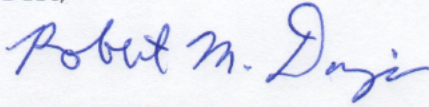


Language Certificate

I, Robert M. Dorazio, acknowledge that I have performed language editing for this manuscript entitled by "AlCl₃ exposure regulates neuronal development through modulating DNA modification".

You can reach me by rmdorazio@zju.edu.cn if you have any further questions.

Best,



Robert M. Dorazio

Robert M. Dorazio, Ph.D.

Profile 简况

I am an expert Biostatistician that specializes in developing novel statistical models for the analysis of observational or experimental data. My combination of statistical, computational, and biological expertise has allowed me to serve as the principal authority and leader in many collaborative research projects. In this capacity I have been responsible for casting the scientific questions in an inferential model-based framework, for planning and coordinating the data-collection efforts of my collaborators, for analyzing and interpreting the results, and for reporting the substantive conclusions at scientific meetings and in the published literature.

我是一位生物统计学专家，专门为分析观测或实验数据开发新的统计模型。我在统计、计算和生物领域的专长及深度使我成为许多合作研究项目的主要权威和领军者。在这一职位上，我负责将科学问题置于基于推理模型的框架中，规划和协调我的合作者的数据收集工作，分析和解释结果，并在科学会议和已发表的文献中报告实质性结论。

I am also an great teacher, who taught many workshops, short courses and semester long courses on various aspects of statistics at all different levels that is accessible to undergraduate students, graduate students, research scientists, and expert research statisticians.

我也是一位优秀的教师，教授了许多不同层次的关于统计各个方面的讲习班，短期课程和课程，本科生、研究生、研究科学家和专家研究统计学家都可以参加。

I published 76 research articles and 1 book, authored 42 technical reports, and gave 125 technical

presentations, Seminars and Colloquia at scientific conferences and university colloquia.

发表研究论文 77 余篇，著书 1 部，撰写技术报告 42 篇，在学术会议和大学学术讨论会上发表技术报告 125 篇。

I Served as associate editors in 3 journals and reviewers for 44 journals, and have reviewed a total of 208 scientific papers for these journals and still continuing paper reviews. I enjoy giving back to the society and helping young scientists.

我担任过 3 个期刊的副主编和 44 个期刊的审稿人，并为这些期刊审阅了总共 208 篇科学论文并继续审稿。我喜欢回馈科学界和帮助年轻的科学家。

Qualifications 资格

- Expert in developing formal, probability-based models that are appropriate for the observed data and the scientific questions at hand.

开发适合观测数据和科学问题的正规的、基于概率的模型专家

- Expert in model-based design of experiments and surveys.

基于模型的实验设计和勘测专家

- Expert in object-oriented programming, including R and C++ languages.

面向对象编程的专家，包括 R 和 C++ 语言。

- Expert in writing R programs to manage, visualize, and analyze data.

非常擅长编写 R 程序来管理、可视化和分析数据。

- Exceptional ability to convey complex statistical models and concepts to diverse audiences.

向不同知识层次的听众传达复杂统计模型和概念的卓越能力。

- Expert in mathematical statistics, including both frequentist and Bayesian systems of inference.

数理统计专家，包括频率和贝叶斯推理系统。

- Working knowledge of a broad range of conventional classes of statistical models including GLMs, GLMMs, and their extensions using basis expansion and regularization.

广泛的传统统计模型类别的工作知识，包括 GLMS、GLMMS，以及使用基础扩展和正则化对其进行扩展。

Experience 经历

Adjunct Professor, Department of Biology, San Francisco State University, Aug 2018–present
旧金山州立大学生物系兼职教授，2018 年 8 月至今

- Taught statistics and computational methods

教授统计学和计算方法

- Collaborated with faculty members and graduate students to solve research problems

与教师和研究生合作解决研究问题

Courtesy Associate Professor, Department of Statistics, University of Florida, 2004–2018

佛罗里达大学统计系兼职副教授，2004-2018 年

- Served on committees of 7 PhD students and 3 MS students

曾任 7 名博士生和 3 名硕士生的兼职导师和论文评审委员

- Taught many workshops and a one-semester course on various aspects of statistics at a level that is accessible to research scientists. These workshops included foundational aspects of statistical inference (frequentist and Bayesian approaches), topics related to statistical modeling, and computational methods needed to fit complex models to data.

