

Vita

Darren Joseph McAvoy

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EDUCATION

M.S. December 1999, Utah State University, Major: Communications, Thesis project: *The Missing Fires* video presented by the National Park Service

B.S. May 1987, Colorado State University, Major: Forestry, concentration in business

PROFESSIONAL EXPERIENCE

Extension Assistant Professor, Department of Wildland Resources, Utah State University, Logan, Utah 2016-present. Direct the Utah Forest Landowner Education Program, Chair the Utah Biomass Resources Group, Chair the Restoring the West Conference Planning Committee, Principal Investigator on a variety of federal grants

Extension Forestry Associate, Department of Wildland Resources, Utah State University, 1999-2016, Utah State University, Logan, Utah. Direct the Utah Forest Landowner Education Program, Chair the Utah Biomass Resources Group, Co-chair the Restoring the West Conference Planning Committee, Principal Investigator on a variety of federal grants including scale up and demonstration of mobile pyrolysis, design of a Cross Laminated Timber building, and field trials of biochar as a soil amendment, Co-Principal Investigator of the Southern Rockies Fire Science Network, advise private landowners, produce the *Utah Forest News*, conduct workshops, field tours, and webinars, produce forestry education videos, coauthored the *Utah Forest Water Quality Guidelines*.

Producer and Director, Center for Information Technology, Utah State University, Logan, Utah, 1997-1999. Created *The Missing Fires* video and digital information base for the National Park Service, a 22-minute presentation about prescribed fire.

Avalanche Forecaster, Utah Avalanche Forecast Center, Logan, Utah 1998-1999. Conducted fieldwork, prepared and posted avalanche hazard forecasts, creating educational messages for the general public.

Forestry Technician, Forest Health Protection, Region 4, USDA Forest Service, Ogden, Utah 1997-1998. Performed forestry fieldwork region-wide; installed and monitored forest health study plots across the Intermountain West.

Writer and Host, Hotshots Video Productions, Sandpoint, Idaho, 1994-1997. Hosted the regional television series *Ski Flakes*.

Consulting Forester, Inland Forest Management Inc., Sandpoint, Idaho, 1990-1996. Practiced stewardship of private non-industrial forest land; represented private forest landowners, emphasized landowner education and involvement, prepared Forest Stewardship Plans, designed and administered selective timber harvest operations, executed government and industrial forestry contracts, fulfilled prescribed fire and wildland fire suppression contracts, and supervised wildland fire crews.

Wildland Firefighter, Flathead Interagency Hotshot Crew, Flathead National Forest, Columbia Falls, Montana, 1987-1989. Saw Squad Boss, Ignition Boss, Red Card Qualified for Task Force Strike Team Leader, Crew Boss, Water Handling Specialist, Sawyer, Dozer Boss, Helipad Manager

Reforestation Survey Technician, Yaak Ranger District, Kootenai National Forest, Yaak, Montana, 1985-1986. Conducted reforestation surveys and fire suppression activities.

Timber Falling Contractor, Frisco, Colorado, 1984. Felled beetle killed timber.

Forestry Technician, Mountain Pine Beetle Project, Colorado State Forest Service, Frisco, Colorado, 1983. Assessed, marked and mapped beetle infested trees.

EXTENSION PUBLICATIONS AND VIDEOS

Kaufmann, Merrill R., Daniel W. Huisjen, Stanley Kitchen, Mike Babler, Scott R. Abella, Todd S. Gardiner, Darren McAvoy, Josh Howie, Douglas H. Page Jr.. 2016. [Gambel Oak Ecology and Management in the Southern Rockies: The Status of Our Knowledge](#). Southern Rockies Fire Science Network Publication 2016-1. 16p.

McAvoy, D.J. 2000-present (quarterly). [Utah Forest News](#). Utah State University Extension. (quarterly) 8 pp.

McAvoy, D.J. 2008. [Considering a Timber Harvest on Your Family Forest](#). (video) 22-minutes.

McAvoy, D.J., E. Storey, and R. Gropp. 2002. The Utah Forest Water Quality Guidelines Primer: A Practical User's Guide for Landowners, Loggers & Resource Professionals. Utah Department of Natural Resources, Division of Forestry, Fire and State Lands. 51 pp.

