

# George K. Criner, Ph.D.

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## PROFESSIONAL POSITIONS

2007 – Present, Director School of Economics, University of Maine

2005 – 2007, Professor & Chair, Resource Economics and Policy, University of Maine

2003 – 2004, Invited Professor, Laval University, Quebec, Canada

1998 – 2003, Chair, Resource Economics and Policy, University of Maine

1993 – 1996, Undergraduate Coordinator, Dept. Resource Economics and Policy

1990 – 1997, Professor, Resource Economics and Policy, University of Maine

1990 – 1997, Associate Professor, Resource Economics and Policy, University of Maine

1983 – 1990, Assistant Professor, Resource Economics and Policy, University of Maine

## EDUCATION

Ph.D., Agricultural Economics, Washington State University, 1983

MS, Agricultural Economics, University of Tennessee, 1979

BA, Economics, University of Tennessee, 1977

## AWARDS

Received, as member of the Hampden, Maine, Landfill Oversight Committee a 2002 State of Maine Governor's Award for Environmental Excellence.

## PUBLICATIONS

### *Journal Articles and Book Chapters:*

Doyon, Maurice, George Criner, and Lisa Bragg. 2008. "Milk Marketing Policy Options for the Dairy Industry in New England." *Journal of Dairy Science*. 91:1229-1235.

Anderson, M. W., Teisl M., Criner, G., Tisher, S., Smith, S., Hunter, M., Norton, S.A., Jellison, J., Alyokyin, A., Gallandt, E., Haggard, S., & Bicknell, E. 2007. "Attitudinal Changes of Undergraduate Students in General Education Courses." *Journal of General Education*. 56(2):149-168.

- Rémy Lambert, Bruno Larue, Clément Yélou and George Criner. 2006. "Regional Differences in Canadian Fish and Meat Demands," *Agribusiness: An International Journal*, 22:2:175-199.
- Dalton, Timothy J., George K. Criner, and John Halloran. 2002. "Fluid Milk Processing Costs: Current State and Comparisons." *Journal of Dairy Science*. 85:984-991.
- Criner, George K., Thomas G. Allen, and Raymond J. Schatzer. 2001. "Compost Economics: Production and Utilization in Agriculture," Chapter 11 in book "Compost Utilization in Horticultural Cropping Systems," edited by Peter J. Stoffella and Brian A. Kahn, Lewis Publishers, Boca Raton. pp: 241-260.
- Criner, George K., Edward McLaughlin, and Alan S. Kezis. 1997. "Pricing Dynamics in the U.S. Fresh Produce Channels: New Empirical Evidence," *Journal of Retailing and Consumer Services*. 4(4):259-268.
- Cheng, Hsiang-tai, George K. Criner, and Alan S. Kezis. 1996. "The Impact of Consumer Characteristics on Performance for Selected Apple Varieties," *Journal of Food Products Marketing*. 3:4:1-11.
- Seguino, Stephanie, George Criner and Margarita Suarez. 1995. "Solid Waste Management Options for Maine: The Economics of Pay-By-The-Bag Systems." *Maine Policy Review*. 4:2:49-58.
- Criner, George K., Alan S. Kezis, Gregory K. White and John P. O'Connor. 1995. "Regional Composting of Residential Waste: An Economic Analysis." *Compost Science & Utilization*. 3:4:31-39.
- Criner, George K., A.S. Kezis, H. Cheng and M. Nord. 1995. "Apple Preferences, Formulation and Testing: Red Delicious, McIntosh, and Empire." *Journal of Food Distribution Research*. 26:1:64-71.
- Criner, George K., Gregory K. White and Stephan Howick. 1995. "Fluid Milk Processing Cost Analysis." *Journal of Dairy Science*. 78:1181-1190.
- Criner, George K., S.C. Howick, J.P. O'Connor and J.D. Kaplan. 1994. "Maine Waste Management Issues." *Maine Business Indicators*, Center for Business and Economic Research, University of Southern Maine. 39:2:1-5.
- Criner, George K. and Stephen L. Jacobs. 1992. "Economic Engineering of Milk Processing Costs." *Journal of Dairy Science*. 75:1365-1372.
- Cheng, H., George K. Criner and Ralph E. Townsend. 1991. "International Lobster Supply: Benefits of Canadian Seasonality." *Marine Policy*, 15:5:363-369.

