boyd. 2007. Seeding a lawn in Arkansas. University of Arkansas Cooperative Extension Service Publication FSA-2113.
  37. **Patton, A.J.**, and J.W. Boyd. 2007. Choosing a grass species for Arkansas lawns. University of Arkansas Cooperative Extension Service Publication FSA-2112.
  38. Vann, S., and **A.J. Patton**. 2007. Bermudagrass spring dead spot. University of Arkansas Cooperative Extension Service Publication FSA-7551.
  39. Reicher, Z.J., C.A. Bigelow, **A.J. Patton**, and T. Voigt. 2006. 7 simple steps to a better home lawn. Purdue Univ. and the Univ. of Illinois Cooperative Extension Publication. AY-32-W, IL-IN TW 72.

40. Reicher, Z.J., C.A. Bigelow, **A.J. Patton**, and T. Voigt. 2006. Lawn improvement programs. Purdue Univ. and the Univ. of Illinois Cooperative Extension Publication. AY-13-W, IL-IN TW 4.
41. Reicher, Z.J., C.A. Bigelow, **A.J. Patton**, and T. Voigt. 2006. Controlling broadleaf weeds in home lawns. Purdue Univ. and the Univ. of Illinois Cooperative Extension Publication. AY-9-W, IL-IN TW 31.
42. Reicher, Z.J., C.A. Bigelow, **A.J. Patton**, and T. Voigt. 2006. Control of crabgrass in home lawns. Purdue Univ. and the Univ. of Illinois Cooperative Extension Publication. AY-10-W, IL-IN TW 33.
43. Reicher, Z.J., C.A. Bigelow, **A.J. Patton**, and T. Voigt. 2006. Establishing turf areas from seed. Purdue Univ. and the Univ. of Illinois Cooperative Extension Publication. AY-3-W, IL-IN TW 1.
44. Reicher, Z.J., C.A. Bigelow, **A.J. Patton**, and T. Voigt. 2006. Purchasing quality grass seed for your lawn. Purdue Univ. and the Univ. of Illinois Cooperative Extension Publication. AY-25-W, IL-IN TW 2.
45. Reicher, Z.J., C.A. Bigelow, **A.J. Patton**, and T. Voigt. 2006. Mowing, dethatching, aeration and rolling turf. Purdue Univ. and the Univ. of Illinois Cooperative Extension Publication. AY-8-W, IL-IN TW 21.
46. **Patton, A.J.**, and R. Latin. 2005. *Rhizoctonia* Large Patch. Purdue Univ. Cooperative Extension Publication. BP-117-W.
47. Reicher, Z.J., C.A. Bigelow, and **A.J. Patton**. 2004. ID and control of annual bluegrass and rough bluegrass in lawns grassy weeds. Purdue Univ. and the Univ. of Illinois Cooperative Extension Publication. AY-41-W, IL-IN TW 34.
48. Reicher, Z.J., C.A. Bigelow, and **A.J. Patton**. 2004. Identification and control of perennial grassy weeds. Purdue Univ. and the Univ. of Illinois Cooperative Extension Publication. AY-11-W, IL-IN TW 32.
49. **Patton, A.J.**, C.A. Bigelow, and Z.J. Reicher. 2004. Bermudagrass for southern Indiana athletic fields. Purdue Univ. and the Univ. of Illinois Cooperative Extension Publication. AY-325-W, IL-IN TW 3.

#### TRAINING MATERIALS

1. Bigelow, C, Y. Jiang, **A. Patton**, R. Latin, T. Gibb, and D. Richmond. 2012. Lawns and the summer 2012 drought/heat crisis: Now what? Purdue Turf Program publication. Available at: [http://www.agry.purdue.edu/turf/pubs/082012\\_DroughtPublication.pdf](http://www.agry.purdue.edu/turf/pubs/082012_DroughtPublication.pdf)
2. Creswell, T., G. Ruhl, **A. Patton**, and S. Weller. 2011. A Homeowner's Guide to Suspected Imprelis® Herbicide Injury in the Landscape. Purdue University Plant & Pest Diagnostic Laboratory publication. Available at: <http://www.ppd.l.purdue.edu/ppdl/pubs/briefs/ImprelisFAQ.pdf>
3. **Patton, A.**, T. Creswell, G. Ruhl, and S. Weller. 2011. A Turf Professionals Guide to Suspected Imprelis® Herbicide Injury in the Landscape. Purdue University Plant & Pest Diagnostic Laboratory publication. Available at: <http://www.ppd.l.purdue.edu/PPDL/pubs/briefs/ImprelisLCO.pdf>
4. **Patton, A.J.** and Z.J. Reicher. 2011. Turf growth and physiology. In pest management and lawn maintenance: A workshop for lawn care professionals. Purdue Pesticide Programs.
5. **Patton, A.J.** 2011. Creating efficient and practical treatment schedules. In pest management and lawn maintenance: A workshop for lawn care professionals. Purdue Pesticide Programs.

#### TRADE AND MASS MEDIA

1. **Patton, A.J.** October 2012. Tackling Tough Broadleaf Weeds: Picking Products with the Right Ingredients. Turf Magazine. Online. Available at: <http://www.turfmagazine.com/article-8729.aspx>
2. **Patton, A.J.** 2012. Warming up in the transition zone: Golf courses are increasingly choosing warm-season turfgrasses as maintenance budgets continue to be squeezed. USGA Green Sec. Rec. 50(20):1-5.
3. **Patton, A.J.**, and K. Daniel. 2012. Yellow Nutsedge Control in Turf and Ornamentals. INLA Magazine. July/August. 20-23.
4. **Patton, A.J.** June 2012. Proven Yellow Nutsedge Control Strategies. Turf Magazine. Online. Available at: <http://www.turfmagazine.com/print-8290.aspx>
5. Trappe, J.M., **A.J. Patton**, D.E. Karcher, and M.D. Richardson. 2012. Do all grasses divot the same? Noticeable differences exist between bermudagrass and zoysiagrass cultivars. Golf Course Management 80(3):92-96.
6. Trappe, J.M., **A.J. Patton**, and M.D. Richardson. 2011. Bermudagrass: Summer traffic tolerance and fall color retention. Golf Course Management 79(12):76-80.