McAvoy, D.J., E. Storey, and R. Gropp. 2002. [The Utah Forest Water Quality Guidelines: A Technical Manual](#). Utah Department of Natural Resources, Division of Forestry, Fire and State Lands. 61 pp.

McAvoy, D.J. 2000. The Missing Fires. Utah State University Extension. (video) 22-minutes.

FACT SHEETS

- Dettenmaier, M., M. Kuhns, D.J. McAvoy. 2017. *In prep.* Climate Change and Trees. USU Extension Forest Facts.
- Britton, J., J. DeRose, J. Long, K. Mock, D. McAvoy. *In review.* [The Regeneration of Aspen Stands in Southern Utah](#). USU Extension Forest Facts. NR/FF/031(pr).
- Davis, R., D.J. McAvoy. 2012. [Bark Beetles](#). Utah Pests Factsheet. ENT-165-12.
- Anderton, L., D.J. McAvoy, and M.R. Kuhns. 2011. [Native American uses of Utah forest trees](#). USU Extension Forest Facts, NR/FF/018. Peer reviewed. 8 pp.
- Salmon, O., C. Reid, and D.J. McAvoy. 2007. [Forest Grazing: Managing your Land for Trees, Forage, and Livestock](#). USU Extension Forest Facts, NR/FF/016. Peer reviewed. 8 pp.
- Daniels, B., D.J. McAvoy, and M.R. Kuhns. 2005. [Timber sale contracts](#). USU Extension Forest Facts, NR/FF/013. Peer reviewed. 6 pp.
- Daniels, B., D.J. McAvoy, M.R. Kuhns, and R. Gropp. 2004. [Managing forests for water quality: Stream crossings](#). USU Extension Forest Facts, NR/FF/009. Peer reviewed. 6 pp.
- Daniels, B., D.J. McAvoy, M.R. Kuhns, and R. Gropp. 2004. [Managing forests for water quality: Streamside management zones](#). USU Extension Forest Facts, NR/FF/008. Peer reviewed. 6 pp.
- McAvoy, D.J., M.R. Kuhns, and J. Black. 2004. [Utah forest types: An introduction to Utah forests](#). USU Extension Forest Facts, NR/FF/011. 4 pp.
- Daniels, B., D.J. McAvoy, M.R. Kuhns, and R. Gropp. 2004. [Managing forests for water quality: Forest roads](#). USU Extension Forest Facts, NR/FF/010. Peer reviewed. 6 pp.
- Kuhns, M.R. and D.J. McAvoy. 2003. Extension forestry at Utah State University. USU Extension publication. 2 pp.

POPULAR ARTICLES/MEDIA

- McAvoy, D.J. 2015. [Intermountain SAF Partners in Mobile Pyrolysis Demonstration](#). The Forestry Source, News for forest resource professionals published by the Society of American Foresters, November, 2015, 21(5).

[Machine produces biofuel, soil additive](#). Herald Journal News. 2014.

- McAvoy, D.J. [YouTube Mobile Pyrolysis in Utah](#). > 15,000 views as of Jan. 2017.
- McAvoy, D.J. 2009. Ablaze: With summer burn near Bear Lake, agencies aim to clear out pines, encourage regrowth of aspen. Logan Herald Journal, October 2, 2009.
- Daniels, B., D.J. McAvoy, M.R. Kuhns, and R. Gropp. 2008. Here's how to plan and manage roads for water quality. Adapted from USU Extension Forestry fact sheet by Soc. Amer. Foresters for Forestry Source 13(9).
- McAvoy, D.J. 2003. [Logger's insurance coverage: A key to managing risk](#). Adapted from USU Extension Forestry newsletter for Journal of Forestry 100(8).
- McAvoy, D.J. 2002. Pay attention to your loggers' insurance policy. National Woodlands

PEER REVIEWED ARTICLES

- Hunter, B., Cardon, G. E., Olsen, S., Alston, D.G. and McAvoy D. 2017. [Preliminary screening of the effect of biochar properties and soil incorporation rate on lettuce growth to guide research and educate the public through extension](#). Journal of Agricultural Extension and Rural Development, Vol.9(1), pp. 1-4, January 2017
- Eddings, E.G., McAvoy, D. and R.L. Coates, R.L. 2015. [Co-firing of Pulverized Coal with Pinion Pine/Juniper Wood in Raw, Torrefied and Pyrolyzed Forms](#). Fuel Processing Technology. DOI:10.1016/j.fuproc.2015.11.020
- Nelson, M. & McAvoy, D. 2013. [Exploring solutions to pinyon and juniper expansion and densification through Biomass Field Days](#). Journal of National Association of County Agriculture Agents.