举办过很多个讲习班和一个为期一个学期的课程，内容涉及统计的各个方面，研究科学家可以参加。这些讲习班包括统计推断（频率和贝叶斯方法）的基本方面，与统计建模相关的主题，以及适合复杂模型到数据所需的计算方法。

Biostatistician, Leading Edge Statistical Consulting, LLC, Jan 2019–present

生物统计学家，Leading Edge 统计咨询有限责任公司，2019 年 1 月至今

- Provided statistical support for research in the following areas:

为以下领域的研究提供统计支持：

Statistical modeling

统计建模

Data analysis

数据分析

Design of surveys and experiment

调查与实验设计

Workshops and training

讲习班和培训

Reviews (manuscripts, theses, grant proposals)

审评（论文杂志、毕业论文、各种基金项目申请）

Research Statistician, Wetland and Aquatic Research Center, US Geological Survey, 1994–2018

研究统计学家，美国地质调查局湿地与水生研究中心，1994–2018

- Most recent accomplishments (2008–2018):

最近的成就 (2008–2018):

- Wrote an R package that allows users to fit Bayesian multi-scale occupancy models, to estimate posterior summaries of occurrence and detection probabilities, and to compare different models using Bayesian model-selection criteria, such as PPLC, WAIC, and AUC. This package is widely used by population geneticists and ecologists that need to analyze PCR data collected during surveys of environmental DNA.

编写一个 R 程序包，使用户可以用贝叶斯多维度占有率模型，估计发生率和检测概率，并与使用贝叶斯模型选择标准（如 PPLC, WAIC, 和 AUC）等不同的模型进行比较。该软件包广泛应用于需要分析环境 DNA 调查过程中收集的 PCR 数据的种群遗传学家和生态学家。

- Developed an approach to estimate the limit of detection of a digital PCR assay. This approach is grounded in analytical chemistry and corrects for overestimation of DNA concentrations caused by a concentration plateau, a nonlinear relationship between expected and measured DNA concentrations.

开发了一种估计数字 PCR 检测下限的方法。这种方法以分析化学为基础，修正了由浓度平台引起的 DNA 浓度过高估计，这是预期 DNA 浓度和测量 DNA 浓度之间的非线性关系。

- Proved and demonstrated that any digital PCR experiment can be analyzed using a specific type of GLM or GLMM. Digital PCR data therefore can be analyzed using readily available software rather than relying on the limited capabilities of manufacturer's software.

论证并示范了任何数字 PCR 实验都可以使用特定类型的 GLM 或 GLMM 进行分析。因此，数字 PCR 数据可以使用现成的软件进行分析，而不是依赖于有限的制造商软件的开发能力。

- Demonstrated that biases in predictions of an animal species' geographic distribution can be reduced or eliminated by using hierarchical modeling to analyze opportunistic presence-only data in conjunction with data observed in planned surveys.

证明通过使用层次模型结合计划调查中观察到的数据分析和机会性的在场的的数据，可以减少或消除动物物种地理分布预测中的偏差。

- Developed a model for the analysis of capture-recapture data of multiple, potentially interacting species of animals. This model was used to estimate positive or negative correlations between abundances of different species while also estimating the effects of habitat and the effects of errors in detection of each species.

开发了一个用于分析多种可能相互作用的动物的捕获-再捕获数据的模型。该模型用于估计不同物种丰富度之间的正相关或负相关，同时也用于估计栖息地的影响和每个物种检测误差的影响。

- Developed a continuous-time, spatial capture-recapture (SCR) model to estimate the spatial distribution and abundance of tigers detected in camera-trap surveys in the Nagarahole Tiger Reserve, India. This SCR model provides three important benefits: First, it exploits all of the information in SCR data obtained using continuous-time recorders. Second, it is sufficiently versatile to allow the effects of both space use and behavior of animals to be specified as functions of covariates that vary over space and time. Third, it allows both the spatial distribution and abundance of individuals to be estimated, effectively providing a species distribution model, even in cases where spatial covariates of abundance are unknown or unavailable.