7. Brosnan, J.T., G.K. Breeden, **A.J. Patton**, P.E. McCullough, and G.M. Henry. 2011. MSMA Phase-out: What's next? *Golf Course Management* 79(4):94-98.
8. Richardson, M.D., D.E. Karcher, **A.J. Patton**, and J. McCalla. 2010. Golf ball lie in bermudagrass and zoysiagrass cultivars. *Golf Course Management* 78(6):90-92,94-95.
9. **Patton, A.J.** 2010. Selecting zoysiagrass cultivars: Part II. Pest tolerance and selection criteria. *Golf Course Management* 78(5):90-95. Reprint to be published in the January/February 2013 issue of GCM China (Chinese).
10. **Patton, A.J.** 2010. Selecting zoysiagrass cultivars: Part I. Turf quality and environmental stress tolerance. *Golf Course Management* 78(6):80-82,84,86,88. Reprint to be published in the January/February 2013 issue of GCM China (Chinese).
11. **Patton, A.J.**, J.M. Trappe, M.D. Richardson, and E. Nelson. 2010. Herbicide safety on seashore paspalum seedlings. *Golf Course Management* 78(2):98-102.
12. Stiegler, J.C., M.D. Richardson, D.E. Karcher, and **A.J. Patton**. 2010. Foliar nutrient uptake by a cool-season and warm-season turfgrass. *USGA Green Section Record*. 48(1):7-9.
13. **Patton, A.J.** 2009. Zoysiagrass lawns: Maintenance tips for success. *Arkansas Gardener*. 9(7):41-42.
14. **Patton, A.J.** 2009. Zoysiagrass lawns in Oklahoma: Maintenance tips for success. *Oklahoma Gardener*. 7(7):41-42.
15. **Patton, A.J.** 2007. Easy green: Ten steps to your best looking Arkansas lawn. *Arkansas Gardener*. 7(5):12-15.
16. **Patton, A.J.**, and Z.J. Reicher. 2007. Zoysiagrass winter hardiness. *Golf Course Management* 75(4): 119-123.
17. **Patton, A.J.**, and Z.J. Reicher. 2007. Zoysiagrass establishment rate. *Golf Course Management* 75(3): 124-127. Reprint published in *Monthly Golf Management*. No. 283: 117-121. (in Japanese) Available online at: <http://www.ikki-web.com/books/gt&gmb/gm.html>
18. **Patton, A.J.**, D.W. Williams, and Z.J. Reicher. 2004. Establishing seeded bermudagrass. *Golf Course Management* 72(12):73-77.
19. **Patton, A.J.**, D.W. Williams, and Z.J. Reicher. 2004. Renovating fairways using seeded zoysiagrass. *Golf Course Management* 72(11):84-88.
20. **Patton, A.J.**, D.W. Williams, and Z.J. Reicher. 2004. Establishing seeded zoysiagrass. *Golf Course Management* 72(11):79-83.
21. **Patton, A.J.** 2003. Warm-season turf for the transition zone. *Golf Course Management* 71(8). [Online]. [6 p.] Available at: <http://www.gcsaa.org/gcm/2003/aug03/08WebEx-Essay2002.asp> (verified 28 Jan. 2005). GCSAA, Lawrence, KS.
22. **Patton, A.J.** 2001. Purdue's world of water. *Golf Course Management* 69(3):134-142.

#### **PRESS RELATED TO EXTENSION PROGRAMS**

1. Robinson, K and S. Doyle. Sept. 2012. Renovating lawns after a tough summer. Video and Article.
2. Throssell, C. August 2012. Healing Power: Brutal heat and awful drought. *Golfdom*. p. 16-19.
3. Doyle, S. 12 July 2012. Your Lawn in times of drought. Video.  
<https://www.youtube.com/watch?v=wS8UnMzwbMY>
4. Leer, S. 2 July 2012. Specialist: Controlling lawn weeds in drought carries risks. Available at: <http://www.purdue.edu/newsroom/outreach/2012/120702PattonWeeds.html>
5. Merzdorf, J. 28 June 2012. Home lawn during drought: to water ... or not? Available at: <http://www.purdue.edu/newsroom/outreach/2012/120628PattonLawn.html>
6. Scoggin, A., and A. Campbell. 1 August, 2011. July burns up records in Indianapolis and beyond. Available at: <http://www.indystar.com/>.
7. Robinson, K. July 22, 2011. Avoid use of herbicide Imprelis, Purdue experts advise. Article source. Available at: <http://www.purdue.edu/newsroom/outreach/2011/110722PattonImprelis.html>
8. Fortune, E. July 2009. Fungus may turn lush lawn into brown, patchy mess. Article Interview. Available at: <http://www.uaex.edu/news/july2009/0710brownpatch.htm>
9. Martin, K. June 13 2009. How do I get grass to grow in my tree shaded yard? Article Interview. Available at: <http://www.nwanews.com/adg/Style/261894/print/>
10. Fortune, E. May 2009. Sharpen mower blades for a clean-cut, healthier lawn. Article Interview. Available at: [http://www.uaex.edu/news/may2009/0508lawnmower\\_blade.htm](http://www.uaex.edu/news/may2009/0508lawnmower_blade.htm)