WEBSITES

- McAvoy, D.J. and R. Wiarda, 2011-present. Utah Biomass Resources Website. <http://utahbiomassresources.org>
- Kuhns, M.R. and D.J. McAvoy. 2004-present. Restoring the West Website. <http://restoringthewest.org>
- M.R. Kuhns, and D.J. McAvoy. 2002-present. USU Extension Forestry Website. <http://extension.usu.edu/forestry>

PRESENTATIONS

- McAvoy, D.J., Jerry Goodspeed, Steve Shrader, Van Lewis. [Cross Laminated Timber, What's all the Fuss?](#) Learn at Lunch Webinar Series. October 2016.
- McAvoy, D. J. 2016. Cross Laminated Timber: A New Use for Beetle Kill, Society of American Foresters, National Convention, Madison, WI, November 4, 2016.

- McAvoy, D. J. 2016. Building a Holistic Extension Facility in an Interlocking Cross-Laminated Timber Building. Association of Natural Resource Professionals/National Association of Community Development Extension Professionals Joint National Conference, Burlington, VT, June 27, 2016.
- McAvoy, D. J. 2016. Interlocking Cross Laminated Timber: A Potential Home Run in Sustainable Building. National Extension Sustainability Summit. Portland, OR April 7, 2016.
- McAvoy, D. J. 2016. How to Tell Fire Stories. Keynote speaker. Utah Arbor Day Poster Contest Ceremony, Salt Lake City, UT, April 29, 2016.
- McAvoy, D.J. and Peltz, C. 2015. [Biochar Applications for Restoration in the Uinta Basin, Utah](#), USU Forestry Extension Learn at Lunch Webinar Series, Logan UT July 28, 2015.
- McAvoy, D. J. 2015. Pinion Juniper, Mobile Pyrolysis, and the Utah Biomass Resources Group. Society of American Foresters National Convention. Baton Rouge, LA, Nov. 4, 2015
- McAvoy, D. J. 2015. Energy Educational Programming of the Utah Biomass Resources Group. National Extension Energy Summit. Seattle, WA April 9, 2015.
- McAvoy, D. J. 2014. [From the Dragon Wagon to Mobile Pyrolysis](#). Conference of the International Union of Forest Research Officers. Salt Lake City, UT, Oct. 7, 2014.
- McAvoy, D. J. 2014. Biomass and Breakfast. Pellet Fuels Institute National Barbeque and Pellet Stove Expo 2014. Salt Lake City, UT, March 6, 2014.
- McAvoy, D.J. 2013. [An Introduction to Woody Biomass and Biochar in Utah](#), USU Forestry Extension Learn at Lunch Webinar Series, Logan UT May 21, 2013.
- McAvoy, D. J. 2012. Panel on State Policies and Incentives. 2012 Smallwood Conference: Forest Restoration for a New Economy. Forest Products Society. Flagstaff, AZ April 30-May 2, 2012.
- McAvoy, D.J. 2009. [Ten Do-it-Yourself Tips for Maintaining Your Family Forestland](#), USU Forestry Extension Learn at Lunch Webinar Series, January 28, 2010.
- McAvoy, D.J. and M.R. Kuhns 2010. Webcasting: a Tool for Collaborative Programming in Challenging Budget Times, 7th Natural Resource Extension Professionals Conference: Opportunities for Extension in a Changing Environment: Lessons from the Last Frontier, Fairbanks, AK, June 27-30, 2010.

