

## CURRICULUM VITAE

PHILIP M. DIXON

15 September 2021

### EDUCATION

A.B., May 1978,	University of California at Berkeley, Biology
M.S., August 1984,	Cornell University, Ithaca, New York, Statistics
Ph.D., January 1986,	Cornell University, Ecology and Evolutionary Biology

### TEACHING EXPERIENCE, since 2017

Introduction to Experimental Design, Stat 471/571	2020
Intermediate Statistical Methods, Stat 301, Iowa State Univ.	2015 (2x), 16, 21 (2x)
Statistical Methods for Researchers, Stat 401/587, Iowa State Univ.	2015, 18 (3x)
Spatial Statistics, Stat 406, Iowa State Univ.	2016, 18, 20
Computer Processing of Statistical Data, Stat 479	2019
Ecological Statistics, Stat 534, Iowa State Univ.	2015, 17, 19, 21
Analysis of Species Composition Data, EEB 698	2019
Nonparametric Statistics, Universidad de la Republica, Uruguay	2017

### Other courses I have taught:

Advanced Statistical Methods: Analysis of Species Composition, Stat 415, ISU  
Workshop in Statistics, Stat 493, ISU  
Statistical Methods, Stat 500, ISU  
Environmental Statistics, Stat 505, Iowa State Univ.  
Statistical Methods II, Stat 511, Iowa State Univ.  
Statistical Analysis of Repeated Measures Data, Univ. Republica, Uruguay  
Spatial Statistics, Universidad de la Republica, Uruguay;  
Yunnan Agricultural University, China

### POSITIONS HELD

University Professor, Department of Statistics, Iowa State University	2011 to Date
Professor, Department of Statistics, Iowa State University	2002 to 2011
Associate Professor, Department of Statistics, Iowa State University	1998-2002
Member, Graduate Program in Ecology and Evolutionary Biology, ISU	1998-date
Member, Graduate Program in Bioinformatics and Computational Biology, ISU	2000-date
Biostatistician and Assistant / Associate Research Scientist, Savannah River Ecology Lab, University of Georgia	1987-1993 (assistant) 1993-1998 (associate)
Postdoctoral Research Associate, Cornell Plantations	1985-1987

### PROFESSIONAL SOCIETIES

American Statistical Association	International Biometrics Society (ENAR)
British Ecological Society	Ecological Society of America
Phi Beta Kappa	Royal Statistical Society
Sigma Xi	

**PROFESSIONAL SERVICE (last three years)**

Associate Editor, Biometrics	2017-
Associate Editor, American Statistician	2020-
Scientific organizing committee, 2022 Int'l Statistical Ecology Conference	2021-
Member, Professional Affairs Committee, Royal Statistical Society	2021-

**COLLEGE and UNIVERSITY SERVICE (last three years)**

Data sharing task force, Vice Pres. for Research's office	2017-2020
Ad hoc member, LAS Honors and Awards committee	2020

**DEPARTMENTAL SERVICE (last three years)**

Chair, Mediation Committee	2017-2020
Member, Honors and Awards committee (chair, 2018-19)	2015-2019
Member, Promotion and Tenure committee (chair, 2020-21)	2017-date
Project director, Hatch statistics umbrella project	2016-date
Supervise graduate student statistical consultants	1999-date
Organize "consulting lunch"	1999-date

**INVITED SEMINARS (last three years)**

Where do Bayesian methods fit in an applied statistician's toolbox? (virtual)	May	2021
Conference on Applied Statistics in Agriculture and Natural Resources,		
How and where does Bayesian inference fit in our statistical toolbox? Agronomy Society of America annual meeting	November 2020 (virtual)	

**AWARDS AND HONORS**

Chartered Statistician (CStat), Royal Statistical Society	2014, renewed 2019
Accredited Professional Statistician (Pstat ®), American Statistical Association	2012, renewed 2019
Frank Wilcoxon Prize for best practical application paper in Technometrics for Morris et al., 2009.	2010
Master Teacher, College of Liberal Arts and Sciences,	2005
Fellow, American Statistical Association	2003
Best Basic Science paper in Veterinary Medicine , for Chang et al 2002. Given by Phi Zeta, the national honor society for veterinary medicine.	2002
Distinguished Achievement Medal, American Statistical Association, Section on Statistics and the Environment	1996