11. Norman, R. September 2008. September a good time to fertilize and maintain a healthy lawn. Article Interview. Available at: <http://www.recordtimes.com/nwat/living/69130/>
12. **Patton, A.J.** 2008. TV: Interview on maintaining shaded lawns. THV, Little Rock. July 3, 2008.
13. **Patton, A.J.** 2008. TV: Interview on mowing lawns. THV, Little Rock. July 3, 2008.
14. Hightower, M. April 2008. Can't Make That Putt? Blame Nematodes! Article Interview. Available at: <http://rvmg.blogspot.com/2008/04/cant-make-that-putt-blame-nematodes.html>

## NEWSLETTERS

### *Electronic*

**Issue:** In 1997, an electronic newsletter (website) entitled "Turf Tips" was created to target the turf industry based on the need to widely disseminate timely information in a rapid fashion. **Objectives:** Communicate maintenance reminders, hot topics, pest problems, etc. to homeowners, turf professionals, and ANR Extension educators, inform subscribers of educational opportunities, and communicate research findings important to stakeholders. **Product:** Electronic newsletter articles are distributed to clientele in a rapid and timely fashion. Content for these articles comes from faculty input, advisory groups, and recent email inquiries from clientele. **Delivery:** Turf Tips are posted either immediately or a minimum of every two weeks during the growing season. In 2011, Turf Tips was reorganized to a blog accessible at [purdueturftips.blogspot.com](http://purdueturftips.blogspot.com) to increase the method of circulation by new technologies (Twitter, Facebook, RSS feeds, and other social media channels). Dr. Patton leads this effort and solicits articles from other faculty in AGRY, BTNY, ENTM, and AGEC. Dr. Patton has authored or co-authored over 50% of all posted Turf Tips since 2010. **Circulation and Impact:** 2,576 subscribers (as of 8/22/12). With 60+ total posts annually, turf tips generates over 154,560 annual email touch points with clientele in addition to web traffic. Traffic to the blog within 24 hours of newsletter postings is approximately 54% of subscribership indicating the majority of newsletter subscribers value content enough to read it within hours of posting. Content from turf tips is often quoted in local newspapers and distributed by turf professionals to their clients.

### *Other*

1. **Patton, A.J.** April 2013. New herbicides for 2013. Midwest Regional Turf Foundation, Midwest Memo.
2. Law, Q.D. and **A.J. Patton.** April 2013. Selecting turfgrasses and mowing strategies to reduce mowing requirements. Midwest Regional Turf Foundation, Midwest Memo.
3. **Patton, A.J.** Spring 2012. Selecting herbicides for Spring Seedings. Indiana Golf Course Superintendents Association Newsletter.
4. **Patton, A.J.** June 2011. Alternating active ingredients in sequential applications of preemergence crabgrass herbicides. Midwest Regional Turf Foundation, Midwest Memo.
5. **Patton, A.J.** June 2011. Herbicide damage on spruce and pine. Midwest Regional Turf Foundation, Midwest Memo.
6. **Patton, A.J.** December 2010. Turf Tips. Indiana Golf Course Superintendents Association Newsletter.
7. **Patton, A.J.** December 2010. New Herbicides for Golf Courses. Indiana Golf Course Superintendents Association Newsletter.
8. **Patton, A.J.** November 2010. Turf Tips. Indiana Agriculture and Natural Resources Extension Newsletter.
9. **Patton, A.J.** October 2010. New Turfgrass Extension Specialist. Indiana Agriculture and Natural Resources Extension Newsletter.
10. **Patton, A.J.** September 2010. New Turfgrass Extension Specialist. Indiana Golf Course Superintendents Association Newsletter.
11. **Patton, A.J.** September 2010. Light at the end of the tunnel: Fighting the battle of summer heat. Indiana Golf Course Superintendents Association Newsletter.
12. **Patton, A.J.** August 2010. Nitrogen arithmetic: Reducing fertilizer costs with math and management. Midwest Regional Turf Foundation, Midwest Factsheet.
13. **Patton, A.J.** 2010. Light at the end of the tunnel: Fighting the battle of summer heat. Indiana Golf Course Superintendents Association. September 2010.
14. **Patton, A.J.** 2008. Ten Steps to Better Turf. Arkansas Parks Association newsletter. June 2008.

15. **Patton, A.J.** 2008. Nitrogen Arithmetic: Reducing fertilizer costs with math and management. Golf Course Superintendents Association of Arkansas newsletter. June 2008.

## WEBSITE

A website (<http://www.agry.purdue.edu/turf>) was redesigned in the fall of 2010 with updated technology to increase technology transfer to turfgrass clientele in Indiana. The website features information about turf help, turf tips, do-it-yourself extension publications, professional extension publications, soil testing information, educational programs, calendar of events, personnel, news and updates, and more and was first published July 2011. Goals for the website are to 1) answer the most commonly asked questions and contain commonly needed information, 2) allow easy access to information, 3) attract clientele with new website technologies, and 4) reflect the quality of the turfgrass science program at Purdue University.

## INTERACTIVE ONLINE RESOURCES

Bigelow, C.A., J. Shore, I. Delgado, K. Tonnen, M. O’Leary and **A.J. Patton**. 2005. Turfgrass Identification tool. [Online]. Available at: <http://www.agry.purdue.edu/turf/tool/index.html>. Purdue University.

