

# CURRICULUM VITAE

Carl Lovell Imaikalani Evensen

## EDUCATION

- Ph.D. Agronomy and Soil Science, University of Hawaii. August, 1989. Dissertation Title: "Alley cropping and green manuring for upland crop production in an Indonesian farming system". Minor in Agricultural Economics and Rural Development.
- M.S. Agronomy and Soil Science, University of Hawaii, May 1984. Thesis Title: "Seasonal yield variation, green leaf manuring uses, and methods of eradication of *Leucaena leucocephala* (Lam) de Wit."
- B.A. Biological Science, Whitman College, May 1977.

## EXPERIENCE

- October 1993 - Present Dept. Natural Resources & Environmental Mgmt.  
University of Hawaii  
**Extension Specialist.** Provide statewide leadership for extension programs in natural resource management and environmental quality. Specific responsibilities include development and implementation of programs for public education and cooperative extension staff development on natural resources, sustainability, pollution control, and water quality. Coordinate the Hawaii Extension Service Water Quality Program. Teach graduate course (*Research Skills*) and undergraduate course (*Environmental Science*). Advise graduate and undergraduate students.
- September 1989 - October 1993 Hawaiian Sugar Planters' Assoc.  
Aiea, HI.  
**Assistant Agronomist.** Designed and conducted soil and water conservation research in sugarcane in conjunction with sugar plantations and the Soil Conservation Service (SCS). Research topics included cover cropping in sugarcane and study of sugarcane growth and canopy development to support improvement of soil loss prediction models. Supervised and implemented residue studies for pesticide registration using good laboratory practices. General duties included extension and training on agronomy and research management within Hawaii's sugar industry.
- September 1984 - August 1988 TROPISOILS Indonesia Project  
West Sumatra, Indonesia  
**Research Associate.** Designed, conducted, and analyzed field research as a team member of a farming systems project in Indonesia. Specific studies included upland food crop and forage production, green manuring, alley cropping, and tree legume species testing. Supervised field staff using the national language (*Bahasa Indonesia*). Planned project research with the multi-disciplinary team and served briefly (3 months) as acting team leader.
- November 1977 - October 1979 U.S. Peace Corps Mission  
Nairobi, Kenya.  
**Peace Corps Volunteer.** Developed a horticultural extension program for subsistence farmers in the Taita/Taveta District of Kenya. Conducted farm visits, group discussions (using the national language, *Kiswahili*), and demonstrations on culture of fruit trees and vegetables. Organized four existing and one new tree crops nurseries and established several fruit tree variety trials. Taught horticultural training courses at a Farmers Training Center.

## **COURSES TAUGHT**

**AGRS/NREM 630, *Agriculture and the Environment* (2cr):** I developed this course to involve students in advanced and in-depth examination of current environmental issues in agriculture and to critically analyze the determinants, indicators, and means of quantifying the impacts of agriculture on the environment. (Alternate years 1994 - 2002, 2003, 2004)

**AGRS 631, *Sustainable Agriculture Seminar* (2cr):** I developed this course to critically evaluate existing and alternative agricultural systems from a holistic and long-term perspective through readings, classroom discussions, and independent research. (Taught Spring 1996)

**NREM 605, *Research Skills* (2cr):** I helped develop this course to assist new NREM graduate students in developing skills necessary to write research grants and design a research proposal (Taught Fall 2005 - 2008)

**AGRN/NREM 210, *Environmental Issues and Options* (3cr):** I helped to develop this course to draw new students into CTAHR and subsequently as a core course in NREM. Team taught with PEPS faculty. (Fall & Spring 1999 – 2003, Fall 2004 - 2008)

**AGRS 492, *Internship* (4cr):** This course involves integration and application of academic knowledge and critical skills emphasizing professional development. Placement with an approved cooperating supervisor/ employer. (Spring 1999 - 2002)

**NREM 301 Lab, *Natural Resource Management Lab* (1cr):** I developed and taught the first offering of this lab on natural resource management and field methodologies, including map interpretation, water quality, geomorphology, soil and water conservation, forestry assessment and native Hawaiian ecosystems. (Fall 2002)

## **PROFESSIONAL ACTIVITIES**

**Editorial Board:** Agricultural Systems Journal (2002 – 2007), **Journal Reviewer:** Agronomy Journal; Micronesica: Journal of Nat. Sci.; Journal of Soil and Water Conservation; USGS Hawaii National Water Quality Assessment publ.