- McAvoy, D.J. 2009. [An Introduction to Utah Trees and Forests](#), USU Forestry Extension Learn at Lunch Webinar Series, Logan UT January 14, 2009.
- McAvoy, D.J. 2009. [Planning a Timber Harvest Part II](#), USU Forestry Extension Learn at Lunch Webinar Series, Logan UT January 24, 2009.
- McAvoy, D.J. 2009. [Planning a Timber Harvest Part I](#), USU Forestry Extension Learn at Lunch Webinar Series, Logan UT May 27, 2009.
- McAvoy, D.J. 2007. Utah Forest Products Association Annual Conference, Orem, UT, April 18-20, 2007.
- McAvoy, D.J. 2007. Aspen Die Off and Decline; Meeting of USDA Forest Service Aerial Survey Team for the Rocky Mountains, Midway, UT, July, 2007.
- McAvoy, D.J. 2007. Defensible Space in the Home Ignition Zone, Cooperative Extension Wildfire Workshop. San Diego, CA, June 6-7, 2007.
- McAvoy, D.J. 2007. Benefit Based Audience Segmentation: A Tool for Identifying Nonindustrial Private Forest Owner Education Needs, National Conference of the Society of American Foresters, Portland, OR, November, 2007.
- McAvoy, D.J. 2006. Firewise Landscaping for Utah, 3rd International Fire Ecology and Management Congress: Changing Fire Regimes: Context and Consequences. San Diego, CA, November 13-17, 2006.
- McAvoy, D.J. 2005. Managing and Passing on Your Family Forest, Fourth Biennial Forest Taxation and Estate Planning Conference, St George, UT January 26 & 27, 2005.
- McAvoy, D.J. 2005. Education for Professional Loggers: Forest Road Building and Maintenance Workshop, Camp Williams, Bluffdale, UT February 23, 2005.
- McAvoy, D.J. 2004. Managing Aspen in Western Landscapes Conference, Cedar City, UT September 22, 2004.
- McAvoy, D.J. 2002. Education for Professional Loggers Workshop, Provo, UT, January, 2002.
- McAvoy, D.J. 2002. Pinion-Juniper Ecology and Management Workshop, Torrey, UT June, 2002.
- McAvoy, D.J. 2000. ["The Missing Fires"](#) A Video Designed to Promote Understanding of Prescribed Fire Use, 3rd Natural Resource Extension Professionals Conference: Revolutionizing or Evolutionizing Extension Programming? Naples, Florida, June 2-5, 2002.

McAvoy, D.J. 2000. "[The Missing Fires](#)" A Video Designed to Promote Understanding of Prescribed Fire Use, The Wildland-Urban Interface: Sustaining Forests in a Changing Landscape conference. Gainesville, Florida, November 5-8, 2001

EXTENSION ACCOMPLISHMENTS

Private Forest Landowner Education Program

- Focus on improving forest practices on private forest land in Utah, helping landowners accomplish their land management goals, and helping Utahns understand forests and forestry. Directed this program since 1999.
- Program activities include quarterly newsletter, fact sheets and other publications, workshops and webinars, working with agencies and organizations, and providing direct assistance to landowners, forestry professionals, and forest industry.
- Thousands of landowners and others reached through this program annually.
- Started the Annual Timber Harvest Tour in 2001 and have held it annually since.
- Have hosted and presented landowner workshops and webinars on forest management, aspen health, pinion juniper ecosystems, wildfire preparation, forest succession, timber taxation, building forest roads, timber harvest planning, timber harvest contracting, maintaining forest health, bark beetles, prescribed fire, Cross Laminated Timber, and more.
- Serve on the Utah Forest Stewardship Committee, Advisor to the Utah Farm Bureau Forestry Committee, the Restoring the West Conference Planning Committee, Utah Forest Restoration Working Group, and other committees.

Utah Forest Industry Assistance

- Directly assist sawmill owners, loggers, and forestry consultants.
- Chair the Utah Biomass Resources Group.
- Scale-up and demonstration of mobile pyrolysis technologies
- Conduct biochar field trials on failed BLM reclamation sites
- Investigate the use of biochar on production agriculture fields
- Chair the Utah Forest Products Association meeting in 2008.
- Host and presenter at Utah's first Logger Education program in 2002.