开发了一个连续的时间、空间捕获-再捕获（SCR）模型，用以估计在印度老虎保护区 Nagarahole 的相机陷阱调查中发现的老虎的空间分布和丰度。这种 SCR 模型提供了三个重要的优点：首先，它利用了连续时间记录器获得的 SCR 数据中的所有信息。其次，它具有足够的通用性，可以将动物的空间使用和行为的影响指定为随空间和时间变化的协变量函数。第三，它允许估计个体的空间分布和丰度，有效地提供了物种分布模型，即使在丰度的空间协变量未知或不可用的情况下。

- Developed a hierarchical, model-based framework for estimating the abundance of a tiger prey species from repeated, line-transect surveys conducted in a finite region of interest that contains spatial heterogeneity in habitat. An important aspect this framework is that it accounts for prey movements and for spatial variation in abundance of prey induced by differences in habitat at sample locations. The resulting model-based estimators of prey density are therefore much more versatile than their conventional, design-unbiased counterparts.

开发了一个基于模型的分级框架，用于根据在有限的感兴趣区域（包含栖息地的空间异质性）进行的重复样条调查估计老虎捕食物种的丰度。这一框架的一个重要方面是，它考虑了样本位置生境差异引起的猎物运动和猎物丰度的空间变化。因此，所得到的基于模型的食饵密度估计器比其传统的、设计无偏的对应估计器更具通用性。

- Developed a statistical modeling framework for the analysis of metacommunity dynamics that is based on the idea of using multispecies occupancy models to compute inferences about individual species, about local communities of species, or about the entire metacommunity of species. This approach accounts for errors in detection of species during sampling and allows different metacommunity paradigms to be specified in terms of species- and location-specific probabilities of

occurrence, extinction, and colonization – all of which are estimable. In addition, this approach can be used to address inference problems that arise in conservation ecology, such as predicting temporal and spatial changes in biodiversity for use in conservation decisions.

开发了一个分析亚群落动力学的统计建模框架，该框架基于使用多物种占有模型计算关于单个物种、关于当地物种群落或关于整个物种亚群落的推断的想法。这种方法解释了采样期间物种检测的错误，并允许根据物种和特定位置发生、灭绝和定殖的概率来指定不同的亚群落模式，所有这些都是可估计的。此外，这种方法可用于解决保护生态学中出现的推断问题，例如预测生物多样性的时间和空间变化，以用于保护决策。

Research Fishery Biologist, National Fisheries Research Center, US Fish and Wildlife Service, 1987–1994

鱼类研究生物学家，国家渔业研究中心，美国鱼类和野生动物研究中心, 1987–1994

Education 教育

Postgraduate Training

博士毕业后培训, 1991-2007 年

High-Performance Computing in R, USGS National Training Center, 2017

R/Splus System: Advanced Programming, University of Washington, 2002

Monte Carlo Methods in Bayesian Computation, American Statistical Association, 2001

Introduction to Adaptive Stochastic Dynamic Programming Theory for Adaptive Resource Management, Colorado State University, 2001

Applying Finite Mixture Models, American Statistical Association, 2000

Bayes and Empirical Bayes Methods for Data Analysis, University of Minnesota, 1998

Sampling-based Methods for Bayesian and Likelihood Inference, American Statistical Association, 1997

Extending the Cox Proportional Hazards Model, Mayo Clinic, Minnesota, 1996

Generalized Linear Models, University of Florida, 1995

Categorical Data Analysis, University of Florida, 1994

Computer Intensive Statistics in Biology, Colorado State University, 1993

Survival Analysis of Recapture Data from Marked Animal Populations, Colorado State University, 1991

PhD, University of Michigan, College of Engineering, 1986

密歇根大学工程学院博士, 1986 年

BS, Ohio State University, College of Arts and Sciences, Biology, 1979

学士, 俄亥俄州立大学, 艺术与科学学院, 生物学, 1979 年

Peer-reviewed Publications and book 同行评议的文章, 书

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analysis of presence-only data", *Global Ecology and Biogeography* 23: 1472–1484.