Bushway, A.A., M.R. Stickney, D. Bergeron, R.H. True, T.M. Work and George K. Criner. 1988. "Formulation and Characteristics of a Fermented Pepperoni Using Mutton and Fowl." *Canadian Institute of Food Science and Technology Journal*. 21:4.

Reiling, Stephen, George K. Criner and Steven Oltmanns. 1988. "The Influence of Information on Public Attitudes Toward Campground User Fees." *Journal of Leisure Research*. 20:3:208-217.

Criner, George K. 1987. "Regulation and Cost Allocations: The Setting of Maine's Minimum Milk Retail Margins." *Journal of Food Distribution Research*. 18:2:47-52.

Anderson, Mark S., Stephen D. Reiling and George K. Criner. 1985. "Consumer Demand Theory and Wildlife Agency Revenue Structure." *Wildlife Society Bulletin*. 13:4:375-384.

Criner, George K., Therese M. Work and Ruth H. True. 1985. "Adult Preferences of Solids-Enriched Milk." *Journal of Food Distribution Research*. 16:2:47-52.

Hayward, Russell A., George K. Criner and Steven P. Skinner. 1984. "Apple Price and Production Forecasts for Maine and the United States." *Northeastern Journal of Agricultural and Resource Economics*. 13:1:268-276.

***Published proceedings, Bulletins and Trade Publications:***

Doyon, M., Criner, G; Bragg, L. A. et A. Files, Milk Market Chain Intervention in the Northeast: Is there a "best" policy option? Rapport de recherche, Centre de Recherche en Économie Agroalimentaire, Série Recherche SR.2007.06.01, Université Laval, 2007

Criner, George K., Rémy E. Lambert, Yannick Rancourt, and Joel Johnson. 2007. "Canadian Food Processors and Retailers: Changes in Concentration and Efficiency since the Canadian-U.S. Free Trade Agreement," *Journal of Food Distribution Research: Proceedings Issue*, 38:1

Doyon, Maurice, George Criner and Ronald Cotterill. "La production laitière en Nouvelle-Angleterre: un malaise qui perdure," *Le Producteur de Lait Québécois*, Avril 2005. pp. 21-24 (Milk Production in New England: A Difficult Situation that Persists, in *The Quebec Milk Producer*).

Rémy Lambert, George K. Criner et Yannick Rancourt. "Concentration, Prix et Pouvoir de Marché dans l'Industrie Alimentaire Canadienne," report final, Fondation Masse. (Market Power, Concentration and Prices in the Canadian Food Industries, final report to the Masse Foundation), March 2005

Criner, George, Rémy Lambert and Yannick Rancourt. 2004. "An Analysis of Canadian Food Industry Concentration," Appearing in the European Association of Agricultural Economics meeting (Paris May 5 and 6) proceedings issue (on CD, 10 pages)

Files, Andrew and George K. Criner. 2003. "Poison Control," *WasteAge*, 34:6:64-67.

Files, Andrew C. and George K. Criner. "Cost Analysis for Household Hazardous Waste Collection," Maine State Planning Office, Office of Waste Management and Recycling Program, Technical Report, February 2002, 18 pp.  
Report ("Household Hazardous Waste Cost Study") found at web site:  
<http://www.state.me.us/spo/recycle/hhw/>  
Report used in preparation of implementing legislation, see web site:  
<http://www.state.me.us/dep/rwm/homeowner/pdf/hhwfundingproposal.pdf>

Files, Andrew C., Thomas G. Allen, and George K. Criner. "Least-Cost Options for the Collection, Treatment, and Disposal of Biomedical Waste in Maine." Maine Agricultural and Forestry Experiment Station, University of Maine, Orono, Maine, November 2002. Technical Bulletin 184, 16 pp.

Files, Andrew C. and George K. Criner. "Cost Analysis for Household Hazardous Waste Collection," Maine State Planning Office, Office of Waste Management and Recycling Program, Technical Report, February 2002, 18 pp.

Dalton, Timothy, George K. Criner and John Halloran. "2001 Milk Processing Costs in Maine." Maine Agricultural and Forest Experiment Station Technical Bulletin #181, University of Maine, Orono, Maine, December 2001, 53 pages plus plant diagram.

Stevens, Noel D. and George K. Criner. "Economic Analysis of Fiber-Reinforced Polymer Wood Beams." Maine Agricultural and Forest Experiment Station Bulletin 848. University of Maine, Orono, Maine (June 2000) 37 pp.