**GRANTS RECEIVED** (last three years) or **PENDING**

NIH, co-PI (PI, Senlin Chen, ISU) Adaptation of the SWITCH (TM) program for middle school wellness programming	\$401,232	2017-2019
USDA, collaborator (PI, Leonor Leandro, ISU) Unraveling the mechanisms underlying beneficial impacts of diversified cropping systems on pest management, soil health and plant productivity	\$900,000	2017-2020
USGS, co-PI (PI, Michael Weber, ISU) Monitoring invasive Asian carp in Iowa	\$190,000	2020-2021
NIH, collaborator (PI David Dzewaltowski, U. Nebraska, Omaha) Whole-of-Community Systems Intervention for Youth Population Physical Activity	\$1,998,000	2017-2022
NIH, co-PI (PI, Greg Welk, ISU) Measurement Error Modeling to Enhance Calibration of the Youth Activity Profile	\$2,000,000	pending

**GRADUATE STUDENTS ADVISED**

## Major Professor / Advisor while at Iowa State University

Lu Shen	B.S. Honors, 2011	clustering physical activity profiles
Jake Allred	M.S. 1999	estimating correlation from censored data
Norbert Karp	M.S. 1999	analysis of interval censored dormancy data
Shuyu Zhang	M.S. 2000	fractional factorial experiments with binomial responses
Kari Rabe	M.S. 2000	mixture models for genetic data
Brooke Fridley	M.S. 2000	evaluating extra Poisson variation with small mean counts
Annissa Kuenneth	M.S. 2000	fitting matrix population models to proportional data
Hong Su	M.S. 2000	evaluation of a Bayesian method for diagnostic test data
Jennifer Herberich	M.S. 2001	analysis of crossover trials with binary responses
Cory Heilmann	M.S. 2002	variance of estimated benchmark doses
Wuyan Zhang	M.S. 2002	estimating largest effective dose in quadratic response models
Han Wu	M.S. 2002	estimating fish movement from recapture data
Katy Jensen	M.S. 2004	estimating spatial scale from point locations
Haishin Ozawa	M.S. 2004	modeling mourning dove population dynamics
Kejian Li	M.S. 2004	comparing means when data have excess zeros
Andy Heggensteller	M.S. 2005	weed population dynamics in 2, 3, and 4 year crop rotations
Jessica Chapman	M.S. 2006	analysis of prevalence data in a group randomized trial
Gina Borrowman	M.S. 2006	testing equality of cross-correlations in repeated panel data
Xiaoli Zhang	M.S. 2006	partial least squares when variances are unequal
Allan Trapp	M.S. 2008	predicting seed longevity
Dale Tessin	M.S. 2010	analysis of spatial patterns when the intensity is non-constant
Yew-Meng Koh	M.S. 2010	Markov-transition modeling of food security
Dennis Lock	M.S. 2011	design of case-cohort studies
Nicholas Michaud	M.S. 2012	integrated population modeling of Mourning Doves
Haley Jepson	M.S., 2016	non-parametric analysis of covariance
Ben Buzzee	M.S., 2017	estimating butterfly emergence date
Jing Hou	M.S., 2021	sensitivity analysis of complex models
Blake Kassmeyer	M.S., in progr	analysis of stream erosion data
Brooke Fridley	Ph. D. 2003	analysis of censored spatial data
Cory Heilmann	Ph. D. 2005	estimating ratios of gases in emission studies
Paul Esker	Ph. D. 2005	population dynamics of plant pathogens
Xia Xu	Ph. D. 2006	toxicokinetic-based survival models
ManYu Yum	Ph. D. 2010	estimating the strength of the Individual Effective Dose
Allan Trapp	Ph. D. 2012	faster 2 stage Monte-Carlo risk assessment
Mark McKelvey	Ph. D. 2013	adjusting for imperfect detection in CART habitat models
Sachet Shukla	Ph. D. 2014.	statistical inference for gene regulatory networks
Adam Martin-Schwarze	Ph.D. 2017.	time-to-event modeling of bird point count surveys
Gabriel Demuth	Ph.D. 2018.	hidden Markov models for agricultural data
Nicholas Clark	Ph.D. 2018	space-time models for terrorist incidents
Audrey McCombs	Ph.D. in progr.	statistical methods for ecological networks
Gang Han	Ph.D. in progr.	location determination by automated radio-telemetry
Miranda Tilton	Ph.D. in progr	clustering home range estimates
Eryn Blyth	Ph.D. in progr	data aggregation to estimate marine mammals at sea
Alejandra Borges	Ph.D. in progr (Uruguay)	spatial design and analysis of agronomic yield trial data
Natalia Berberian	Ph.D. in progr (Uruguay)	spatial and temporal variation in bat fatalities at wind farms

