

CURRICULUM VITAE

Jean Bonhotal

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Education:

1991 M.S. SUNY Binghamton, Education and Communication
1984 B.A./B.S. Utah State University, Fisheries and Wildlife Biology
1979 AAS SUNY Morrisville, Natural Resources

Positions:

2012-present: Cornell Waste Management Institute, Cornell University, Ithaca, NY, Director and Senior Extension Associate
2007-2012: Cornell Waste Management Institute, Cornell University, Ithaca, NY, Associate Director and Senior Extension Associate
1989-2007: Cornell Waste Management Institute, Cornell University, Ithaca, NY, Extension Associate
1986-1989: Cornell Cooperative Extension, Broome County, Binghamton, NY, Cooperative Extension

Areas of Expertise: Composting; manure; mortality disposal; compost quality; compost use

Professional Overview and Objectives:

Improve soil health through increased use of organic residuals. Provide economic and environmentally sound options for livestock farmers to manage manure and mortalities. Promote sound, practical plans for mass casualty disposal throughout the US. Work with the compost/horticulture/agriculture industry to develop specifications for compost use and promote an increase use of organic residuals.

Honors and Awards:

Rufus Chaney Award – US Composting Council. 2014.
NACAA Poster Award – “Sustainable Livestock Mortality Management.” 2013.
MacDonald Award – Department of Crop & Soil Sciences. 2011.
NYSAR³ Recycler of the Year – Private Sector. 2009.
Communications Award Regional Finalist, National Association of County Agricultural Agents, “Compost Fact Sheet Series.” 2009.
Outstanding Accomplishments in Extension/Outreach Award – CALS Research and Extension Award. 2007.
David Allee Campus-County Connection Award – The “Natural Rendering” project. 2004
Blue Ribbon: from the American Society of Agricultural Engineers. “Natural Rendering: Composting Livestock Mortality and Butcher Waste,” (NRAES-163). 2003.
Outstanding New Extension Publication Recognition Award, “Natural Rendering: Composting Livestock Mortality and Butcher Waste” fact sheet, presented by Cornell Cooperative Extension. 2003.
National Association of County Agricultural Agents Communication Award & NYS winner, “Disposal of Livestock Mortality & Butcher Waste.” 2003.
NYS Association of County Agricultural Agents, Communications Northeast Regional Finalist, “You Can Compost What?” 2003.
National Association of County Agricultural Agents Communication Award & NYS winner, “Farm-Based Composting: Manure & More.” 2001.
Solid Waste Association of North America - award for developing a youth solid waste education program. 1991.
U.S. Environmental Protection Agency – “Environmental Quality Award” for developing a solid waste education program that protect and enhance environmental quality. 1991.

Grants/contracts:

Agricultural Innovation Manure Projects – Technology Transfer
Agronomic and Soil Condition Value of Organic Residuals
Assessing the Fate of Drugs in Livestock Mortality and Manures
Assessment of Soil and Compost Microbial in a Large Animal Mortality Composting System
Characterizing and Determining Beneficial Use of Paper Production Residuals that Otherwise Become Waste
Connecting Farm Compost with Ag Industry Users: Demonstrating Compost Assets with Growers
CWMI Compost Training
Emergency and Routine Mortality Management
Emergency Planning for Avian Influenza in New York State
Evaluation of New Compost Dairy Barn Facility
Fate of Urushiol (poison ivy and oak toxin) in Composting
Implementing Natural Rendering on Farms and in Butcher Operations
Implementing the Use of Compost in Agriculture, Turf, Landscaping and for Erosion Control
Improving Disposal of On-Farm Mortality and Butcher Waste Residual
Improving Soil Test Performance, Interpretation and Education for Toxic Metals
Improving Turf and Soil Health, Reducing Energy Use and Accessing Tick Populations by Mulching Leaves in Place
Managing Waste as a Resource
Northern Forest Compost Collaborative
Pathogen Analysis of NYS DOT Road-Killed Deer Carcass Compost Facilities
Recycling Agricultural Plastics Project (RAPP)
Sustainable Livestock Mortality Management
Sustainable Materials Management Outreach and Education in New York and Puerto Rico
Use of Dried Manure Solids as Bedding for Dairy Cows
Use of Vermicompost as a Substitute for Synthetic Inputs to Horticulture and Nursery Production

Professional Societies

New York State Association of Reduction, Reuse and Recycling
National Recycling Coalition
Soil Conservation Society
Federation of NYS Solid Waste Professionals
Solid Waste Association of North America

Publications

Miller, Lori, et al. 2016. Mortality Composting Protocol for Avian Influenza Infected Flocks – FY2016 HPAI Response. USDA APHIS, 1-31.