Wildland Fire/Urban Interface

- Co-Principal Investigator for the Southern Rockies Fire Science Network
- Conduct prescribed fire field trips
- Regularly write newsletter articles and media releases on these subjects.
- Published *Firewise Landscaping for Utah* poster.

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

- Member of the Society of American Foresters, former Chair and Treasurer of the Utah Chapter for three years
- Member of the Association of Natural Resource Extension Professionals
- Member and Chair Elect, Western Coordinating Committee of Extension Foresters

GRANTS

McAvoy, Darren J. (Principal), [“BLM-Utah Biomass Resources Partnership Project,”](#) Bureau of Land Management, \$50,000.00 (annually) (August 4, 2016 – August 3, 2021).

McAvoy, Darren J. (Principal), and Anderson, D. (Co-Investigator), “A Cross-Laminated Timber (CLT) Educational and Awareness Building Campaign” Wood Innovation Grant, USDA Forest Service, \$161,960.00, (started April 2015; ongoing).

McAvoy, Darren J., (Principal), “FY15 Utah Biomass Resources Group”, USDA Forest Service, \$20,000 (May 27, 2015- May 31, 2020).

Hunter, B, (Principal), Cardon, G., Murray, M., Alston, D., McAvoy, D., Olsen, S., (Co-Investigators), [“Biochar Amendment to Enhance Tomato and Melon Productivity and Protect Against Phytophthora Root Rot Disease,](#) Western SARE Professional and Producer Grant, US Dept. of Agriculture, \$60,000. (2014-2017).

McAvoy, Darren J., and Kuhns, M., (Co-principals), “Cooperative Agreement for Utah Forest News Production and Distribution Assistance,” Utah Division of Forestry, Fire & State Lands, \$15,000.00 (started June 2010; ongoing).

Conlin, N, (Principal), and McAvoy, D. (Co-Investigator), “Forest Restoration Through Biomass Utilization in Southeastern Utah,” Utah Division of Forestry, Fire, and State Lands, USDA Forest Service, \$300,000.00 (2015-2018).

McAvoy, Darren J., (Principal), and Eddings, E., Coates, R. (Co-Investigators). Sun Grant Initiative, US Department of Transportation, [Distributed Densification of Pinion Juniper and Phragmites Utilizing Mobile Rapid Pyrolysis Machine](#) \$493,000 (2013-2016).

McAvoy, Darren J. (Principal), Hanks, D. (Co-Investigator), “BLM-Utah Biomass Resources Partnership Project,” Bureau of Land Management, \$44,000.00 (May 11, 2011 – May 10, 2016).

McAvoy, Darren J. (Principal), Hanks, D. (Co-Investigator), “USU Biomass Gasification Project,” Sponsored by Fuels for Schools funds from the USDA Forest Service, through the Utah Department of Agriculture and Food, \$40,000.00. (May 1, 2011 – April 30, 2013).

McAvoy, Darren J. (Principal), Hanks, D. (Co-Investigator), “USU’s Facilitation of the Utah Biomass Resources Group,” USDA Forest Service, \$103,000.00 (August 8, 2010 – September 30, 2013).

McAvoy, Darren J. (Principal), “Monitoring Effects of PJ Harvesting and Utilization in Southwest Utah,” USDA Forest Service, \$30,000.00, (July 28, 2011-August 1, 2013).

HONORS AND AWARDS

- State Director's Public Land Partner Award, Bureau of Land Management, 2012
- Silver Award Web Design, ANREP, 2010
- Forest Stewardship Achievement Award, Utah Division of Forestry, Fire and State Lands, 2009.
- Silver Award DVD, ANREP, 2009
- Communications Award, Society of American Foresters, 2008
- Gold Award Newsletter, ANREP, 2006
- Silver Award Web Design, ANREP, 2004
- Silver Award Newsletter, ANREP, 2003
- Silver Award Long Publication, ANREP, 2002
- Silver Award Newsletter, ANREP, 2002
- Spirit of the Land Award, Salt Lake Olympic Organizing Committee, 2002
- Silver Award Video, ANREP, 2001
- Silver Award Newsletter, ANREP, 2001
- Scholarship Award, Outdoor Writers Association of America, 1997
- Certificate of Merit, U.S. Department of Agriculture, 1989