Criner, George K., Volodymyr Tchaikovsky and Jonathan Kaplan. 1999. "Economies of Size in Processing Recyclables." Appearing in R'99 Recovery, Recycling, Re-Integration Congress Proceedings, Geneva, Switzerland, February 5-8, 1999. Vol. 1, pp. 131-137.

Criner, George K., and Stephanie Sequino. 1997. "Volume Based Fees Impact Residential Waste Disposal: Case Study of Maine, USA," appearing Vol. 1 of R'97 Recovery, Recycling, Re-Integration Congress Proceedings, Geneva, Switzerland, Feb. 4-7, 1997. pp. 91-96.

Seguino, S., Suarez, M, Young, J., McKay, R., Spruce, C. and George K. Criner, "Solid Waste Management (SWM) Options: The Economics of Variable Cost and Conventional Pricing Systems in Maine, Margaret Chase Smith Center for Public Policy Staff Paper, (June 1995) 39 pp.

Criner, George K., A.S. Kezis, and J.P. O'Connor. "Regional Composting of Waste Paper and Food." *BioCycle: Journal of Waste Recycling*, (January, 1995), 36:1, pp. 66-67.

O'Connor, John P. and George K. Criner. "A Maine Town Shifts From Drop-off to Curbside." *BioCycle: Journal of Composting & Recycling*, (1994), 35:2, pp. 38-39.

- Criner, George K., J.D. Kaplan, S. Juric and N.R. Houtman. 1994. "Maine's Household Garbage." Maine Agricultural and Forestry Experiment Station, University of Maine, Bulletin 841, 23 pp.
- Criner, George K., S.L. Jacobs and S.R. Peavey. 1991. "An Economic and Waste Management Analysis of Maine's Bottle Deposit Legislation." Maine Agricultural Experiment Station, University of Maine, Miscellaneous Report 358, 95 pp.
- Halstead, J.M., S.D. Myers, George K. Criner and S.C. Deller. 1991. "Solid Waste Management in Northern New England." New Hampshire Agricultural Experiment Station Research, Durham, NH, Report No. 124, 73 pp.
- Criner, George K. 1991. "Anaerobic Treatment of Food Wastes." *BioCycle: Journal of Waste Recycling*, 32:4, pp. 80-83.
- Criner, George K., S.L. Jacobs and C.A. Rock. 1991. "A Residential Waste Stream Analysis: Orono, Maine, 1990." Maine Agricultural Experiment Station, University of Maine, Bulletin 833, 12 pp.
- Criner, George K., J.M. Halstead, E. Curtin, and S.C. Deller. 1991. "Landfills and Municipal Solid Waste in Maine." Maine Agricultural Experiment Station, University of Maine, Bulletin 835, 18 pp.
- Jacobs, Steven L. and George K. Criner. 1990. "Milk Processing and Distribution Costs: The Maine Model." Maine Agricultural Experiment Station, University of Maine, Technical Bulletin 140, pp. 72 plus one pull-out blue print.
- Criner, George K. 1989. "New Courses in Waste Management" *BioCycle: Journal of Waste Recycling*, 30:5, 40-41.
- Criner, George K., F. M. French, M. El-Begearmi, Alan S. Kezis and Van L. Perry. 1987. "Domestic Rabbit Production in Maine," Cooperative Extension Service, University of Maine, Bulletin 669, 20 pp.
- Criner, George K. 1987. "Economic Feasibility of Anaerobic Digesters." *BioCycle: Journal of Waste Recycling*, 28:1, pp. 51-53.
- Criner, George K. and Mary E. McPartland. 1987. "Economic Evaluation of Waste Treatment Projects with Microcomputers." *BioCycle: Journal of Waste Recycling*, 28:10:39-41.
- Criner, George K., D.F. Silver, F. Richard. King, James D. Leiby, and Alan S. Kezis. 1986. "An Economic Analysis of a Maine Dairy Farm Anaerobic Digester." Maine Agricultural Experiment Station, University of Maine, Bulletin 816, 28 pp.

Thurston, Wayne, George K. Criner and Ralph Reeb. 1985. "Dairy Farmer Indebtedness in Maine." Maine Agricultural Experiment Station, University of Maine, Bulletin 812, 10 pp.

Criner, George K., and Russell C. Parker. 1985. "A Study of The Maine Lamb Industry." Maine Agricultural Experiment Station, University of Maine, Bulletin 807, 51 pp.