## PRESENTATIONS

### Summary of extension presentations

Year	In-state	Regional	National	International	Total	Invited	Total attendees	Mean rating <sup>z</sup>
2012	43	2	1	0	46	29	3,299	4.7
2011	43	8	5	0	56	39	4,461	--
2010	32	6	8	0	46	39	3,364	4.4
2009	28	6	7	0	41	28	1,625	4.6
2008	28	12	3	0	43	27	2,231	4.7
2007	31	4	1	0	36	24	1,566	4.5
2006	5	0	0	0	5	0	469	--
2005	4	0	0	0	4	0	491	4.5
2004	5	0	0	0	5	0	516	4.6
2003	4	1	1	0	6	2	340	--
2002	8	0	0	0	8	1	528	4.5
2001	2	0	0	0	2	0	225	--
Totals	233	39	26	2	298	189	19,115	4.6 <sup>y</sup>

<sup>z</sup> Speaker overall rating. When available, on a scale of 1 to 5, where excellent=5, good=4, fair=3, poor=2, and very poor=1.

<sup>y</sup> Weighted mean of annual speaker ratings.

## RESEARCH

Dr. Patton has established an applied research program focusing on turfgrass systems with the goal to develop management practices that reduce inputs to the environment without compromising turf quality. Dr. Patton works closely with a range of stakeholders (lawn care professionals, sports field managers, golf course superintendents, and turfgrass producers) as part of his Extension program which provides an excellent opportunity to learn their research needs. His applied research program is designed to address current and potential future challenges facing the turfgrass industry. Research results are communicated to his clientele via his engagement program to provide solutions to these challenges.



**A. Research Goal:** Plan, implement, and lead projects devoted to minimizing environmental risks while improving turf quality and health. Dr. Patton is currently investigating three specific research areas including:

1. **Weed Biology and Control.**
2. **Increased Understanding of Carbon Sequestration in Urban Grasslands.**
3. **Evaluation of Warm-Season Turfgrass Germplasm.**

**Summary of Research Publications**

Type	Number
Refereed Journal Articles	30
Refereed Proceedings	4
Abstracts	44
Experiment Station Reports/Research Bulletins	114
Research Reports	7
Technical Reports to Funding Agencies	92

**REFEREED PUBLICATIONS**

\* Served as major professor and/or with primary editing responsibilities of the publication

1. Law, Q.D., M.A. Jones, **A.J. Patton\***, and N.E. Christians. 2012. Influence of an amino acid complex on the growth of *Agrostis stolonifera* L. cv. Penncross. International Turfgrass Research Journal 12:*In press*
2. Trappe, J.M., and **A.J. Patton\***. 2012. Evaluating two zoysiagrass cultivars in separate field trials for their preference of nitrogen source. International Turfgrass Res. J. 12: *In press*.
3. **Patton, A.J.**, D.V. Weisenberger, J.T. Brosnan, and G.K. Breeden. 2013. Safety of labeled herbicides for broadleaf weed control in creeping bentgrass putting greens. Turfgrass Sci. *In press*.
4. Brosnan, J.T., G.K. Breeden, M.T. Elmore, **A.J. Patton**, and D.V. Weisenberger. 2012. Zoysiagrass seedhead suppression with imidazolinone herbicides. Weed Technol. 26:708-713.
5. Proctor, C.A., M.D. Sousek, **A.J. Patton**, D.V. Weisenberger, and Z.J. Reicher. 2012. Combining preemergence herbicides in tank-mixes or as sequential applications provides season-long crabgrass control. HortScience 47(8):1159-1162.
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11. Trappe, J.M., D.E. Karcher, M.D. Richardson, and **A.J. Patton\***. 2011. Bermudagrass and zoysiagrass cultivar selection: Part 1, clipping yield, scalping tendency, and golf ball lie. Appl. Turfgrass Sci. doi:10.1094/ATS-2011-0630-01-RS.
12. Trappe, J.M., D.E. Karcher, M.D. Richardson, and **A.J. Patton\***. 2011. Bermudagrass and zoysiagrass cultivar selection: Part 2, divot recovery. Appl. Turfgrass Sci. doi:10.1094/ATS-2011-0630-02-RS.
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14. Trappe, J.M., D.E. Karcher, M.D. Richardson, and **A.J. Patton\***. 2011. Shade and traffic tolerance varies for

- bermudagrass and zoysiagrass cultivars. *Crop Sci.* 51: 870-877.
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  16. Richardson, M.D., D.E. Karcher, **A.J. Patton**, and J.H. McCalla. 2010. A method to measure golf ball lie in various turfgrasses using digital image analysis. *Crop Sci.* 50:730-736.
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  20. Summerford, J.A., D.E. Karcher, M.D. Richardson, **A.J. Patton**, J.W. Boyd. 2009. Cultural practice effects on the spring transition of overseeded meadow fescue and tetraploid perennial ryegrass sports fields. *International Turfgrass Research Journal* 11:501-510.
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3. Karcher, D.E., J. Summerford, M.D. Richardson, J.W. Boyd, and **A.J. Patton**. 2008. Managing *Festuca pratensis* and tetraploid *Lolium perenne* as an overseeded turf on athletic fields. *Proceedings European Turfgrass Soc. Conf.* 1:103-104.
4. Richardson, M.D., D.E. Karcher, **A.J. Patton**, J.H. McCalla, and W.W. Hanna. 2008. Influence of management practices on golf ball lie in bermudagrass. *Proceedings European Turfgrass Soc. Conf.* 1:161-162.

**ABSTRACTS/PROFESSIONAL PRESENTATIONS** (Unless otherwise noted, abstracts published in Agronomy abstracts as "In Annual meetings abstracts [CD-ROM]. ASA, CSSA, and SSSA Madison, WI.")