**Professional Memberships:** Am. Soc. Agronomy, Am. Water Res. Assoc., NRCS Hawaii State Technical Committee member, Hawaii Plant Materials Center Advisory Committee, NRCS Hawaii Training Committee.

**Proposal Reviewer:** CSREES National Water Program (2004); CSREES Small Business Innovation Res. (2005); CSREES International Science & Education (2006)

**External Reviewer:** CSREES National Water Program, New England Regional Coordination Project, October 2007

## **STUDENT TRAINING EXPERIENCES (PAST 4 YEARS)**

**Graduate chair** (University of Hawaii): **MS:** Colleen Bergmanis, Guy Ragosta, Tiana Sudduth, Christopher Walsh, Christina Hardy, Collette Cortez, Adam Mehlhorn, Ilima Hawkins, Dashiell Dunkell, Bartholomew Battista, Natalie Fletcher; **PhD:** Tomas Oberding

**Graduate committee member** (University of Hawaii): **MS:** Sara Erwin, Julianne Rentner, Chad Browning, Dana Ogle; **PhD:** Rowena Valencia-Gica, Dana Okano, Matias Boll, Nghia Tran, Alan Mair, Toby Wood, Caleb O'Kray

## **GRANT AWARDS SINCE 1993**

- 1) "Contaminant Control in Surface and Ground Water by Cover and Residue Management on Agricultural Land in the Pearl Harbor Basin". Project Duration: 1992 - 1995.  
Principal Investigators: Samir El-Swaify & Carl Evensen. Project Funds: \$90,000 (FY91) + \$45,516 (FY93)