## Major Professor while at Savannah River Ecology Lab / University of Georgia

Susan Turner	Ph. D. 2004	spatial aspects of competition in nutrient-poor old fields.
Gordon Ward	Ph. D. 2003	estimation of tritrophic predator-prey relationships
Huda Alkaff	M.S. 1997	spatial geomorphology

Served on 10 Ph. D. committees at University of Georgia.

Served or currently serving on over 100 M.S. committees and over 135 Ph.D. committees at ISU.

**PUBLICATIONS**

- Rabinowitz, D., Rapp, J.K. and Dixon, P.M. 1984. Competitive abilities of sparse grass species: means of persistence or cause of abundance. *Ecology* 65:1144-1154.
- Rabinowitz, D., Rapp, J.K., Dixon, P.M. and Khieu, A.T. 1986. Separating structural and developmental variability in growth rate estimates for *Andropogon scoparius* Michx. *Bulletin of the Torrey Botanical Club* 112:403-408.
- Dixon, P.M., Weiner, J., Mitchell-Olds, T. and Woodley, R. 1987. Bootstrapping the Gini coefficient of inequality. *Ecology* 68: 1548-1551.
- Louda, S.M., Dixon, P.M. and Huntly, N.J. 1987. Herbivory in sun versus shade at a natural meadow-woodland ecotone in the Rocky Mountains. *Vegetatio* 72:141-149.
- Louda, S.M., Huntly, N. and Dixon, P.M. 1987. Insect herbivory across a sun/shade gradient: response to experimentally-induced in situ plant stress. *Acta Oecologica* 8(3):357-363.
- Diamond, S.A., Newman, M.C., Mulvey, M., Dixon, P.M. and Martinson, D. 1989. Allozyme genotype and time to death of mosquitofish, *Gambusia affinis* (Baird and Girard), during acute exposure to inorganic mercury. *Environmental Toxicology and Chemistry* 8:613-622
- Newman, M.C., Dixon, P.M., Looney, B.B. and Pinder, J.E., III. 1989. Estimating mean and variance for environmental samples with below detection limit observations. *Water Resources Bulletin* 25:905-916.
- Newman, M.C., Diamond, S.A., Mulvey, M. and Dixon, P. 1989. Allozyme genotype and time to death of mosquitofish, *Gambusia affinis* (Baird and Girard) during acute toxicant exposure: comparison of arsenate and inorganic mercury. *Aquatic Toxicology* 15:141-156.
- Dixon, P.M. and Cook, R.E. 1989. Science, planning, and the recovery of endangered plants. *Endangered Species Update* 6:9-14.
- Dixon, P.M. and May, B. 1990 Genetic diversity and population structure of a rare plant: Northern Monkshood (*Aconitum noveboracense*). *New York State Museum Bulletin* 471:167-175. (10)
- Palmer, M.W. and Dixon, P.M. 1990. Small scale environmental heterogeneity and the analysis of species distributions along gradients. *Journal of Vegetation Science* 1:57-65.
- McCallum, D.A. and Dixon, P.M. 1990. Reducing bias in estimates of the Richards growth function shape parameter. *Growth, Development and Aging*, 54: 135-141.
- Dixon, P. M. and Newman, M. C. 1991. Analyzing toxicity data using statistical models for time-to-death: an introduction. In Newman, M.C. and McIntosh, A. (eds.) Metal Ecotoxicology: Concepts and Applications, pp. 207-242.
- Carlson, C.L., Adriano, D.C. and Dixon, P.M. 1991. Effects of soil-applied selenium on the growth and Se content of a forage species. *Journal of Environmental Quality*, 20:363-368.
- Grant, B. W., Tucker, A. D., Lovich, J. E., Mills, A. M., Dixon, P. M. and Gibbons, J. W. 1992. The use of coverboards in estimating patterns of reptile and amphibian biodiversity. pp. 379-403 In Siegel, R. and Scott, N. (eds.). Wildlife 2001. Elsevier Science Publ., London.
- Shea, M. M., Dixon, P. M. and Sharitz, R. R. 1993. Size differences, sex ratio and spatial distribution of male and female *Nyssa aquatica* (Water Tupelo), *American Journal of Botany*. 80:26-30.
- Heagler, M. G., M. C. Newman, M. Mulvey and P. M. Dixon. 1993. Allozyme genotype in mosquitofish: temporal stability, concentration effects, and field verification. *Environmental Toxicology and Chemistry*. 12:385-395.
- Dixon, P. M. 1993. The Bootstrap and the Jackknife: Describing the precision of ecological indices. pp. 290-318 in Scheiner, S. and Gurevitch, J. Design and Analysis of Ecological Experiments. Chapman and Hall.
- Dixon, P. M. and Garrett, K. A. 1993. Sampling ecological information, choice of sample size reconsidered.