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8. Trappe, J.M., **Patton, A.J.**, and D.V. Weisenberger. 2012. Methiozolin rate and spring application timing affect annual bluegrass control on putting greens. ASA, CSSA and SSSA Annual Meetings, Cincinnati, OH.
9. Proctor, C.A., **Patton, A.J.**, Weisenberger, D.V., Sousek, M., and Z.J. Reicher. 2012. Crabgrass control from tank mixtures of sequential applications of unlike preemergent herbicides. ASA, CSSA and SSSA Annual Meetings, Cincinnati, OH.
10. Law, Q., **Patton, A.J.**, and D.V. Weisenberger. Influence of mowing timing before or after a herbicide application on ground ivy control. ASA, CSSA and SSSA Annual Meetings, Cincinnati, OH.
11. Ruhl, G.E., T.C. Creswell, and **A.J. Patton**. 2012. Spruce Death Spiral 2011: Non Target Plant Injury From A New Turf Herbicide. Indiana Acad. of Sci. Meeting Abstracts. W. Lafayette, IN.
12. **Patton, A.J.**, and D.V. Weisenberger. 2012. Ground ivy control as affected by mowing prior to or following herbicide applications. Abstract no. 98. 2012 Proceedings, Northeastern Weed Sci. Soc., Volume 66. Philadelphia, PA.
13. **Patton, A.J.**, D.V. Weisenberger, J.T. Brosnan., and G. Breeden. 2012. Potential antagonism of sulfentrazone and fenoxaprop tank-mixes for goosegrass control. Abstract no. 104. 2012 Proceedings, Northeastern Weed Sci. Soc., Volume 66. Philadelphia, PA.
14. **Patton, A.J.**, D.V. Weisenberger, and Z.J. Reicher. 2011. Alternating active ingredients in sequential applications of preemergence crabgrass herbicides. Abstract no. 85. 2011 Proceedings, Northeastern Weed Sci. Soc., Volume 65. Baltimore, MD.
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17. Trappe, J.M., D.E. Karcher, M.D. Richardson, and **A.J. Patton**. 2010. Divot resistance varies among bermudagrass and zoysiagrass cultivars.
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101. **Patton, A.J.** and Z.J. Reicher. 2006. Winter survival of zoysiagrass cultivars. 2005 Annual Report - Purdue University Turfgrass Science Program.
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103. **Patton, A.J.** and R.X. Latin. 2005. Fungicide selection and timing for *Rhizoctonia* large patch control. 2004 Annual Report - Purdue University Turfgrass Science Program. p. 151-154.
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112. **Patton, A.J.** and Z.J. Reicher. 2002. Greenhouse herbicide safety on seedling 'Zenith' zoysiagrass. 2001 Annual Report - Purdue University Turfgrass Science Program. p. 57-58.
113. **Patton, A.J.** and Z.J. Reicher. 2002. Turf conversion using seeded zoysiagrass and bermudagrass. 2001 Annual Report - Purdue University Turfgrass Science Program. p. 54-56.
114. **Patton, A.J.**, G.A. Hardebeck, D.W. Williams and Z.J. Reicher. 2002. Defining optimum seeding date for bermudagrass and zoysiagrass fairways. 2001 Annual Report - Purdue University Turfgrass Science Program. p. 47-49.

**EXTRAMURAL FUNDING**

Dr. Patton has been awarded \$545,834 of research support since 2007. Grant money is used to support his applied research program, Extension and teaching activities. The majority of funds are from small industry grants and from competitive, non-governmental research foundations.

**Other funding procured for research**

As Executive Director of the Midwest Regional Turf Foundation (MRTF), Dr. Patton raises funds through the Foundation for turfgrass research and education at Purdue University. The majority of these funds are raised as a result of the education programs that Dr. Patton creates, plans, and conducts. This money is used to support the research programs of members of the Turfgrass Team including Bigelow (AGRY), Gibb (ENTM), Jiang (AGRY), Latin (BTNY), Patton (AGRY), and Richmond (ENTM); and supports the W.H. Daniel Turfgrass Research Center. Funding is also used to pay 0.5 FTE for an executive secretary. Since Dr. Patton joined the faculty, the MRTF has donated \$251,904 to Purdue University. In addition to MRTF fundraising, Dr. Patton helps generate external funding for the Daniel Center through a service and site agreement with Dow AgroSciences. This relatively novel partnership benefits all parties and has generated 102,000 for maintenance of the Center.

**Grants submitted but not funded**

Not listed are grants not funded and grants funded while at the University of Arkansas. Not funded: 17 competitive research grant proposals as PD requesting a total of \$1,152,215 of support with \$385,398 as his responsibility, and 5 additional competitive research grant proposals as co-PI requesting a total of \$503,611 of support. Proposals not funded were submitted to agencies including; Golf Course Superintendents Assoc. of America, Lawn Institute, O.J. Noer Turfgrass Foundation, United States Golf Association, USDA-CSREES: Specialty Crop Research Initiative, Sustainable Agriculture Research and Education Program, USDA-NIFA, AFRI: Foundational Program, USDA-NIFA: IR-4, and USDA-NIFA: Specialty Research Grants Program – Pest Management Alternatives.