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24. [Dorazio, R.M.](#), H.L. Jelks, and F. Jordan. (2005) "[Improving removal-based estimates of abundance by sampling a population of spatially distinct subpopulations](#)", *Biometrics* 61: 1093–1101.
23. [Dorazio, R.M.](#) and J.A. Royle. (2005) "[Rejoinder to 'The performance of mixture models in heterogeneous closed population capture-recapture.'](#)", *Biometrics* 61: 874–876.
22. [Dorazio, R.M.](#) and J.A. Royle. (2005) "[Estimating size and composition of biological communities by modeling the occurrence of species](#)", *Journal of the American Statistical Association* 100: 389–398.
21. Dodd, C.K. and [R.M. Dorazio](#). (2004) "[Using counts to simultaneously estimate abundance and detection probabilities in a salamander community](#)", *Herpetologica* 60: 468–478.
20. [Dorazio, R.M.](#), and J.A. Royle. (2003) "[Mixture models for estimating the size of a closed population when capture rates vary among individuals](#)", *Biometrics* 59: 351–364.
19. [Dorazio, R.M.](#), and F.A. Johnson. (2003) "[Bayesian inference and decision theory - a framework for decision making in natural resource management](#)", *Ecological Applications* 13: 556–563.

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4. Dorazio, R.M.. (1986) "[Estimating population birth rates of zooplankton when rates of egg deposition and hatching are periodic](#)", *Oecologia* 69: 532–541.
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2. Dorazio, R.M.. (1984) "[The contribution of longevity to population death rates](#)", *Hydrobiologia* 108: 239–243.
1. Dorazio, R.M., and J.T. Lehman. (1983) "[Optimal reproductive strategies in age-structured populations of zooplankton](#)", *Freshwater Biology* 13: 157–175.

Technical Reports 技术报告

42. Dorazio, R.M. and D. Onorato. (2017) Estimating the density of Florida panthers using camera traps and telemetry – Report for Phase 2 of the project. Technical report for Florida Fish and Wildlife Conservation Commission.
41. Dorazio, R.M. and D. Onorato. (2016) Estimating the density of Florida panthers using camera traps and telemetry – Report for Phase 1 of the project. Technical report for Florida Fish and Wildlife Conservation Commission.
40. Figueiredo, I., R.M. Dorazio, C. Maia, J. Neves, I. Natário, and M.L. Carvalho. (2015) Undulata Project - First estimates of Raja undulata abundance off Setúbal Peninsula. Technical report for ICES Working Group on Elasmobranch fishes, Lisbon, Portugal.
39. Dorazio, R.M. and F.A. Johnson. (2003) A comparison of optimal decisions computed using Bayesian updating and stochastic dynamic programming. Technical report for Adaptive Resource Management Conference Series.
38. Dorazio, R.M., F.A. Johnson, and H.F. Percival. (2001) Adaptive management of waterfowl habitat: numerical examples with hypothetical data. Technical report for Adaptive Resource Management Conference Series.
37. Dorazio, R.M. and F.A. Johnson. (2001) Adaptive management of waterfowl habitat using Bayesian inference and decision theory. Technical report for Adaptive Resource Management Conference Series.
36. Dorazio, R.M.. (1997) Estimates of abundance indexes and survival rates of fish collected in multimesh gill nets in Albemarle Sound, North Carolina. Technical report for Division of Marine Fisheries, Dept. of Environment, Health and Natural Resources, State of North Carolina.
35. Dorazio, R.M.. (1993) Tag-recovery estimates of survival of striped bass released from eastern Long Island, New York during 1987-1991. Technical report for Striped Bass Stock Assessment Subcommittee, Atlantic States Marine Fisheries Commission.
34. Dorazio, R.M.. (1993) The difficulties of interpreting region-specific rates of tag recovery. Technical report for Striped Bass Stock Assessment Subcommittee, Atlantic States Marine Fisheries Commission.
33. Dorazio, R.M.. (1993) Estimation of tag reporting, exploitation, and fishing mortality in Maryland's recreational fishery during fall 1992. Technical report for Striped Bass Technical Committee, Atlantic States Marine Fisheries Commission.
32. Rago, P.J., R.M. Dorazio, R.A. Richards, D.G. Deuel, and C.D. Stephan. (1992) Emergency striped bass research study: Report for 1992. Technical report for U.S. Fish and Wildlife Service.
31. Dorazio, R.M.. (1992) Survival and recovery rates of Atlantic striped bass estimated from recoveries of fish tagged during 1986-1991. Technical report for Striped Bass Stock Assessment Subcommittee, Atlantic States Marine Fisheries Commission.
30. Rago, P.J., R.M. Dorazio, R.A. Richards, D.G. Deuel, and C.D. Stephan. (1991) Emergency striped bass research study: Report for 1991. Technical report for U.S. Fish and Wildlife Service.
29. Dorazio, R.M., and P.J. Rago. (1991) Population dynamics of striped bass in the Roanoke River/Albemarle Sound estuary: 1. Rates of total mortality and exploitation estimated from W. W. Hassler's tag-recovery data. Technical report for North Carolina Striped Bass Study Management Board.
28. Dorazio, R.M., and V.J. Vecchio. (1991) Catch curve estimates of mortality from the Long Island haul seine survey. Technical report for Striped Bass Stock Assessment Subcommittee, Atlantic States Marine Fisheries Commission.