***Other Publications and Prepared Testimony:***

Allen, Thomas and George Criner with Jim Dorsky and William Gartley. "Feasibility Assessment Bulky Waste Facility: Union, Maine," Gartley and Dorsky Engineering and Surveying of Camden, ME. December, 2004.

Criner, George K. 1996. "Paying for Garbage by the Bag," *Orono Observer*, Town of Orono Newsletter, Volume 3:2, (Winter), p. 4.

Smith, Ken, and George K. Criner. 1996. "Mandatory Recycling Enforcement: Results from Seven Maine Towns," *Orono Observer*, Town of Orono Newsletter, Volume 3:4, (Spring), p. 4.

Criner, George K. and Michael Nord. "McIntosh, Red Delicious, and Empire: Preference and Promotion Tests." Published proceedings from Massachusetts Fruit Growers' Association Annual Meeting, Sturbridge, MA, (January 18-19, 1995), pp. 95-101.

Seguino, Stephanie, George Criner and Margarita Suarez. 1995 "Solid Waste Management Options for Maine: The Economics of pay-by-the-bag Systems," *Maine Policy Review*, 4:2:49-58, October.

Marra, M.C., George K. Criner and A.B. Carmichael. 1995. "Enterprise Budgets for Maine Blueberries: Three Production Methods." Maine Agricultural and Forest Experiment Station, University of Maine, Miscellaneous Report 394, (October, 1995).

Criner, George K. "McIntosh Still Far From Dead to Consumers." *New England Farmer*, (April, 1995), p. 31.

Criner, George K., H. Cheng and Alan S. Kezis. "Analysis of Retail Produce Pricing Patterns." Published abstract from 2nd Recent Advances in Retailing & Services Science Conference, held at Broadbeach, Gold Coast, Australia, (July 11-14, 1995).

Cheng, H., George K. Criner and Alan S. Kezis. "The Impact of Consumer Characteristics on Preferences for Selected Apple Varieties." Published abstract from 2nd Recent Advances in Retailing & Services Science Conference, held at Broadbeach, Gold Coast, Australia, (July 11-14, 1995).

- O'Connor, J.P. and George K. Criner. "An Economic Assessment of Curbside Recycling in Orono, Maine." Resource Economics and Policy Staff Paper #453, University of Maine. Abstract in *BioCycle: Journal of Waste Recycling*, (February, 1994), pp 38-39.
- Criner, George K. "The Impact of Gross Margin-Price Elasticity on Retail Produce Pricing." Published research up-date, *Journal of Food Distribution Research*, (1994), 25:1, p. 105.
- Criner, George K. 1992. Testimony and Exhibits, Docket No. 92-101 before the State of Maine Public Utilities Commission on Behalf of Maine Public Service Company, 49 pp.
- Criner, George K. 1991. Rebuttal Testimony and Exhibits, Docket No. 91-010 before the State of Maine Public Utilities Commission, 40 pp.
- Criner, George K., M.R. Blanchard and S.L. Jacobs. 1991. "Direct Product Profit." Maine Grocers Association Bulletin, Maine Grocers Association, Augusta, ME, pp. 3-7.
- Halstead, J.M., S.D. Myers, George K. Criner and S.C. Deller. 1991. "Solid Waste Management in Northern New England." New Hampshire Agricultural Experiment Station, Durham, NH, Research Report No. 124, 73 pp.
- Criner, George K., S.L. Jacobs and S.R. Peavey. 1991. "An Economic and Waste Management Analysis of Maine's Bottle Deposit Legislation." Maine Agricultural Experiment Station, University of Maine, Miscellaneous Report 358, 98 pp.
- Jacobs, Steven L. and George K. Criner. 1990. "Documentation for the Maine Farm Energy Audit System." Maine Agricultural Experiment Station, University of Maine, Miscellaneous Report 334, 78 pp.
- Criner, George K., editor. 1988. Waste Utilization Research Group Newsletter, Maine Agricultural Experiment Station, University of Maine, Vol. 1, No. 7, 6 pp.
- Criner, George K. 1988. "Computer Assisted Grocery Store Management Systems: Needs, Assimilation and the Role for Universities." Published abstract, *Journal of Food Distribution Research: 28th Annual Meeting Proceedings Issue*, 19:1, pp. 131-132.
- Criner, George K., J.D. Leiby and A.S. Kezis. 1987. "Current Situation, Issues and Research Needs of Canadian-Maine Potato Trade." Resource Economics in Emerging Free Trade: Proceedings of a Maine/Canadian Trade Conference, University of Maine Canadian-American Center, University of Maine, pp. 33-44.
- Criner, George K., J.D. Leiby and A.S. Kezis. 1987. "Canadian and Maine Potatoes: A Bushel of Questions." *Explorations: A Journal of Research and Public Service*, University of Maine, pp. 48-52.