- 2) "Reducing Nonpoint Source Pollution from Sugarcane Fields by Cereal Cover Cropping in Kaiaka-Waialua Bay Hydrologic Unit Area". Project Duration: 1993 - 1994. Principal Investigators: Samir El-Swaify & Carl Evensen. Project Funds: \$46,174
- 3) "Evaluating Vegetation Effectiveness for Reducing Sediment Movement from Road Cuts in the Pearl Harbor Basin." Project Duration: 1993 - 1995. Principal Investigators: Samir El-Swaify & Carl Evensen. Project Funds: \$26,750
- 4) "Manawainui Conservation Planning Project". This project was funded by the Molokai-Lanai Soil and Water Conservation District (MLSWCD) and the Soil Conservation Service (SCS). Project Duration: 1994 - 1995. Principal Investigator: Carl Evensen. Project Funds: \$55,000
- 5) "Reducing Nonpoint Source Pollution from Sediments and Herbicides in Orchards in the Kaiaka-Waialua HUA." Project Duration: 1996 - 1997. Principal Investigator: Carl Evensen. Project Funds: \$23,650
- 6) "Farm\*A\*Syst / Home\*A\*Syst for Hawaii: Development of a Farm and Home Pollution Risk Assessment Program". Project Duration 1997-2000. Principal Investigators: Carl Evensen and Linda Cox. Project Funds: \$84,337
- 7) "Increasing Public Awareness of Pollution Risks Using Farm\*A\*Syst/Home\*A\*Syst". Project Duration 2000 - 2002. Principal Investigators: Carl Evensen, Linda Cox, and Richard Bowen. Project Funds: \$64,690
- 8) "Land application of livestock manures in Hawaii and the American Pacific". (USDA Water Quality 406 Grant). Project Duration: 2001 - 2004. Principal Investigator: Carl Evensen and Co.P.I.s: Russell Yost and Nguyen Hue. Project Funds: \$390,000
- 9) "Water Quality Research and Extension Coordination in Hawaii". (USDA Water Quality 406 Grant, through regional project at Univ. Arizona). Project Duration: 2002 – 2004. Principal Investigator: Carl Evensen Project Funds: \$134,330.
- 10) "Water Quality Research and Extension Coordination in Hawaii". (USDA Water Quality 406 Grant, through regional project at Univ. Arizona). Project Duration: 2004 – 2006. Principal Investigator: Carl Evensen Project Funds: \$136,804.
- 11) "Local Action Strategy to Address Land Based Pollution to Hawaii's Coral Reefs" (USDA, Natural Resources Conservation Service). Project Duration:2004 – 2008. PI: Carl Evensen. Funds: \$105,000
- 12) "Conservation Guides for Pacific Basin Beginning and Limited Resource Farmers and Ranchers" (USDA, Natural Resources Conservation Service). Project Duration: 2005 – 2007. PI: Carl Evensen. CoPI: Richard Bowen. Project Funds: \$56,507
- 13) "Local Action Strategy to Address Land Based Pollution to Hawaii's Coral Reefs" (Hawaii Dept Land and Natural Resources – Aquatic Resource Division). Project Duration: 2004 – 2008. PI: Carl Evensen Project Funds: \$171,000
- 14) "Water Quality Research and Extension Coordination in Hawaii". (USDA Water Quality 406 Grant, through regional project at Univ. Arizona). Project Duration: 2005 – 2007. Principal Investigator: Carl Evensen Project Funds: \$107,726.
- 15) "Water Quality Research and Extension Coordination in Hawaii". (USDA Water Quality 406 Grant, through regional project at Univ. Arizona). Project Duration: 2006 – 2007. Principal Investigator: Carl Evensen Project Funds: \$123,959. + Additional supplement to this project of \$53,725.
- 16) "Water Quality Research and Extension Coordination in Hawaii". (USDA Water Quality 406 Grant, through regional project at Univ. Arizona). Project Duration: 2007 – 2008. Principal Investigator: Carl Evensen Project Funds: \$160,518.
- 17) "Address Pollution Threats to Coral Reefs". (Hawaii Dept Land and Natural Resources – Aquatic Resource Division). Project Duration: 2008 - 2009. PI: Carl Evensen Project Funds: \$47,000
- 18) "Assessment of Fish and Coral Disease". (Hawaii Dept Land and Natural Resources – Aquatic Resource Division). Project Duration: 2009 – 2010. PI: Carl Evensen Project Funds: \$20,000