Schwarz, M. and Bonhotal, J. 2016. The Fate of Ivermectin in Manure Composting. Cornell Waste Management Institute, 1-9.

Bonhotal, J. 2015. Composting Horse Mortality and Mortality Disposal Alternatives. Waste to Worth: Spreading Science and Solutions. Seattle, WA. March 31-April 3, 2015. <http://www.extension.org/pages/72738/composting-horse-mortality-and-mortality-disposal-alternatives>. Accessed on 2/13/17.

Bonhotal, J. 2015. Horse Manure Composting: Facilities and Methods. Waste to Worth: Spreading Science and Solutions. Seattle, WA. March 31-April 3, 2015. <http://www.extension.org/pages/72737/horse-manure-composting:-facilities-and-methods> Accessed on 2/13/17.

Bonhotal, J. and Schwarz, M. 2015. Where There is Livestock, There is Occasionally Deadstock. Progressive Dairyman, 3:58-59. Progressive Dairyman-Canada [online](#).

Payne, J., Farris, R., Parker, G., Bonhotal, J., and Schwarz, M. 2015. Quantification of Sodium Pentobarbital Residues from Equine Mortality Compost Piles. Journal of Animal Science, 93(4):1824-1829.

Schwarz, M., and Bonhotal, J. 2015. Effectiveness of Composting as a Means of Emergency Disposal: A Literature Review. 5th International Symposium on Managing Animal Mortality, Products, By Products. Lancaster PA.

