

References for Fall 2003 FIFRA Update

“Moditoring”—What Would It Look Like?

Further introductory reading on Bayesian methods:

Hively, W. 1996. The mathematics of making up your mind. *Discover* 17(5):90-97.

Howson, C., and P. Urbach. 1993. *Scientific Reasoning: The Bayesian Approach*. Open Court Publishing, Chicago. (Minimum of complex math, maximum of provocative examples: Was it reasonable for Macbeth to first doubt, and later believe, the witches' prophecy? On the strength of faith in Newton's laws, Neptune was discovered—despite zero evidence. Why people get hooked on Dianetics.)

Jefferys, W.H., and J.O. Berger. 1992. Ockham's razor and Bayesian analysis. *American Scientist* 80(1):64-72.

And for the more ambitious:

Aquatic Dialogue Group. 1994. *Final Report: Aquatic Risk Assessment and Mitigation Dialogue Group*. SETAC Press, Pensacola, Florida.

Bayes, T. 1763. An essay toward solving a problem in the doctrine of chances. *Philosophical Transactions of the Royal Society* 53:370-418.

Berger, J.O. 1985. *Statistical Decision Theory and Bayesian Analysis*. Springer Verlag, New York.

Brophy J., P. Bélisle, and L. Joseph. 2003. Evidence for use of coronary stents: A hierarchical Bayesian meta-analysis. *Annals of Internal Medicine* 138:777-786.

Brophy, J.M., and L. Joseph. 1995. Placing trials in context using Bayesian analysis: GUSTO revisited by Reverend Bayes. *Journal of the American Medical Association* 273:871-875.

Henson, S.M., A.A. King, R.F. Costantino, J.M. Cushing, B. Dennis, and R.A. Desharnais. 2003. Explaining and predicting patterns in stochastic population systems. *Proceedings of the Royal Society of London, Series B: Biological Sciences* 270:1549-1553.

Patwardhan, A., and M.J. Small. 1992. Bayesian methods for model uncertainty analysis with application to future sea level rise. *Risk Analysis* 12:513-523.

Pugesek, B.H., A. Tomer, and A. Von Eye. 2003. *Structural Equation Modeling: Applications in Ecological and Evolutionary Biology*. Cambridge University Press, New York.

Raftery, A.E., and J.E. Zeh. 1993. Estimation of bowhead whale, *Balaena mysticetus*, population size (with discussion). In: C. Gatsonis et al. (Eds.), *Bayesian Statistics in Science and Technology: Case Studies*. Pages 163-240. Springer-Verlag, New York.

Raftery, A.E., G.H. Givens, and J.E. Zeh. 1995. Inference from a deterministic population dynamics model for bowhead whales (with discussion). *Journal of the American Statistical Association* 90:402-430.

Steinberg, L.J., K.H. Reckhow, and R.L. Wolpert. 1997. Characterization of parameters in mechanistic models: A case study of PCB fate and transport in surface waters. *Ecological Modelling* 97:35-46.

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