27. Dorazio, R.M.. (1991) Mortality rates of tagged Atlantic striped bass released and recovered from 1986 to 1991. Technical report for Striped Bass Stock Assessment Subcommittee, Atlantic States Marine Fisheries Commission.
26. Dorazio, R.M.. (1990) Mark-recapture estimates of survival of Atlantic striped bass stratified at release by sex, size, and age. Technical report for Striped Bass Technical Committee, Atlantic States Marine Fisheries Commission.
25. Dorazio, R.M., and P.J. Rago. (1990) Post-stocking survival of phase-II striped bass: distinguishing the effects of hatchery of origin and stocking location. Technical report for Meeting of striped bass hatchery managers and Chesapeake Bay fishery coordinators.
24. Dorazio, R.M.. (1990) Recapture and survival rates of striped bass tagged and released from 1986 to 1988. Technical report for Striped Bass Stock Assessment Subcommittee, Atlantic States Marine Fisheries Commission.
23. Rago, P.J., R.A. Richards, R.M. Dorazio, and D.G. Deuel. (1990) Emergency striped bass research study. Report for 1989. Technical report for U.S. Fish and Wildlife Service.
22. Dorazio, R.M.. (1990) Recent estimates of mortality of phase II striped bass: implications for recovery of coded-wire tags. Technical report for Striped Bass Stocking Technical Advisory Committee, Atlantic States Marine Fisheries Commission.
21. Dorazio, R.M.. (1989) Sample sizes and mean stock compositions required to ensure that target compositions are exceeded with specified levels of confidence. Technical report for Striped Bass Scientific and Statistical Committee, Atlantic States Marine Fisheries Commission.
20. Dorazio, R.M.. (1989) Detection of statistically significant differences in stock composition. Technical report for Striped Bass Stock Assessment Subcommittee, Atlantic States Marine Fisheries Commission.
19. Dorazio, R.M.. (1989) A generalization of Maryland's maturation rate estimator that includes differential mortality of males and females. Technical report for Striped Bass Scientific and Statistical Committee, Atlantic States Marine Fisheries Commission.
18. Rago, P.J., R.A. Richards, R.M. Dorazio, and D.G. Deuel. (1989) Emergency striped bass research study. Report for 1988. Technical report for U.S. Fish and Wildlife Service.
17. Dorazio, R.M.. (1989) Mortality of phase I striped bass stocked in the Patuxent River, Maryland. Technical report for U.S. Fish and Wildlife Service.
16. Dorazio, R.M.. (1989) A preliminary summary of 1988 recovery data from striped bass marked during the coastwide, cooperative tagging program. Technical report for Striped Bass Scientific and Statistical Committee, Atlantic States Marine Fisheries Commission.
15. Rago, P.J., and R.M. Dorazio. (1988) Evaluation of a habitat suitability index for coastal stocks of striped bass. Technical report for National Ecology Research Center, U.S. Fish and Wildlife Service.
14. Rago, P.J., and R.M. Dorazio. (1988) A comparative anatomy of modeling approaches for striped bass. Technical report for Striped Bass Scientific and Statistical Committee, Atlantic States Marine Fisheries Commission.
13. Dorazio, R.M., and P.J. Rago. (1988) Consequences of alternative harvest strategies for population growth and allocation of yield of striped bass from Chesapeake Bay. Technical report for Striped Bass Scientific and Statistical Committee, Atlantic States Marine Fisheries Commission.
12. Rago, P.J., R.A. Richards, R.M. Dorazio, and D.G. Deuel. (1988) Emergency striped bass research study. Report for 1987. Technical report for U.S. Fish and Wildlife Service.
11. Dorazio, R.M., and P.J. Rago. (1988) Effects of noncatch fishing mortality and maximum size limits on predictions of threshold F values for anadromous striped bass of Chesapeake Bay.