## PUBLICATIONS

- Evensen, C. Sustainable Water Quality Management for Pacific Island Watersheds: Illustrations from American Samoa, Hawai'i, and Micronesia. In J. Roumasset, K. Burnett, and A. Balisacan (eds.), *Sustainability Science for Watershed Landscapes*. Singapore: Institute of Southeast Asian Studies; Los Banos, Philippines: Southeast Asian Regional Center for Graduate Study and Research in Agriculture, forthcoming.
- Bruland, G., C. Browning, and C. Evensen. Effects of Feral Pigs (*Sus scrofa*) on Watershed Health in Hawai'i: A Literature Review and Preliminary Results on Runoff and Erosion. In J. Roumasset, K. Burnett, and A. Balisacan (eds.), *Sustainability Science for Watershed Landscapes*. Singapore: Institute of Southeast Asian Studies; Los Banos, Philippines: Southeast Asian Regional Center for Graduate Study and Research in Agriculture, forthcoming.
- Evensen, C. Livestock manure management in the American Pacific Islands. 2009. *Water Resources IMPACT*. 11(4): 14-17.
- Evensen, C. and S. El-Swaify. 2008. Working with water. pp. 96-97. In B. Brennan and J. Hollyer. *Hawaii's College of Tropical Agriculture and Human Resources: Celebrating the First 100 years*. CTAHR, University of Hawaii.
- El-Swaify, S. and C. Evensen. 2008. Sustaining our environment. pp. 90-91. In B. Brennan and J. Hollyer. *Hawaii's College of Tropical Agriculture and Human Resources: Celebrating the First 100 years*. CTAHR, University of Hawaii.
- El-Swaify, S. and C. Evensen. 2008. Agronomy and soil science. pp. 200-201 In B. Brennan and J. Hollyer. *Hawaii's College of Tropical Agriculture and Human Resources: Celebrating the First 100 years*. CTAHR, University of Hawaii.
- Mahler, R., L. Castro , C. Evensen , L. Duponcheel , A. Kalemén , J. Phillip , P. Franz , K. van Houte-Howes, 2008. Priority water issues in the six Pacific island entities having a governmental association with the USA. *Water International*. 33(2): 162 — 174.
- Evensen, C. and G. Ragosta, 2007, Riparian Composition and Function in a Small Watershed in Hanalei, Hawaii: in Field, Michael E., Berg, Carl S., and Cochran, Susan A., eds., *Science and management in the Hanalei watershed; a trans-disciplinary approach: Proceedings from the Hanalei watershed workshop, 21-22 February 2007, Hanalei, HI, U.S. Geological Survey Open File Report 2007-1219*, p. 31-33. [<http://pubs.usgs.gov/of/2007/1219/>]
- Evensen, C. and K. Chaston. 2007. Environmental Quality. In *Hawaii 2050: Building a Shared Future*. Hawaii State Legislature. pp. 40-50.
- Fox, R.L., A. Fares, Y. Wan and C.I. Evensen. 2006. Comparative Phosphorus Sorption by Marine Sediments and Agricultural Soils in a Tropical Environment. *Journal of Environ. Sci. and Health, Part A, Toxic/Hazardous Substance & Environ. Eng.*, 41:1–18, 2006.
- Hue, N., G. Fukumoto, M. Duponte, L. Ching, C. Evensen, and J. Powley. 2004. Manure Sampling, Nutrient Content, and N Mineralization. In J. Deenik and N. Hue (eds.) *Integrating Animal Waste Issues into Nutrient Management Recommendations for Hawaii's Soils*. University of Hawaii - CTAHR & USDA Natural Resources Conservation Service. pp. 11-20.

- Evensen, C, N. Hue, G. Fukumoto, M. Duponte, L. Ching, and J. Powley. 2004. Manure Solids and Effluent Sampling, Analysis and Recommendation Guidelines. *In* J. Deenik and N. Hue (eds.) Integrating Animal Waste Issues into Nutrient Management Recommendations for Hawaii's Soils. University of Hawaii - CTAHR & USDA Natural Resources Conservation Service. pp. 21-31.
- Yost, R., R. Uchida, J. Silva, C. Evensen, and N. Hue. 2004. Upgrading and Revising FACS (Fertility Advice and Consulting System). *In* J. Deenik and N. Hue (eds.) Integrating Animal Waste Issues into Nutrient Management Recommendations for Hawaii's Soils. University of Hawaii - CTAHR & USDA Natural Resources Conservation Service. pp. 57-62.
- Erwin, S. C. Evensen, and R. Yost. 2004. Feedback to FACS Recommendations, Suggestions for Improvements and Increasing User-Friendliness. *In* J. Deenik and N. Hue (eds.) Integrating Animal Waste Issues into Nutrient Management Recommendations for Hawaii's Soils. University of Hawaii - CTAHR & USDA Natural Resources Conservation Service. pp. 82-90.
- Joy, R.J., G.S. Sakamoto, and C.I. Evensen. January 2003. Notice of Release of Kaho'olawe Germplasm Piligrass Source Identified Class of Natural Germplasm. Official Plant Release Notice, Natural Resource Conservation Service, Plant Materials Center, Hoolehua, Molokai. 4p
- Derrickson, S.A., M.P. Robotham, S.G. Olive, C.I. Evensen. 2002. Watershed management and policy in Hawaii: Coming full circle. *Journal of the American Water Resources Association*. 38(2) 563-576.
- Evensen, C.I., S.A. El-Swaify, and C.W. Smith. 2001. C-factor development for sugarcane in Hawaii. p. 687-690. *In* J.C. Ascough II and D.C. Flanagan (ed.) Soil erosion research for the 21<sup>st</sup> Century. Proc. International Symposium ASAE, Honolulu, HI. Jan. 3-5, 2001, St. Joseph, Michigan
- Silva, J.A., C.I. Evensen, R. Bowen, R. Kirby, G.Y. Tsuji, R.S. Yost. 2000. Managing Nutrients to Protect the Environment and Human Health, pp. 7-22. *In* J.A. Silva and R.S. Uchida (eds.) Plant Nutrient Management in Hawaii's Soils: Approaches for Tropical and Subtropical Agriculture. University of Hawaii, CTAHR
- R.S. Yost, Y.N. Tamimi, J.A. Silva, N.V. Hue, and C.I. Evensen. 2000. How Fertilizer Recommendations are Made, pp. 79-86. *In* J.A. Silva and R.S. Uchida (eds.) Plant Nutrient Management in Hawaii's Soils: Approaches for Tropical and Subtropical Agriculture. University of Hawaii, CTAHR
- Guo, F., R.S. Yost, N.V. Hue, C.I. Evensen, and J.A. Silva. 2000. Changes in phosphorus fractions in soils under intensive plant growth. *Soil Sci. Soc. Am. J.* 64(5): 1681-1689.
- Joy, R.J., G.S. Sakamoto, and C.I. Evensen. March 2000. Notice of Release of Kamiloloa Germplasm A'ali'i Source-Identified Class of Natural Germplasm. Official Plant Release Notice, Natural Resource Conservation Service, Plant Materials Center, Hoolehua, Molokai. 5p
- Crosby, C. H.R. Valenzuela, B. Kratky and C. Evensen. 1999. Evaluation of weed control in a no-tillage vegetable production system. *HortScience* 34(3): 442
- Uchida, J.Y., B. Sipes and C. Evensen. 1999. Turmoil in the tropics: An interdisciplinary course for the next century. *Phytopathology* 89: S78 (P-1999-0558-AMA). Abstract

