

## Ernie Marx

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### Education

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<u>Institution</u>	<u>Curriculum</u>	<u>Degree</u>	<u>Year</u>
Oregon State University	Soil Science	M.S.	1993-95
Humboldt State University	Natural Resources	Post-bac coursework	1991-93
Humboldt State University	Music	B.A. cum laude	1985-87
Brown University	Economics	Undergraduate coursework	1978-80

### Related Professional Positions

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#### ***Research Associate III* CSU-Natural Resources Ecology Lab      April 2009 – present**

- Post-processing and analysis and quality control of DayCent output using MySQL and ArcGIS.
- Processing soil, weather and land use input data for Century and DayCent model simulations.
- Development of Python, R and MySQL scripts to automate data processing.
- Crop parameterization for DayCent model.

#### ***Agriculture/Natural Resources Agent*      Colorado State University Extension      Feb. 2000 – April 2009**

- Designed and delivered educational programs, seminars and short-courses on natural resources and agricultural topics.
- Transferred research-based land management information from Colorado State University to land managers in northern Colorado.
- Advised landowners on invasive plant management and grazing management.
- Wrote fact sheets and newspaper articles on current natural resources issues.
- Facilitated development of grower-owned Northern Colorado Pickle Cooperative.
- Facilitated development of Larimer County Land Evaluation and Site Assessment (LESA) system.
- Coordinated and facilitated public policy advisory committees including Larimer County Agricultural Advisory Board.
- Served on CSU Administrative Professional Council and University Benefits Committee.

#### ***Senior Faculty Research Assistant*      Oregon State University      July 1999 - Feb. 2000**

#### ***Faculty Research Assistant*      Oregon State University      Aug. 1995 - July 1999**

- Supervised field research in soil fertility and nutrient management to protect water quality.
- Supervised statewide research (21 locations) on cereal crop performance.
- Analyzed and maintained data using SAS, Access and Excel.
- Produced publications summarizing research findings.
- Presented research findings at meetings.
- Created and maintained web page.

## **Biological Technician**

May 1990 - Feb. 1991

### **USDA-Forest Service, Pacific Southwest Research Station**

- Field collection of vegetation data for pileated woodpecker habitat study.
- Data entry.

## **Vegetable Producer Dows Prairie Farm, McKinleyville, CA**

Nov. 1987 - March 1990

- Owned and operated certified organic vegetable farm.
- Responsible for field production, marketing, bookkeeping, employee hiring and supervision.
- President of North Coast Growers Cooperative which managed three Farmers' Markets.

## **Refereed Journal Articles**

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Field, J. L., Marx, E., Easter, M., Adler, P. R. and Paustian, K. (2015), *Ecosystem model parameterization and adaptation for sustainable cellulosic biofuel landscape design*. GCB Bioenergy.

Davis, S. C., W. J. Parton, S. J. Del Grosso, C. Keough, E. Marx, P. R. Adler, E. H. DeLucia. 2011. *Impact of second-generation biofuel agriculture on greenhouse-gas emissions in the corn-growing regions of the US*. Frontiers in Ecology and the Environment doi:10.1890/110003

Parton, W. J., S. J. Del Grosso, E. Marx, A. L. Swan. 2011. *Agriculture's Role in Cutting Greenhouse Gas Emissions*. Issues in Science and Technology. 27:4:39-32

Sexton, P.J., M.G. Bohle, R.B. Simmons, R.S. Karow, E. Marx, N.W. Christensen, and T. Shibley. 2006. *Effect of nitrogen topdressing at anthesis and the association of flag-leaf nitrogen with grain protein concentration in irrigated spring wheat*. Journal of Plant Nutrition 29:1035-1046.

Baloch, D.M., R.S. Karow, E. Marx, J.G. Kling, and M.D. Witt. 2003. *Vernalization Studies with Pacific Northwest Wheats*. Agronomy Journal. 95:1201-1208.

Hart, J.M., E. S. Marx, N. W. Christensen, and J. A. Moore. 1997. *Nutrient management strategies*. Journal of Dairy Science. 80:2659-2666.

## **Reviewed/Numbered Extension and Experiment Station Publications**

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Waskom, R., E. Marx, D. Wolfe and G. Wallace. 2003. *Irrigation Ditches and their Operation*. Fact Sheet No. 6.701. Colorado State University Cooperative Extension, Fort Collins, CO.

Marx, E., R. Waskom and D. Wolfe. 2002. *Private Wells for Home Use*. Fact Sheet No. 6.700. Colorado State University Cooperative Extension, Fort Collins, CO.

Karow, R. and E. Marx. 1999. *Spring grain varieties for 1999*. 1999. Special Report 986. Oregon State University Extension Service, Corvallis, OR.

Karow, R. and E. Marx. 1999. *Winter cereal varieties for 1999*. 1999. Special Report 775. Oregon State University Extension Service, Corvallis, OR.

Marx, E., R. Karow, M. Bohle, and S. James. 1999. *State-wide cereal variety testing program trials in central Oregon*. In *Central Oregon Agricultural Research Center 1998 Annual Report*. Special Report 1003. Agricultural Experiment Station, Oregon State University.