Criner, George K. 1987. "Anaerobic Digestion: Alternative Energy Source." Appeared in the Bangor Daily News column: As Maine Grows, p. 7, (August 17, 1987).

Cooper, Roger and George K. Criner. 1986. "A Preliminary Economic Investigation of Freezing Strawberries in Maine." Maine Agricultural Experiment Station, University of Maine, Miscellaneous Report 316, 53 pp.

Criner, George K., Duane A. Smith, Kathy J. Sage and Ralph Reeb, II. 1986. "A Standardized Methodology for Evaluating Commodity Potential." Maine Agricultural Experiment Station, University of Maine, Miscellaneous Publication No. 688, 24 pp.

Criner, George K., Alan S. Kezis and Mark W. Anderson. 1983. "Allocating Costs to the Three Quart Milk Container." Maine Agricultural Experiment Station, University of Maine, Miscellaneous Report 291, 18 pp.

Pratt, J. E. , A.M. Novakovic, George J. Elterich, D.E. Hahn, B.J. Smith and George K. Criner. 1986. "An Analysis of the Spatial Organization of the Northeast Dairy Industry." *Search: Agriculture*, Cornell University Agricultural Experiment Station, Ithaca, N.Y., No. 32, 84 pp.

Criner, George K. 1983. "An Econometric Model of Milk Production in Maine." Proceedings of the September, 1983, NE-126 Workshop on the Spatial Organization of the Northeast Dairy Industry. Andrew M. Novakovic, editor. Cornell University, A.E. Res. 83-39, pp. 18-36.

***Staff paper and others:***

Eganhofer, Stefanie and George K. Criner. "Preliminary Bioreactor Landfill Technology for Maine. Resource Economics and Policy Staff Paper #548, University of Maine, Orono (June 2005).

Files, Andrew, Thomas G. Allen, and George K. Criner. "Least-Cost Options for the Collection, Treatment, and Disposal of Biomedical Waste in Maine." Resource Economics and Policy Staff Paper #494, University of Maine, Orono (Spring 2001).

Dalton, Timothy and George K. Criner. "The Potential Impact of an Atlantic Salmon Endangered Species Listing on Blueberry Producers," NSFA White Paper and also appearing in *The Maine Farmer*, Vol. 4 No. 2, Feb. 2000

Criner, George K. (1997) "Community Adjustments to Regulatory and Fiscal Pressures in Municipal Solid Waste Management," published symposium abstract *American Journal of Agricultural Economics*, Vol 79 No. 5 p:1697.

- Criner, George K., A.S. Kezis, and H.T. Cheng, "Consumer Apple Variety Preference and Impact of Promotion." Northern New England Product Development and Marketing Center, University of Maine, Staff Paper No. 007, (September, 1994).
- Criner, George K., A.S. Kezis and H.T. Cheng. "Young Adult Apple Varietal Preference: Socioeconomic Factors." Northern New England Product Development and Marketing Center, University of Maine, Staff Paper No. 006, (September, 1994).
- Rock, C.A., R.A. Kostinec, J.A. Alexander, D.N. Humphrey and George K. Criner. "Evaluation of Recycled Glass/Ceramic Products as an Aggregate Substitute for Maine Department of Transportation Projects." Department of Civil and Environmental Engineering Technical Report, University of Maine, (March, 1994).
- O'Connor, J.P. and George K. Criner. "An Economic Assessment of Curbside Recycling in Orono, Maine." Department of Resource Economics and Policy, University of Maine, Staff Paper No. 453, (February, 1994).
- McPartland, Mary E., and George K. Criner. 1987. "Diversifying Maine's Fruit and Vegetable Processing Industry," ARE 382, Department of Agricultural and Resource Economics, University of Maine, Orono, Maine, 11 pp.
- Criner, George K. 1984. "Design, Construction, and Use of Economic-Engineering Models," ARE 368, Department of Agricultural and Resource Economics, University of Maine, Orono, Maine, 7 pp.
- Unterstein, Richard J. and George K. Criner. 1984. "Short-Run Residential Wood Demand Forecasts for Maine," ARE 367, Department of Agricultural and Resource Economics, University of Maine, Orono, Maine, 8 pp.
- Criner, George K. and Ralph Freeze. 1984. "An Evaluation of Two Distributed Lag Estimators with Respect to Different Degrees on Interperiod Variable Correlation," ARE 366, Department of Agricultural and Resource Economics, University of Maine, Orono, Maine, 25 pp.
- Criner, George K. and Russel C. Parker. 1985. "Evaluation of Maine's Slaughter Facilities and Intermediaries," ARE 372, Department of Agricultural and Resource Economics, University of Maine, Orono, Maine, 10 pp.
- Johnson, Kathy A., and George K. Criner. 1985. "Economic Analysis of Pick-Your-Own Raspberry Operation in Maine," ARE 373, Department of Agricultural and Resource Economics, University of Maine, Orono, Maine, 14 pp.