*Ecological Modeling*. 68:67-73.

- Dixon, P.M. and Garrett, K. 1994. Statistics for field experimenters. In Kendall, R. and Lacher, T. (ed.) Chapter 41, pp 439-450. Wildlife Toxicology and Population Modeling. CRC Press. (20)
- Jones, R. H., Sharitz, R. R., Dixon, P. M., Segal, D. S. and Schneider. 1994. Woody plant regeneration in four floodplain forests. *Ecological Monographs*. 64:345-367.
- Dixon, P. M. 1994. Testing spatial segregation using a nearest-neighbor contingency table. *Ecology*. 75:1940-1948.
- Ellison, A. E., Dixon, P. M. and J. Ngai. 1994. Null models for neighborhood models of plant competitive interactions. *Oikos* 71:225-238.
- Jones, R.H., Sharitz, R.R., James, S.M. and Dixon, P.M. 1994. Tree population dynamics in seven South Carolina mixed-species forests. *Bulletin of the Torrey Botanical Club* 121:360-368.
- Poiani, K. A. and Dixon, P. M. 1995. Seed banks of Carolina Bays: potential contributions from surrounding landscape vegetation. *The American Midland Naturalist* 134:140-154.
- McCloskey, J. T., Newman, M. C., and Dixon, P. M. 1995. Effect of metal and metalloid contaminated sediment on the spatial distribution of asiatic clams (*Corbicula fluminea*). *Archives of Environmental Contamination and Toxicology* 28:203-208.
- Newman, M.C. and Dixon, P.M. 1996. Ecologically meaningful estimates of lethal effect in individuals. Pp 225-253 in Newman, M.C. and Jagoe, C.H. (ed.) Quantitative Ecotoxicology: A hierarchical approach. CRC Press
- Dixon, P.M. and Ellison, A.E. 1996. Ecological applications of Bayesian inference. *Ecological Applications* 6:1034-1035.
- Garrett, K.A. and Dixon, P.M. 1997. Environmental pseudointeraction: the effects of ignoring scale of environmental heterogeneity in competition studies. *Theoretical Population Biology* 51:37-48.
- Cross, W.H., Cross, W.M., Jackson, P.R., Dixon, P.M. and Pinder, J.E. 1997. Corresponding development of plant phytophagous orthopteran communities during Southeastern old-field succession. *American Midland Naturalist* 137:188-193. (30)
- Dixon, P.M., Friday, N., Ang, P., Heppell, S., and Kshatriya, M. 1997. Sensitivity analysis of structured population models for management and conservation. Pp 471-513 In Tuljapurkar, S. and Caswell, H. (eds.) Structured Population Models in marine, terrestrial, and freshwater systems. Chapman and Hall, London.
- Dixon, P.M. 1998. Assessing effect and no effect with equivalence tests. pp 275-301 in Newman, M. C. and Strojan, C.L. (eds.) Risk Assessment: Logic and Measurement, Ann Arbor Press, Chelsea MI.
- Dixon, P.M. 1998. Testing for no effect when the data include below-detection limit observations. Pp 17-32 In Fletcher, D., Kavalieris, L. and Manly, B.J.F., (eds) Statistics in Ecology and Environmental Monitoring 2. University of Otago Press, Dunedin NZ.
- Dixon, P.M., Olsen, A.R., and Kahn, B. 1998. Measuring trends in ecological resources. *Ecol. Appl.* 8:225-227.
- Philippi, T.E., Dixon, P.M. and Taylor, B. E. 1998. Detecting trends in species composition. *Ecol. Appl.* 8:300-308.
- Garrett, K.A. and Dixon, P.M. 1998. When does the spatial pattern of weeds matter? Predictions from neighborhood models *Ecological Applications* 8:1250-1259.
- Pechmann, C., Dixon, P.M. and Lane, N. 1998. An assessment of the United States and Canadian smoking reduction objectives for year 2000. *American Journal of Public Health*. 88:1362-1367.