- Evensen, Carl I., Osgood, Robert V., El-Swaify, Samir A. 1998. Small grain cover crops in Hawaii for erosion and weed control. *J. Soil Water Cons.* 53 (3): 292
- Evensen, Carl I. 1998. Cover crops for coffee orchards in Hawaii. p. 18-28. *In Proceedings 2<sup>nd</sup> Annual Conference of the Hawaii Coffee Assoc.*, July 25-26, 1997, Kona, HI.
- Wan, Y., R. Fox, and C. Evensen. 1998. Phosphorus sorption by marine sediments and soils in Pearl Harbor Basin, Hawaii. *J. Soil Water Cons.* 53 (2): 183.
- Evensen, C.I., R.C. Muchow, S.A. El-Swaify, and R.V. Osgood. 1997. Yield accumulation in irrigated sugarcane. I. Effect of crop age and variety. *Agronomy Journal* 89:638-646.
- Muchow, R.C., C.I. Evensen, R.V. Osgood, and M.J. Robertson. 1997. Yield accumulation in irrigated sugarcane. II. Utilization of intercepted radiation. *Agronomy Journal* 89:646-652.
- Evensen, C.I., R.S. Yost, and T.S. Dierolf. 1995. Decreasing rice and cowpea yields in alley cropping on a highly weathered oxisol in West Sumatra, Indonesia. *Agroforestry Systems* 31: 1-19.
- Yost, R.S., Y.N. Tamimi, J.A. Silva, N.V. Hue, and C.I. Evensen. 1995. Towards automating nutrient management diagnosis and recommendations by a University Diagnostic Center. pp. 106-113. *In* T.A. Tindall (ed) *Proceedings of the Western Nutrient Management Conference*. Vol. 1 Salt Lake City, March 9-10, 1995, Phosphate and Potash Institute, Manhattan, KS.
- Evensen, C.I., R.S. Yost, and T.S. Dierolf. 1994. Growth of four tree species managed as hedgerows in response to liming on an acid soil in West Sumatra, Indonesia. *Agroforestry Systems* 27: 207-222..
- Yost, R. and C. Evensen. 1994. Liming sugarcane soils in Hawaii. *Proceedings of Hawaiian Sugar Technologists 51st Annual Meeting*.
- Evensen, C. 1994. Growth comparison of two sugarcane varieties. *Hawaiian Sugar Planters' 1992 Annual Report*. pp. 16-17.
- Evensen, C.I. 1993. Biomass production of two sugarcane varieties. *Hawaiian Sugar Planters' 1992 Annual Report*. pp. 15-16.
- Evensen, C.I. 1993. Cover crops for erosion control. *Hawaiian Sugar Planters' 1992 Annual Report*. pp. 36-37.
- Zhang, G.Q and C.I. Evensen. 1993. Sugarcane root sampling and biomass estimation. *Hawaiian Sugar Planters' 1992 Annual Report*. pp. 16-17.
- Evensen, C.I. and R. A. Harrington. 1992. Growth comparison of two sugarcane varieties for use in C-factor development. *Proceedings of Hawaiian Sugar Technologists 50th Annual Meeting*. pp. A42-A44.
- Zhang, G.Q and C.I. Evensen. 1992. Sugarcane root biomass measurements. *Hawaiian Sugar Planters' 1991 Annual Report*. pp. 16-17.
- Zhang, G.Q and C.I. Evensen. 1992. Sugarcane root biomass prediction models. *Hawaiian Sugar Planters' 1991 Annual Report*. pp. 17-18.