- Bonhotal, J., Schwarz, M., and Rynk, R. 2014. Composting Animal Mortalities. Cornell Waste Management Institute, 1-23.
- Schwarz, M. and Bonhotal, J. 2014. Quality Assurance in Mortality Composting, Mortality Composting Safety. Proceedings of the Mortality Composting Conference, pg 21-31, April 25. Agricultural Research and Extension Program Langston University, Langston, OK.
- Bonhotal, J. 2013. Is This Your Idea of Taking Out the Trash? Cornell Waste Management Institute. Available at: <http://hdl.handle.net/1813/33153>.
- Bonhotal, J., Hutchinson, M., and Williams, C. 2013. Sustainable Livestock Mortality Management. National Association of County Agricultural Agents, Maroa, IL. Poster.
- Fernandez, R., Arache, A., Alsina, J., and Bonhotal, J. 2013. Advancing Organic Materials Management in Puerto Rico. *BioCycle*, 54(8):40-41.
- Payne, J., Bonhotal, J., and Rahman, S. 2013. Managing Animal Mortalities Curriculum Materials. Available at: <http://www.extension.org/68315>.
- Schwarz, M, Bonhotal, J., Boschoff, K., and Ebel, J. 2013. Fate of Barbiturates and Non-steroidal Anti-inflammatory Drugs During Carcass Composting. *Trends in Animal and Veterinary Sciences Journal*, 4(1):1-12.
- Bonhotal, J., Schwarz, M., Williams, C., and Swinker, A. 2012. Horse Mortality: Carcass Disposal Alternatives. Cornell Waste Management Institute, 8 pgs.
- Bonhotal, J. and Schwarz, M. 2012. Natural Rendering for Horses - Composting Horse Mortality. Cornell Waste Management Institute, 5 min DVD.
- Proceedings of the 4th International Symposium Managing Animal Mortalities, Products, By-Products & Associated Health Risk: Connecting Research, Regulations & Response: Dearborn, MI. 2012. Cornell Waste Management Institute, University of Maine Extension, Michigan State University.
- Brinton, W.F., Bonhotal, J. and Fiesinger, T. 2012. Compost Sampling for Nutrient and Quality Parameters: Variability of Sampler, Timing and Pile Depth. *Compost Science and Utilization*, 20(3):141-149.
- Payne, J., Farris, R., Parker, G., Bonhotal, J. and Schwarz, M. 2012. Quantification of Sodium Pentobarbital Residues from Equine Mortality Compost Piles. Page 167-174. 4th International Symposium: Managing Animal Mortalities, Products, By-products and Associated Health Risk Connecting Research, Regulations and Response. Dearborn, MI.
- Bonhotal, J., Schwarz, M. and Feinland, G. 2011. In-vessel Composting Options for Medium-scale Food Waste Generators. *BioCycle*, 52(3):49-53.
- Bonhotal, J., Schwarz, M. and Rowland, S. 2011. Disposal of Routine and Disaster Related Livestock Mortality. *Accredited Vet Newsletter*, NYS Department of Agriculture and Markets, Spring 2011:1-2.
- Bonhotal, J., Schwarz, M. and Stehman, S.M. 2011. How *Mycobacterium avium paratuberculosis* is affected by the composting process. *Trends in Animal & Veterinary Sciences Journal*, 2:5-10.
- Nelson, J. and Bonhotal, J. 2011, Capture the Energy: Heat Recovery from Composting, Finger Lakes Institute Happenings November.
- Schwarz, M. and Bonhotal, J. 2011. Composting at Home – The Green and Brown Alternative. Cornell Waste Management Institute. 12 pgs.
- Glanville, T., Klingborg, D., Hutchinson, M., and Bonhotal, J. 2011. Knowledgeable, Ready, Able - A Comprehensive Extension Agro-security Information Program for the Livestock & Poultry Industries, In: 2011 Extension Disaster Education Network (EDEN) Scholarly Paper Program on Emerging, Critical, or Dynamic National Agro-security Priorities in Extension, Portland, OR.
- Schwarz, M., Bonhotal, J. and Staehr, A.E. 2011. How Frequently Should Stalls Be Refreshed With New Bedding? *Progressive Dairyman*, 1:57-58
- Bonhotal, J. and Jack, A. 2010. Vermicompost-A Living Soil Amendment. Cornell Waste Management Institute. 9-min video and website. <http://cwmi.css.cornell.edu/vermicompost.htm>
- Bonhotal, J., Schwarz, M., Harrison, E., Petrovic, A.M. and Gruttadaurio, J. 2010. Using Manure Based Composts in Turf Management for Athletic Fields, Cornell Waste Management Institute, 1-9.
- Schwarz, M., Bonhotal, J., Harrison, E., Brinton, W. and Storms, P. 2010. Effectiveness of Composting Road-Killed Deer in New York State. *Compost Science and Utilization*, 18(4):232-241.