- Gaines, K. F., Bryan, A. L. Jr, Dixon, P. M., and Harris, M. H. 1998. Foraging habitat use by wood storks nesting in the coastal zone of Georgia, USA. *Colonial Waterbirds* 21:43-52.
- Bunzl, K., Desmet, G., Dixon, P., Scott, E.M., Sheppard, S., Voigt, G., Whicker, W. 1999. Some perspectives on sampling of radionuclides in the environment. *Journal of Environmental Radioactivity* 43:89-95.
- Easterling, M.R., Ellner, S.P. and Dixon, P.M. 2000. Size-specific sensitivity: applying a new structured population model. *Ecology* 81:694-708. (40)
- Gaines, K.F., Bryan, A.L. Jr, and Dixon, P.M. 2000. The effects of drought on foraging habitat selection in breeding wood storks in coastal Georgia. *Waterbirds* 23:64-73.
- Lewis, G. P., Taylor, B. E., Pinder, J. E. III, Dixon, P. M. 2000. Apparent decline of the sediment <sup>137</sup>Cs inventory of an abandoned reactor cooling reservoir: export or uncertainty?. *Journal of Environmental Radioactivity* 49:293-306.
- Cocciolone, S.M., Sidorenko, L.V., Chopra, S., Dixon, P.M. and Peterson, T. 2000. Hierarchical patterns of transgene expression indicate involvement of developmental mechanisms in the regulation of the maize P1-rr promoter. *Genetics*, 156:839-846.
- Dixon, P.M. 2000. The Bootstrap and the Jackknife: Describing the precision of ecological indices. Chapter 14, pp 267-288 in Scheiner, S. and Gurevitch, J., Design and Analysis of Ecological Experiments, 2<sup>nd</sup>. Ed. Oxford Univ. Press.
- Apsit, V. J. and Dixon, P. M. 2001. Genetic diversity and population structure in *Echinaceae laevigata* (Boynton and Beadle) Blake, an endangered plant species. *Natural Areas Journal*,21:71-77.
- Philippi, T., Collins, B. E., Guisti, S. and Dixon, P.M. 2001. A multistage approach to population monitoring to detect trends for rare plant populations. *Natural Areas Journal* 21:111-116.
- Lihono, M. A., Mendonca, A. F., Dickson, J. S., and Dixon, P. M. 2001. Influence of Sodium Pyrophosphate on thermal inactivation of *Listeria monocytogenes* in pork slurry and ground pork. *Food Microbiol.*, 18:269-276.
- Munkvold, G.P., Martinson, C.A., Shriver, J.M., and Dixon, P.M. 2001. Probabilities for profitable fungicide use against gray leaf spot in hybrid maize. *Phytopathology* 91:477-484.
- Alford, R.A, Dixon, P. M., and Pechmann, J. 2001. Global amphibian population declines. *Nature* 412:499-500.
- Dixon, P. M. 2001. Just how much better is a time-to-event analysis? Pp 69-87, Chapter 5 in Crane, M. (ed.) Risk Assessment with time-to-event models. CRC Press, Boca Raton, FL. (50)
- Leandro, L. F. S., Gleason, M. L., Wegulo, S.N., Dixon, P. M., and Nutter, F. W. Jr. 2001. Germination and sporulation of *Colletotrichum acutatum* on symptomless strawberry leaves. *Phytopathology*, 91:659-664.
- Dixon, P. M. 2002. Nearest neighbor methods. *Encyclopedia of Environmetrics*, 3:1370-1383
- Dixon, P. M. 2002. Ripley's *K* function. *Encyclopedia of Environmetrics*, 3:1796-1803
- Dixon, P. M. 2002. Bootstrap resampling. *Encyclopedia of Environmetrics*, 1:212-220
- Dixon, P. M. 2002. Population ecology. *Encyclopedia of Environmetrics*, 3:1615-1622
- Chang, C-C., Yoon, K-J., Zimmerman, J. J., Harmon, K. M., Dixon, P. M., Dvorak, C.M.T. and Murtaugh, M. P. 2002. Evolution of porcine reproductive and respiratory syndrome virus during sequential passages in pigs. *Journal of Virology* 76:4750-4763
- Perry, J. N. and Dixon, P. M. 2002. A new method to measure spatial association for ecological count data. *Ecoscience* 9:133-141.