**MENTORING**

**Graduate students supervised**

Student	Degree	Role	Status	Research Focus	Current Position
Jon Trappe	PhD	Chair/Advisor	In progress	Carbon Sequestration	Graduate Research Assistant
Quincy Law	MS	Chair/Advisor	In progress	Enhancing Soil Carbon Management	Graduate Research Assistant
David Moseley	MS	Chair/Advisor	Completed – 2010	Turf Establishment	Research technician, Univ. of Arkansas Soybean breeding
Jon Trappe	MS	Chair/Advisor	Completed – 2009	Turf Cultivar and Selection	Graduate Research Assistant, Purdue

Veronica Hutchinson	MS	Member	Completed – 2012	Greenhouse Production	Vice President of Operations, UrbanPonics
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					LLC, Chicago, IL
Josh Anderson	MS	Member	Completed – 2012	Turf Establishment	Family Farm Manager, Mannsville, OK
Joey Young	PhD	Member	Completed – 2012	Turf Physiology	Asst. Professor. Texas Tech Univ. Lubbock, TX
Will Jellicorse	MS	Member	Completed – 2009	Turf Establishment	Lawn Care Manager, Knoxville, TN
Jay Richards	MS	Member	Completed – 2008	Golf Course Putting Green Management	Blades Lawn and Landscaping, Fayetteville, AR
Josh Summerford	MS	Member	Completed – 2008	Turf Establishment	Blades Lawn and Landscaping, Fayetteville, AR

#### Advisee Awards:

- a. Jon Trappe
  - Marvin and Barbara Phillips Scholarship, Department of Agronomy, Purdue University
  - Award Chris Stiegler Memorial Scholarship, Crop Science Society of America, 2012
  - 2<sup>nd</sup> place in the Crop Science Society of America, Turfgrass Science Division (C-5), graduate student oral presentation contest. 2010. Long Beach, CA.
  - Jon Trappe (advisee - graduate student) was selected as “2009 Outstanding M.S. Student in the Horticulture Department” by the department faculty.
  - Jon Trappe (advisee - graduate student) was selected as the winner of the Crop Science Society of America, Turfgrass Science Division (C-5), graduate student poster contest. 2008. Houston, TX.
  - Jon Trappe was runner-up in the GCSAA student essay contest in 2008. He received a grant of \$1,500 for his paper: “Implications of genetically modified turfgrasses.
- b. Quincy Law
  - Outstanding Graduate Extension Award, Department of Agronomy, Purdue University
  - 1<sup>st</sup> place in the Crop Science Society of America, Turfgrass Science Division (C-5), graduate student research poster presentation contest, 2012. Cincinnati, OH.
  - 1<sup>st</sup> place Oral Presentation at the 2012 NCWSS Annual Meetings. Oral competition. St. Louis, MO.
  - William H. Daniel Scholarship, Purdue University, 2013
  - Golf Course Superintendents Association of America essay contest 2<sup>nd</sup> place, 2012
- c. David Moseley received a certificate of excellence from the American Society of Agronomy (A-4). 2010 Extension Education Materials Contest, Division: Publications 16 pages and under. Winning publication: Moseley, D., A.J. Patton, R. Bateman, and T. Kirkpatrick. 2010. Controlling nematodes on golf courses. University of Arkansas Cooperative Extension Publication. MP-481.

#### MAGAZINE ARTICLES

1. **Patton, A.J.**, and L. Snyder. September 2012. Interview preparation: what questions should I ask? CSA News Magazine. p. 36,38.
2. **Patton, A.J.**, and L. Snyder. August 2012. Interview preparation: what questions will they ask me? CSA News Magazine. p. 38-39.
3. **Patton, A.J.** January 2012. Creating a research statement: A needed document for job applicants. CSA News Magazine. p. 30-31.
4. **Patton, A.J.** April 2011. Refining your CV: Tips for success. CSA News Magazine. p. 32
5. **Patton, A.J.** April 2010. Mentor and Mentored. CSA News Magazine. p. 32-33.

## TEACHING

Dr. Patton has a minor teaching appointment but he takes teaching seriously and is enthusiastic about the opportunity to interact with undergraduate and graduate students. Dr. Patton integrates his applied research program and his experience working with clientele in his Extension program to prepare undergraduate students for real-life challenges in the capstone course he teaches each fall. He also teaches a Professional Presentations course for graduate students in which he is able to take his passion for mentoring students and use it to prepare them for future success.

AGRY 512 (Purdue University) - Integrated Turfgrass Systems (Credit 3). *Catalog Description:* This capstone course is taught with units on different turf systems including lawns, athletic fields, and golf courses. Students develop management plans and budgets for real-world locations. Students learn through hands-on evaluation and problem-solving exercises. The course emphasizes higher order skills where students analyze, evaluate, and create using both independent and group work. Students also evaluate social, ethical, and economical aspects underlying agronomic management decisions. Students interact with industry leaders throughout the curriculum as industry leaders are used to help critique assignments. In their capstone assignment, students presented recommendations to the board of directors for a local golf course on capital improvement project ideas requested by the golf course. Additional service learning was implemented in 2012 through a new community athletic field care partnership.

AGRY 596 (Purdue University) – Professional Presentations (Credit 1). Students develop, evaluate, and critique their own presentations (oral and poster) and evaluate and critique the presentations of others (oral and poster). Students develop a pedagogy in the course which defines how they help others learn in both formal and informal situations.