- Schwarz, M., Bonhotal, J. and Rozeboom, D. 2010. The Space It Takes-Footprint Calculator for Composting Butcher Waste. Cornell Waste Management Institute, 1-8.
- Schwarz, M., Bonhotal, J. and Staehr, A.E., 2010. Use of Dried Manure Solids as Bedding for Dairy Cows. Fact sheet. Ithaca, Cornell Waste Management Institute, p.10.
- Bonhotal, J. and Schwarz, M. 2009. Save Money on Bedding. Eastern DairyBusiness, p21.
- Bonhotal, J., Staehr, E. and Schwarz, M. 2009. Are Your Deadstock Piles and Disposal Costs Causing Your Farm Nightmares? Country Folks, B:21-23.
- Petzen, J., Wolfanger, C., Bonhotal, J., Schwarz, M., Terry, T., and Youngers, N. 2009. Case Study - Eagleview Compost Dairy Barn. NY Farm Viability Institute, p. 12.
- Schwarz, M., and Bonhotal, J. 2009. Are Solids a Solid Bedding? Hoard's Dairyman, 154(14):518.
- Schwarz, M., and Bonhotal, J. 2009. Cornell Farm Services Compost Facility. Cornell Waste Management Institute, p. 7.
- Bonhotal, J., Harrison, E., Schwarz, M., and Staehr, E. 2008. Dairy Manure Solids Cut Bedding Costs, Northeast DairyBusiness, 10, p. 24-25.
- Bonhotal, J., Schwarz, M., and Brown, N. 2008. Natural Rendering: Composting Poultry Mortality. Fact sheet. Ithaca, Cornell Waste Management Institute, p. 12.
- Bonhotal, J. 2008. Natural Rendering: Composting Poultry Mortality. 6 minute DVD. Ithaca, Cornell Waste Management Institute.
- Bonhotal, J. 2008. Natural Rendering: Composting Poultry Mortality. Poster. Ithaca, Cornell Waste Management Institute.
- Bonhotal, J., Staehr, E., and Schwarz, M. 2008. A How-To on Livestock Composting, Northeast DairyBusiness, 10, p. 18-19.
- Petrovic, A.M., Gruttadaurio, J., Barlow, J., Harrison, E.Z., Bonhotal, J.F., Swartz, M., & Soldat, D.J. 2008. Influence of Site Conditions on Soil Responses to Manure-Based Compost Applications on Athletic Fields, Acta Horticulturae, 783:415-424.
- Petrovic, A.M., Gruttadaurio, J., Barlow, J., Harrison, E.Z., Bonhotal, J. F., Schwarz, M., & Soldat, D.J. 2008. Turfgrass Response to Manure-Based Compost Applications on Athletic Fields Bases on Site Factors, Acta Horticulturae, 783:425-436.
- Schwarz, M. and Bonhotal, J. 2008. Health Impacts and Economics of Using Dried Manure Solids in the Northeast: Ninth Annual Fall Dairy Conference "Happy Cows in New York", Liverpool, NY, 2008, p. 67-83.
- Schwarz, M., Bonhotal, J., and Harrison, E.Z. 2008. Manure Solids for Bedding, Northeast DairyBusiness. <http://dairywebmall.com/dbcpress/?p=569>.
- Schwarz, M., Harrison, E.Z., and Bonhotal, J. 2008. Pathogen Analysis of NYSDOT Road-Killed Deer Carcass Compost Facilities. Temperature and Pathogen. Final Report #PIN R020.63.881. Cornell Waste Management Institute, p. 1-78.
- Schwarz, M., and Bonhotal, J. 2008. Using Dairy Manure Solids (DMS) as Bedding: Properly Managed DMS Can Provide an Economic Benefit Without Compromising Herd Health. *in* Understanding Organics and Grazing: Livestock Management and Health - Presented by The Northeast Organic Farming Association of Vermont and Quality Milk Production Services, October 28-30, Auburn, NY.
- Bonhotal, J., Harrison, E.Z., and Schwarz, M. 2007. Natural Rendering: Composting Road Kill. Cornell Waste Management Institute. 12 page fact sheet and poster.
- Schwarz, M., Bassuk, N., Bonhotal, J., and Harrison, E.Z. 2007. Highly Compacted Soils Improved by Compost Use. BioCycle. 48(7):55-56.
- Schwarz, M., Bonhotal, J., Harrison, E.Z., and Gruttadaurio, J. 2007. Compost Use on Established Turf. BioCycle. 48(9):27-29.
- Bonhotal, J., Harrison, E.Z., Schwarz, M., Gruttadaurio, J. Petrovic, A. Martin. 2007. Using Manure-Based Composts in Turf Maintenance. Cornell Waste Management Institute. <http://hdl.handle.net/1813/7936>.
- Bonhotal, J.F, Harrison, E.Z., and Schwarz, M. 2007. Composting Liquids. Cornell Waste Management Institute, <http://hdl.handle.net/1813/9346>.
- Aldrich, B. and Bonhotal, J. 2006. Aerobic Composting Affects Manure's Nutrient Content. Northeast DairyBusiness. 8(3):18

Bonhotal, J. 2006. Poultry Waste Composting at Brey Farm: Case Study. C-3. Manure Management Program, Cornell University, Ithaca.

Bonhotal, J. 2006. Poultry Waste Composting at ACE Farm: Case Study. C-2. Manure Management Program, Cornell University, Ithaca.