- Dixon, P. M. 2002 Nearest-neighbor contingency table analysis of spatial segregation when there are more than two types of points. *Ecoscience* 9:142-151
- Keitt, T. H., Bjørnstad, O., Dixon, P. and Citron-Pousty, S. 2002. Accounting for spatial pattern when modeling organism-environment interactions. *Ecography* 25:616-625.
- Dale, M.R.T, Dixon, P., Fortin, M.-J., Legendre, P., Myers, D. E. and M. S. Rosenberg 2002. Conceptual and mathematical relationships among methods for spatial analysis. *Ecography* 25:558-577. (60)
- Kaiser, M. S., Daniels, M.J., Furakawa, K. and Dixon, P. 2002. Analysis of particulate matter air pollution using Markov random field models of spatial dependence. *Environmetrics* 13:615-628.
- Batzer, J. C., Gleason, M. L., Weldon, B., Dixon, P.M. and Nutter, F. W. Jr., 2002. Evaluation of postharvest removal of sooty blotch and flyspeck on apples using sodium hypochlorite, hydrogen peroxide with peroxyacetic acid, and soap. *Plant Disease* 86:1325-1332.
- Adam, M. L., Kelly, J. M., Graves, W. R. and Dixon, P. M. 2003. Nitrate uptake by red maple is a function of root-zone temperature. *J. Plant Nutrition* 26:203-222
- DeRoin, M. A., Foong, S.C.C., Dixon, P.M., and Dickson, J.S. 2003. Survival and recovery of *Listeria monocytogenes* on ready-to-eat meats inoculated with a desiccated and nutritionally depleted dustlike vector. *Journal of Food Protection* 66:962-969.
- Lemke, B.M., Gibson, L.R., Knapp, A.D., Dixon, P.M., Moore, K.J. and Hintz, R. 2003. Maximizing seed production in Eastern Gamagrass. *Agronomy Journal* 95:863-869.
- Aberle, E.Z., Gibson, L.R., Knapp, A.D., Dixon, P.M., Moore, K.J., Brummer, E.C., and Hintz, R. 2003. Optimum planting procedures for eastern gamagrass. *Agronomy Journal* 95:1054-1062.
- Lihono, M.A., Mendonca, A.F., Dickson, J.S., and Dixon, P.M. 2003. A predictive model to determine the effects of temperature, sodium pyrophosphate and sodium chloride on thermal inactivation of starved *Listeria monocytogenes* in pork slurry. *Journal of Food Protection* 66:1216-1221
- Davis, A.S., P.M. Dixon, and Liebman, M.. 2003. Cropping system effect on giant foxtail (*Setaria faberi*) demography. 2. Retrospective perturbation analysis. *Weed Science* 51: 930-939.
- Leandro LFS, Gleason ML, Nutter FW, Wegulo SN, Dixon PM. 2003. Influence of temperature and wetness duration on conidia and appressoria of *Colletotrichum acutatum* on symptomless strawberry leaves *Phytopathology* 93: 513-520
- Leandro LFS, Gleason ML, Nutter FW, Wegulo SN, Dixon PM. 2003. Strawberry plant extracts stimulate secondary conidiation by *Colletotrichum acutatum* on symptomless leaves. *Phytopathology* 93:1285-1291. (70)
- Widrechner M. P., Thompson J.R., Iles, J.K. and Dixon, P.M. 2004. Models for predicting the risk of naturalization of non-native woody plants in Iowa. *Journal of Environmental Horticulture*, 22:23-31.
- Persyn, R.A., Glanville, T.D., Richard, T.L, Laflen, J.M, and Dixon, P.M. 2004. Environmental effects of applying composted organics to new highway embankments. Part 1. Interrill runoff and erosion. *Transactions of the ASAE* 47:463-469
- Persyn, R.A., Glanville, T.D., Richard, T.L, Laflen, J.M, and Dixon, P.M. 2004. Environmental effects of applying composted organics to new highway embankments. Part 2. Water Quality. *Trans. of the ASAE* 47:471-478
- Davis, A. S., Dixon, P. M., Liebman, M.. 2004. Using matrix models to determine cropping system effects on annual weed demography. *Ecological Applications*. 14: 655–668.