### SUMMARY OF TEACHING EXPERIENCE

Date	Course Number/ University	Course Title	Responsibility	Number of Students in Class	Overall Instructor Rating <sup>y</sup>
Fall 2012	AGRY 596/ Purdue Univ.	Professional Presentations	Instructor	8	4.8
Fall 2012	AGRY 512/ Purdue Univ.	Integrated Turfgrass Systems	Instructor	15	4.9
Fall 2011	AGRY 512/ Purdue Univ.	Integrated Turfgrass Systems	Instructor	21	4.8
Fall 2010	AGRY 512/ Purdue Univ.	Integrated Turfgrass Systems	Instructor	12	4.9
Spring 2006	AGRY 311/ Purdue Univ.	Integrated Turfgrass Diagnostics	Instructor	14	5.0
Spring 2005	AGRY 211/ Purdue Univ.	Fundamentals of Turfgrass Culture Lab.	Instructor	21	4.7
Spring 2005	AGRY 399T/ Purdue Univ.	Integrated Turfgrass Diagnostics	Instructor	10	4.9
Fall 2004	AGRY 255/ Purdue Univ.	Soil Science Discussion Sessions	Instructor	26	4.9
Spring 2004	AGRY 399T/ Purdue Univ.	Integrated Turfgrass Diagnostics	Instructor	7	5.0
Spring 2004	AGRY 255/ Purdue Univ.	Soil Science Discussion Session	Instructor	8	5.0
Spring 2004	AGRY 270/ Purdue Univ.	Forest Soils Discussion Session	Instructor	13	5.0
Fall 2003	AGRY 255/ Purdue Univ.	Soil Science Discussion Sessions	Instructor	23	4.8
Spring 2003	AGRY 211/ Purdue Univ.	Fundamentals of Turfgrass Culture Lab.	Instructor	19	4.7
Fall 2002	AGRY 510/ Purdue Univ.	Turfgrass Science	Co-Instructor	32	<sup>z</sup>
Spring 2002	AGRY 210/ Purdue Univ.	Turfgrass Management	Instructor	69	4.4
Fall 2001	AGRY 510/ Purdue Univ.	Turfgrass Science	Co-Instructor	30	<sup>z</sup>
Fall 2000	HORT 351L/ Iowa St. Univ.	Turfgrass Management Laboratory	Instructor	16	<sup>z</sup>
Fall 1999	HORT 351L/ Iowa St. Univ.	Turfgrass Management Laboratory	Co-Instructor	15	<sup>z</sup>

<sup>y</sup> Median instructor score when available, on a scale of 1 to 5, where excellent=5, good=4, fair=3, poor=2, and very poor=1.

<sup>z</sup> Instructor not evaluated or not evaluated separately from other instructors.

## COURSE DEVELOPED

HORT 402V (University of Arkansas) - Horticulture Judging and Competition Activity (Lab 2 hours, Credit 1)  
*Catalog Description:* An intensive laboratory based diagnostic and problem solving experience for those students wishing to further their practical knowledge of turfgrass management. Students learn key diagnostic features and identifying characteristics for all turfgrass species, seed, turfgrass pests (weeds, insects, diseases), and fertilizer materials. Appropriate pesticides, applied mathematical skills and best management practices for worldwide golf courses are reinforced. Additionally, students develop communication skills while learning in a team environment and preparing for the National Collegiate Turfgrass Competition. Students placed 17<sup>th</sup> out of 92 teams in their first year (2008) of competition and 7<sup>th</sup> out of 83 teams in their second year (2009) of competition.

AGRY311 (Purdue University) - Integrated Turfgrass Diagnostics (Lab 2 hours, Credit 1). Co-developed with Dr. Cale Bigelow. *Catalog Description:* An intensive laboratory based diagnostic and problem solving experience for those students wishing to further their practical knowledge of turfgrass management. Students learn key diagnostic features and identifying characteristics for all turfgrass species, seed, turfgrass pests (weeds, insects, diseases), and fertilizer materials. Appropriate pesticides, applied mathematical skills and best management practices for worldwide golf courses are reinforced. Additionally, students develop communication skills while learning in a team environment and preparing for the National Collegiate Turfgrass Competition. This course was available to students with no prerequisites.

The above courses (HORT402V, Univ. of Arkansas; AGRY311, Purdue Univ.) were created to better facilitate student preparation for the Golf Course Superintendents Association of America collegiate turf bowl competition. The courses also provided opportunities to develop communication skills through creating and presenting presentations to the class and networking with golf course superintendents.

## INSTRUCTIONAL MATERIALS

### *Book Chapter*

**A.J. Patton**, R.E. Gaussoin, and D.L. Hensley. 2010. Turfgrass Management. In D.L. Hensley (ed.) Professional Landscape Management, 3<sup>rd</sup> edition, Stipes Pub LLC, Champaign, IL.

### *Book Color Plates*

**Patton, A.J.**, M. Jones and T. Christians. Turfgrass morphology: Color plates for the identification of common turfgrasses. Table (4 pages) published in Christians, N.E. 2011 (4<sup>th</sup> edition). Fundamentals of Turfgrass Management. John Wiley and Sons, New Jersey. Table revised in 2011. Also published in 2007 (3<sup>rd</sup> edition) and 2004 (2<sup>nd</sup> edition).

### *Course Manuals*

- Walker, K.S., **Patton, A.J.** and C.A. Bigelow. 2005. Turfgrass science laboratory manual. Purdue University. 150 pages.
- **Patton, A.J.** and C.A. Bigelow. 2005. Fundamentals of turfgrass culture laboratory manual. Purdue University. 188 pages.
- **Patton, A.J.** and N.E. Christians. 2000. Turfgrass management laboratory manual. Iowa State University. 101 pages.

## ABSTRACTS/PROFESSIONAL PRESENTATIONS

**Patton, A.J.**, G.E. Van Scoyoc, C. Beyrouy, J. Graveel, and W. McFee. 2005. Educating future teachers at Purdue. In Annual meetings abstracts [CD-ROM]. ASA, CSSA, and SSSA Madison, WI.

## **GUEST LECTURING**

At Purdue University, Dr. Patton served as a guest lecturer for AGRY 520 (Plant Breeding) and AGRY 596 (Professional Presentations) in 2011. At the University of Arkansas, Dr. Patton served as a guest lecturer on 16 occasions in various courses from 2007-2010. These courses included: Plants in the Home Environment, Principles of Horticulture, Turfgrass Integrated Pest Management, Horticulture Judging and Competition Activity, Professional Landscape Installation, Professional Landscape Management, Golf and Sports Turf Management, and Seminar.