- Evensen, C.I. and L.A. Jakeway. 1992. Cover crops for erosion control. Hawaiian Sugar Planters' 1991 Annual Report. pp. 39-42.
- Evensen, C.I. and R.V. Osgood. 1991. Oat cover cropping in sugarcane for weed and erosion control in Hawaii. Proceedings of an international conference on Cover Crops for Clean Water, Jackson, TN. April 9-11, 1991. Soil and Water Conservation Society. pp 30-31.
- Evensen, C.I. and R.V. Osgood. 1991. Cover crops for erosion control. Proceedings of Hawaiian Sugar Technologists 49th Annual Meeting. pp A5-A10.
- Evensen, C. 1991. Seedpiece coating and drying studies. Hawaiian Sugar Planters' 1990 Annual Report. pp. 45-46.
- Evensen, C. 1991. Cover crops for erosion control in sugarcane. Hawaiian Sugar Planters' 1990 Annual Report. pp. 64-66.
- Evensen, C.I. and R.S. Yost. 1990. The growth and lime replacement value of three wood green manures produced by alley cropping in West Sumatra. p 109-112. In E. Moore (ed.) Agroforestry Land Use Systems, Special Publ. 90-02, Nitrogen Fixing Tree Association. Waimanalo, HI.
- Evensen, C., R. Yost, Y. Kanehiro, and R. Guyton. 1989. Pasture grass and legumes for the humid tropics. p. 265-271. In N. Caudle (ed.) Tropsoils Technical Report 1986 - 1987. TropSoils Management Entity. North Carolina State University. Raleigh, N.C.
- Evensen, C., R. Yost, J. Hansen, and M. Wade. 1989. Management of organic materials in Indonesian farming systems. p. 272-279. In N. Caudle (ed.) Tropsoils Technical Report 1986 - 1987. TropSoils Management Entity. North Carolina State University. Raleigh, N.C.
- Evensen, C., R. Yost, and M. Wade. 1987. Management of organic materials in Indonesian farming systems. p.184-186. In N. Caudle and C.B. McCants (eds.) Tropsoils Technical Report 1985 - 1986. TropSoils Management Entity. N. Carolina State Univ. Raleigh, N.C.
- Evensen, C., C.J.P. Colfer, Michael Wade, Herman Agus. 1986. Constraints to crop production in Sitiung, West Sumatra: a comparison of researcher and farmer perceptions. Proc. of International Farming Systems Workshop. Sukarami (West Sumatra), Indonesia. 10-13 December 1985. Indonesian Agency for Agric. Res. and Development. pp. 239 - 255.
- Gill, D. W., M. K. Wade, C. J. P. Colfer, C. I. Evensen, F. Agus. 1986. On-farm research in Sitiung, West Sumatra, with emphasis on maize. Paper presented at the MARIF On-Farm Maize Research Workshop, Malang, E. Java, 24-27 March, 1986.
- Evensen, C. I. 1985. Effects of season on forage yield variation in *Leucaena*. *Leucaena Research Reports* 6:88-90.
- Colfer, C. J. P., C. Evensen, S. Evensen, F. Agus, D. Gill, and M. Wade. 1985. Transmigrant's gardens: a neglected research opportunity. Proceedings of the Indonesian Center for Soil Research Annual Technical Meeting. Bogor, Indonesia. March 18-20, 1985.
- MacDicken, K. G., C. I. Evensen, N. T. Vergara, R. J. Van Den Beldt, H. Baker, J. Holderness. 1983. Hawaii as a source of certified seeds of fast-growing trees for the Asia-Pacific region. Working paper, Environment and Policy Institute, East-West Center, Honolulu, Hawaii. 57 pp.