Criner, George K., and Richard Unterstein. 1983. "An Analysis of Residential Wood Demand in Maine," ARE 362, Department of Agricultural and Resource Economics, University of Maine, Orono, Maine, 13 pp.

## **GRANTS AND CONTRACTS RECEIVED**

10/1/09 – 9/30/12 "Knowledge Transfer Alliance," funded by the US Economic Development Administration. George Criner PI, with co-PI's John Mahon and Hugh Stevens. Amount: \$1,827,000.

11/1/07 – 12/31/08 "Estimating cost of milk production under Maine conditions: 2007-2009," funding Maine Milk Commission. George Criner co-PI. Amount: \$33,136.

2/1/07 – 12/31/07 "Milk Retailing Costs 2007," funded by the Maine Milk Commission. George Criner PI with Lisa A. Bragg. Amount: \$41,831.

7/1/06 – 6/30/07 "Milk Processing Costs 2006," funded by the Maine Milk Commission. George Criner and Timothy Dalton co-PIs. Amount: \$51,000.

9/1/03 – 12/31/03 "Milk Processing Costs 2003," funded Maine Milk Commission. George Criner co-PI with Timothy Dalton PI and Thomas Allen. Amount: \$36,500.

8/1/02 – 7/31/04 "Cross-Border Curricular Programs in International Environmental and Agribusiness Management," USDA Higher Education Challenge Grant. Amount: \$457,000. George Criner Project Director with Drs. Nina Lilja (CIAT) and Tim Dalton (UM), and Gary Fairchild and Tim Taylor from the University of Florida, and Eastern Maine Development Corporation and Maine International Trade Center.

6/1/01 – 3/31/02. "2001 Milk Retailing Cost Analysis," funded by the Maine Milk Commission. George Criner and Andrew Files. Amount: \$31,712.

4/1/01 – 12/31/01. George Criner, Tim Dalton and John Halloran. "Costs of Processing Milk in Maine: 2001," funded by the Maine Milk Commission. Amount: \$51,405.

1/15/01 – 6/15/01. "Impact Assessment of Participatory Plant Breeding Project: 2001," funded by the Center for International Tropical Agriculture. Nina Lilja PI, George Criner Co-PI. Amount: \$7236.

8/96. Contract: "1996 Milk Processing and Retailing Cost Analysis," Maine Department of Agriculture, Food and Rural Resources. Criner PI. Amount: \$38,889.

12/91. Contract: "The Cost of On-Farm Milk Production in Maine," funded by the Maine Milk Commission. Criner Co-PI. Amount: \$5,000.

9/88. Contract: "Theoretical Milk Processing Costs in Maine," funded by the Maine Department of Agriculture, Food and Rural Resources. Criner PI. Amount: \$109,736.

8/88. Industry Grant of \$2,000 from Maine Pomological Society to support Criner's research of apple production and marketing.

7/87. Industry Grant of \$2,500 awarded from Agway, Inc. to support Criner's research of on-farm anaerobic digestion of animal wastes.

6/87. Contract: "Farm Energy Audit," funded by the Maine Department of Agriculture, Food, and Rural Resources. Criner PI. Amount: \$45,933.

3/87. Contract: "Consumer Acceptance and Market Opportunities for New Maine Potato Varieties," funded by USDA Special Grants Program. Criner Co-PI. Amount: \$54,407.

4/86. Industry Grant of \$4,000 awarded from Nantucket Conservation Foundation to support Criner's research of lamb production.

11/85. Contract: "Analysis of Factors Affecting Exports of Canadian Potatoes into the Eastern US" funded USDA Economic Research Service. Criner Co-PI. Amount: \$10,000.