## **SERVICE AND LEADERSHIP ACTIVITIES**

- Executive Director, Midwest Regional Turf Foundation, 2010-current
- Technical Editor, Applied Turfgrass Science journal, Plant Management Network, Crop Science Society of America, 2013-2015;
- Fred V. Grau Turfgrass Science Award Committee (C458). Crop Science Society of America, 2013-2015
- Early Career Representative, American Society of Agronomy Board of Directors (A003), 2011-2013
- Science Policy Committee, American Society of Agronomy (A537), 2011-2013
- Indiana Golf Course Owners Association Advisory Committee, 2011-current
- Early Career Members Committee (ACS530), American Society of Agronomy, 2010-2012
- Chair, C-5 Division (Turfgrass) symposium committee, Crop Science Society of America, 2010-2013; Chair in 2010-2011.
- C-5 Division (Turfgrass) Extension symposium committee, Crop Science Society of America, 2007-current; Chair in 2007-2008
- Acquisitions Editor, Applied Turfgrass Science, Plant Management Network, 2008-2011
- Chair, SERA-IEG 25 Extension Program, 2007
- Board of Directors, Arkansas Turfgrass Association, 2007-2010
- Chair, Education Committee, Arkansas Turfgrass Association, 2007-2010
- Faculty Council Representative for the Univ. of Arkansas Department of Horticulture - 2010
- Univ. of Arkansas Department of Horticulture Non-Classified Support Personnel Promotion Committee
- Univ. of Arkansas Department of Horticulture Public Relations Committee
- Reviewer: Agronomy Journal, Amer. J. of Hort. Sci., Applied Turfgrass Science, Crop Science, Crop Science Monograph, HortScience, HortTechnology, the International Turfgrass Research Society Journal, Journal of Environmental Quality, Weed Science, and Weed Technology. Total of 31 manuscripts reviewed since 2006.

## **HONORS AND AWARDS**

*As a Faculty Member*

### Individual Awards

- Dept. of Agronomy Nominee for the R.L. Kohls Early Career Award, College of Agriculture, Purdue University, 2012
- Awardee, Purdue University College of Agriculture, Service Learning Faculty Development Program, 2012
- Extension Excellence Award for Early Career-Specialist, University of Arkansas Division of Agriculture, 2009
- Extension Faculty of the Quarter, University of Arkansas Cooperative Extension Service, Jan-March 2008

### Team Awards

- Team Award, Purdue University College of Agriculture, Imprelis Herbicide Injury Response Team, 2013
- Team Award, Purdue University Cooperative Extension Specialists Association, Imprelis Herbicide Injury Response Team, 2012

### Publication Awards

- Certificate of Excellence. American Society of Agronomy. Extension Education Materials Contest

- 2012. Winning publication: Patton, A.J. and D.V. Weisenberger. 2012 Turfgrass Weed Control for Professionals. Purdue University Extension Publication. AY-336.
- 2011. Winning website: <http://www.agry.purdue.edu/turf/>. Collaborators: K. Delp and J. Biehl.
- 2010. Winning publication: Moseley, D., A.J. Patton, R. Bateman, and T. Kirkpatrick. 2010. Controlling nematodes on golf courses. University of Arkansas Cooperative Extension Publication. MP-481.
- 2008. Winning publication: Patton, A.J., and J. Boyd. 2007. Establishing a lawn from sod. University of Arkansas Cooperative Extension Publication. FSA-2042.
- 2007. Winning website: <http://turf.uark.edu/>
- Extension Communication Award from the Southern Region of the American Society for Horticultural Sciences for a manual. 2009 Winning publication: Patton, A.J. 2008. Practical Math for the Turfgrass Professional. University of Arkansas Cooperative Extension Publication. CDHORT200.

#### *As a Graduate Student*

- Musser Award of Excellence, Musser International Turfgrass Foundation, 2007  
(*"The Musser Award acknowledges the most outstanding of these scholars seeking a Ph.D. in the turfgrass sciences and encourages their continued pursuit of excellence."* – Musser Foundation)
- CSSA student presentation contest, Turfgrass Science Division (C-5), 1<sup>st</sup> place oral competition, 2006
- Graduate Student Excellence Award (Ph.D.), Purdue Graduate Student Government, 2006
- George D. Scarseth Scholarship Award, Department of Agronomy, 2005
- M.O. Pence Scholarship Award for Agronomic Extension, Department of Agronomy, 2005
- Purdue University, Department of Agronomy Outstanding Student in Extension Award, 2005
- Purdue University Center for Instructional Excellence, Advanced Graduate Teaching Certificate, 2005
- Purdue University Center for Instructional Excellence, Graduate Teaching Certificate, 2005
- Dr. James Watson Fellowship, Golf Course Superintendents Association of America, 2005
- Purdue University, Graduate School Excellence in Teaching Award, 2004  
(*"This award recognizes graduate students who exemplify excellence in the University's learning mission and is the highest award presented by the University in recognition of graduate student teaching."* - Purdue Univ. Graduate School)
- Purdue University, Department of Agronomy Outstanding Student in Teaching Award, 2004
- Purdue Univ., Dep. of Agronomy Honoree for the Celebration of Graduate Student Teaching, 2004

#### **SOCIETY MEMBERSHIP**

- American Society of Agronomy, since 2001
- Crop Science Society of America, since 2001
- Golf Course Superintendents Association of America, since 1997
- International Turfgrass Research Society, since 2008
- Indiana Golf Course Superintendents Association, since 2010
- Midwest Regional Turf Foundation, since 2001
- Northeastern Weed Science Society, since 2010
- Sports Turf Managers Association, since 2000
- Turfgrass Producers International, since 2007
- Weed Science Society of America, since 2009