- Bohle, M. R. Karow, E. Marx, and S. James. 1999. *Seeding rate effect on winter triticale and soft white winter wheat in 1998*. In *Central Oregon Agricultural Research Center 1998 Annual Report*. Special Report 1003. Agricultural Experiment Station, Oregon State University.
- Marx, E., R. Karow, and K. Morrow. 1998. *State-wide cereal variety testing program*. In *Columbia Basin Agricultural Research Annual Report, 1998*. Special Report 989. Agricultural Experiment Station, Oregon State University.
- Marx, E., R. Karow, M. Bohle, and S. James. 1998. *State-wide cereal variety testing program trials in central Oregon*. In *Central Oregon Agricultural Research Center Annual Report, 1997*. Special Report 987. Agricultural Experiment Station, Oregon State University.
- Bohle, Mylen, R. Karow, E. Marx, and S. James. 1998. *Celia winter triticale and Stephens soft white winter wheat response to nitrogen fertilization in 1997*. In *Central Oregon Agricultural Research Center Annual Report, 1997*. Special Report 987. Agricultural Experiment Station, Oregon State University.
- Karow, R. and E. Marx. 1998. *Winter cereal varieties for 1998*. 1998. Special Report 775. Oregon State University Extension Service, Corvallis, OR.
- Karow, R., E. Marx, H. Ruddenklau, and M. Moore. 1997. *State-wide cereal variety testing program trials*. In *Columbia Basin Agricultural Research Annual Report, 1997*. Special Report 977. Agricultural Experiment Station, Oregon State University.
- Marx, E.S., J. Hart, and R.G. Stevens. 1996. *Soil Test Interpretation Guide*. EC 1478. Oregon State University Extension Service, Corvallis, OR.
- Karow, R., E. Marx, H. Ruddenklau, S. James, and M. Bohle. 1996. *State-wide cereal variety testing program trials in central Oregon*. In *Central Oregon Agricultural Research Center Annual Report, 1996*. Special Report 955. Agricultural Experiment Station, Oregon State University.
- Marx, E.S., N.W. Christensen, J. Hart, M. Gangwer, C.G. Cogger, and A.I. Bary. 1996. *The Pre-sidedress Soil Nitrate Test (PSNT) for western Oregon and western Washington*. EM 8650. Oregon State University Extension Service, Corvallis, OR.
- Hart J., M. Gangwer, M. Graham, and E. Marx. 1995. *Dairy manure as a fertilizer source*. EM 8586. Oregon State University Extension Service, Corvallis, OR.
- Hart, J., E.S. Marx, and M. Gangwer. 1995. *Manure application rates for forage production*. EM 8585. Oregon State University Extension Service, Corvallis, OR.

## **Conference Papers**

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- Field, J.L., T. Dinh, E. Marx, J. Tryner and K. Paustian. 2013. *Biofuels On The Landscape: Modeling To Balance The Environmental Footprint Of Feedstock Production On Marginal Lands*. In: Proceedings of the 2013 Annual Meetings of the American Society of Agronomy, Crop Science Society of America, Soil Science Society of America, November 3-6, Tampa, FL
- Paustian, K., K. Brown, M. Easter, A. Chambers, G. Johnson, K. Killian, E. Marx, C. G. Olson, A. Swan, A. Reno, B. Sutton and S. Williams. 2013. *Farm-Scale Full GHG Accounting With COMET-Farm*. In:

Proceedings of the 2013 Annual Meetings of the American Society of Agronomy, Crop Science Society of America, Soil Science Society of America, November 3-6, Tampa, FL

Marx, E.S., J.M. Hart, and N.W. Christensen. 1996. *On-Site Soil Nitrate Testing Using a Quick-Test Field Kit*. In: Proceedings of the 1996 Annual Meetings of the American Society of Agronomy, Crop Science Society of America, Soil Science Society of America, November 3-8, Indianapolis, IN, p. 316.

Hemphill, D.D. Jr., J.M. Hart, and E.S. Marx. 1996. *Survey of Nitrate in Soil Profiles Before and After Vegetable Crop Production*. In: Proceedings of the 1996 Annual Meetings of the American Society of Agronomy, Crop Science Society of America, Soil Science Society of America, November 3-8, Indianapolis, IN, p. 316.

Marx, E.S., N.W. Christensen, J.M. Hart. 1994. *PSNT and other methods for predicting nitrogen needs of silage corn in western Oregon*, American Society of Agronomy annual meeting, Seattle, WA. 1994 Agronomy Abstracts, p. 395.

Marx, E.S., N.W. Christensen, J.M. Hart. 1994. *Calibration of the Pre-sidedress Soil Nitrate Test for Corn Silage in Western Oregon*, Western Society of Soil Science, San Francisco, CA. Pacific Div. AAAS and WSSS Abstracts, p. 81.

### **Popular Press**

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*Ask SAM*, monthly column discussing land management and rural issues in North Forty News, Wellington, CO. Eighty-four columns written during 2001-2009.

### **Presentations**

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Over 200 public presentations while working for Oregon State University Extension (1995-2000) and Colorado State University Extension (2000-2009).