- Schleuter, J.A., Dixon, P., Granger, C., Grant, D., Clark, L., Doyle, J.J., and Shoemaker, R.C. 2004. Mining EST databases to resolve evolutionary events in major crop species. *Genome* 47:868-876.
- Ji, Y., Pollak, L.M., Duvick, S., Seetharaman, K., Dixon, P.M., and White, P.J. 2004. Gelatinization properties of starches from three successive generations of six exotic corn lines grown in two locations. *Cereal Chemistry*, 81:59-64.
- Dixon, P.M., Ellison, A. and Gotelli, N.J. 2005. Improving the precision of estimates of the frequency of rare events. *Ecology*, 86:1114-1123.
- Fraterrigo, J.M., Turner, M.G., Pearson, S.M. and Dixon, P. 2005. Effects of past land use on spatial heterogeneity of soil nutrients in southern Appalachian forests. *Ecological Monographs*, 75:215-230.
- Houser, T.A., Sebranek, J.G, Maisonet, W.N, Cordray, J.C., Ahn, D.U. and Dixon, P.M. 2005. Irradiation-induced cured ham color fading and regeneration. *Journal of Food Science* 70:281-285.
- Dixon, P.M. and Pechmann, J.H.K. 2005. A statistical test to show negligible trend. *Ecology* 86: 1751-1756 (80)
- Tarr, A.B., Moore, K.J, Burras, C.L, Bullock, D.G. and Dixon, P.M. 2005. Improving map accuracy of soil variables using soil electrical conductivity as a covariate. *Precision Agriculture* 6:255-270.
- Tarr, A. B., K. J. Moore, and P. M. Dixon 2005. Spectral reflectance as a covariate for estimating pasture productivity and composition. *Crop Science*, 45:996-1003, 2005
- Persyn RA, Glanville TD, Richard TL, Laflen JM, Dixon PM. 2005. Environmental effects of applying composted organics to new highway embankments: Part III. Rill erosion. *Transactions of the ASAE* 48:1765-1772
- Westerman P, Liebman M, Menalled FD, Heggenstaller AH, Hartzler RG, Dixon PM. 2005. Are many little hammers effective? - Velvetleaf (*Abutilon theophrasti*) population dynamics in two- and four-year crop rotation systems. *Weed Science* 53:382-392
- Van Thuy, P., Berger, J., Nakanishi, Y., Khan, N.C., Lynch, S. and Dixon, P. 2005. The use of NaFeEDTA-fortified fish sauce is an effective tool for controlling iron deficiency in women of childbearing age in rural Vietnam. *Journal of Nutrition*, 135:2596-2601.
- Esker PD, Gibb KS, Padovan A, Dixon, P M., and Nutter, F. W. 2006. Use of survival analysis to determine the postincubation time-to-death of papaya due to yellow crinkle disease in Australia *Plant Disease* 90: 102-107
- Dancause N, Barbay S, Frost SB, Plautz EJ, Popescu M, Dixon PM, Stowe AM, Friel KM, Nudo RJ, 2006. Topographically divergent and convergent connectivity between premotor and primary motor cortex *Cerebral Cortex* 16: 1057-1068.
- Schmitt, L.A., Liu, Y., Murphy, P.A., Petrich, J.W., Dixon, P.M. and Birt, D.F. 2006. Reduction in hypericin-induced phytotoxicity by *Hypericum perforatum* extracts and pure compounds. *Journal of Photochemistry and Photobiology. B. Biology* 85:118-130.
- Schwarte, A. J., Gibson, L.R., Karlen, D.L., Dixon, P.M., Liebman, M. and Jannink, J-L. 2006. Planting date effects on winter triticale grain yield and yield components. *Crop Science* 46: 1218-1224
- Esker, P. D., Harri, J., Dixon, P. M., and Nutter, F. W., Jr. 2006. Comparison of models for forecasting of Stewart's disease of corn in Iowa. *Plant Disease* 90:1353-1357 (90)
- Whicker, F.W., Buntzl, K., Dixon, P., Scott, E.M., Sheppard, S.C., and Voigt, G. 2006. Sampling for Radionuclides in the Environment. ICRU report no. 75. *Journal of the ICRU* 6: 1-93.
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