Bonhotal, J., Harrison, E.Z. and Schwarz, M. 2006. Evaluating Pathogen Destruction in Road Kill Composting. *BioCycle*. 47:49-51.

Bonhotal, J. and E. Z. Harrison. 2006. Compost Equipment. Cornell Waste Management Institute, <http://hdl.handle.net/1813/3286>.

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Harrison, E.Z., Bonhotal, J., and Schwarz, M. 2005. Compost Pads. Cornell Waste Management Institute, <http://hdl.handle.net/1813/2540>.

Harrison, E.Z. and Bonhotal, J. 2004. Regulation and Certification of Composts. Cornell Waste Management Institute, <http://hdl.handle.net/1813/2311>.

Harrison, E.Z. and Bonhotal, J. 2004. Marketing Composts and Meeting Consumer Needs. Cornell Waste Management Institute, <http://hdl.handle.net/1813/2310>.

Harrison, E.Z. and Bonhotal, J. 2004. Improving and Maintaining Compost Quality. Cornell Waste Management Institute, <http://hdl.handle.net/1813/2312>.

Harrison, E.Z. and Bonhotal, J. 2004. Testing Composts. Cornell Waste Management Institute, <http://hdl.handle.net/1813/2313>.

Harrison, E.Z. and Bonhotal, J. 2004. Compost Bulking Materials. Cornell Waste Management Institute, <http://hdl.handle.net/1813/2314>.

Bonhotal, J. and Laibach, T. 2004. Composting Road-Killed Deer in New York. *BioCycle*. 45(5):25-26

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Harrison, E.Z., Bonhotal, J., and Olmstead, D.L. 2003. What's Behind a Compost Label or Seal? *BioCycle*. 44(9):28-30

Bonhotal, J. 2003. Natural Rendering: A Natural Solution for Mortality and Butcher Waste. *Small Farms Quarterly*, Fall Issue, pg 17

Wright, P.E., Inglis, S.F., Stehman, S.M., and J. Bonhotal, J. 2003. "Reduction of Selected Pathogens in Anaerobic Digestion." *Proceedings of the Ninth International Symposium, Animal, Agricultural and Food Processing Wastes IX*. pp. 74-82, October 12-15. Raleigh, NC

Bonhotal, J. 2002. Compost Markets: Are They There? *Northeast Dairy Business*. 4(4):40

Bonhotal, J., Telega, S.L., and Petzen, J.S. 2002. Natural Rendering: Composting Livestock Mortality & Butcher Waste, Cornell Waste Management Institute. 12 page fact sheet and 3 posters.

Bonhotal, J. and Staehr, E. 2001. Will Composting Pay on Your Dairy? *Northeast Dairy Business*. 3(12):39-41

Bonhotal, J. 2001. Managing Manure Solids. NRAES-143. "Dairy Manure Systems: Equipment and Technology." *Proceedings March 20-22*. www.nraes.org/publications/nraes143.html

Bonhotal J.F. 2000. Surveys Guide Development of Quality Compost Seal. *BioCycle* 41(11):72-78

Bonhotal, J. 2000. Computer Model for On-Farm Composting. *BioCycle*. 41(10):18

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Bonhotal, J., Conway, S. and Leopold, L. 1994. Waste Prevention Tools at Work: Cornell Waste Management Institute. 85 p.

Bonhotal, J., Harrison, E.Z. and Theodore, S. 1992. Implementing Waste Management Projects at a Local Level: Cornell Waste Management Institute. 48 p.

Bonhotal, J., et al. 1991. Trash Goes To School. Cornell Waste Management Institute.
<http://hdl.handle.net/1813/14280>.

Bonhotal, J., Edelstein, K.L. and Krasny, ME. 1990. What About Waste? Ithaca, NY: 4-H Natural Resources, Cornell Cooperative Extension. p 25.

Bonhotal, J. 1990. Recycling: Mining Resources From Trash. Cornell Cooperative Extension, 4-H Natural Resources.

Bonhotal, J. and Krasny, M.E. 1990. Composting: Wastes to Resources. Cornell Cooperative Extension, 4-H Natural Resources.