Evensen, C. I. 1982. Chemical and non-chemical control of leucaena: preliminary studies. *Leucaena Research Reports* 3:79-80.

**EXTENSION PUBLICATIONS** (most available on CTAHR Free Publications website):  
<http://www.ctahr.hawaii.edu/ctahr2001/PIO/FreePubs.asp>

Glen K. Fukumoto, Carl I. Evensen, and Luisa F. Castro. 2008. *Livestock Producer's Nutrient Management Planner Guidebook: A Waste Management Planning Guide for Pacific Island Livestock Producers*. University of Hawaii, Cooperative Extension Service. Animal Waste Management. AWM-4, Feb 2008 15p

Evensen, C. and G. Fukumoto. 2007. Small scale animal waste management. Southwestern States and Pacific Islands Regional Water Quality Program. RWQ0005, Winter 2007, 2p. Available on-line at: [http://ag.arizona.edu/region9wq/pdf/factsheet\\_RWQ005.pdf](http://ag.arizona.edu/region9wq/pdf/factsheet_RWQ005.pdf)

Cox, L., S. Swan and C. Evensens 1999. *Managing Hawaii's Watersheds: Why Watersheds Are Important and How Hawaiians Kept These Resources Healthy*. University of Hawaii, Cooperative Extension Service. Animal Waste Management. RM-1, May 1999 2p

**Hawaii's Pollution Prevention Information (HAPPI)**, December 2000, 27 brochures.  
(all co-authored by Michael Robotham, Carl Evensen, and Linda Cox)

\* Pollution prevention contacts and information resources (HAPPI-1)

#### **HAPPI-Home series**

- \* Water quality around your home--Introduction to the HAPPI-Home series (HH-1)
- \* Mapping your house and yard to identify pollution risks (HH-2)
- \* Reducing pollution risks from your trash (HH-3)
- \* Managing hazardous household products (HH-4)
- \* Think before you dump it: safe disposal of hazardous products (HH-5)
- \* Alternatives to hazardous household products (HH-6)
- \* Lead--in and around the home (HH-7)
- \* Indoor air quality (HH-8)
- \* Drinking water wells (HH-9)
- \* Rainwater catchment systems (HH-10)
- \* Household wastewater treatment systems (HH-11)
- \* Runoff control in your yard and garden (HH-12)
- \* Yard and garden nutrient management (HH-13)
- \* Yard and garden pest management (HH-14)
- \* Motor vehicle maintenance (HH-15)
- \* Pet waste management (HH-16)

#### **HAPPI-Farm series**

- \* Water quality and your farm--Introduction to the HAPPI-Farm series (HF-1)
- \* Mapping your farm to identify pollution risks (HF-2)
- \* Minimizing pollution risk from land management (HF-3)
- \* Minimizing pollution risk from nutrient management (HF-4)
- \* Minimizing pollution risk from pest management (HF-5)
- \* Minimizing pollution risk from irrigation management (HF-6)
- \* Minimizing pollution risk from livestock operations (HF-7)
- \* Minimizing pollution risk from pasture management (HF-8)

- \* Minimizing pollution risk from storage and disposal of chemicals and fuel (HF-9)
- \* Minimizing pollution risk from forest and streamside areas management (HF-10)