Technical report for Striped Bass Scientific and Statistical Committee, Atlantic States Marine Fisheries Commission.

10. Rago, P.J., and R.M. Dorazio. (1988) Use of historical trends in recruitment and exploitation to forecast the consequences of management measures on striped bass abundance, catch, and young of year. Technical report for Striped Bass Scientific and Statistical Committee, Atlantic States Marine Fisheries Commission.

9. Dorazio, R.M., and P.J. Rago. (1988) Maximum allowable fishing mortality rates for anadromous striped bass of Chesapeake Bay: revised predictions and further comments. Technical report for Striped Bass Scientific and Statistical Committee, Atlantic States Marine Fisheries Commission.

8. Dorazio, R.M., and P.J. Rago. (1988) Length percentiles of the 1982 year class at and beyond the age of full maturity. Technical report for Striped Bass Scientific and Statistical Committee, Atlantic States Marine Fisheries Commission.

7. Rago, P.J., and R.M. Dorazio. (1988) Implications of updated striped bass maturation schedules for Amendment 3 of the Interstate Fisheries Management Plan: an update. Technical report for Striped Bass Scientific and Statistical Committee, Atlantic States Marine Fisheries Commission.

6. Rago, P.J., and R.M. Dorazio. (1988) Implications of updated striped bass maturation schedules for Amendment 3 of the Interstate Fisheries Management Plan. Technical report for Striped Bass Scientific and Statistical Committee, Atlantic States Marine Fisheries Commission.

5. Rago, P.J., and R.M. Dorazio. (1988) Non-equilibrium analysis of the Maryland striped bass population. Technical report for Striped Bass Scientific and Statistical Committee, Atlantic States Marine Fisheries Commission.

4. Dorazio, R.M., and P.J. Rago. (1988) Prediction of maximum allowable fishing mortality rates for anadromous striped bass of Chesapeake Bay. Technical report for Striped Bass Scientific and Statistical Committee, Atlantic States Marine Fisheries Commission.

3. Rago, P.J., and R.M. Dorazio. (1987) Management of the striped bass tagging database. Technical report for Striped Bass Scientific and Statistical Committee, Atlantic States Marine Fisheries Commission.

2. Rago, P.J., and R.M. Dorazio. (1987) An adaptive management program for striped bass. Technical report for Striped Bass Scientific and Statistical Committee, Atlantic States Marine Fisheries Commission.

1. Dorazio, R.M.. (1986) Demographic and experimental approaches to zooplankton population dynamics. Technical report for University of Michigan, PhD Dissertation.

Seminars and Colloquia 研讨会和座谈会

- 1 Nov 2016: "Quantification and modeling of environmental DNA: Opportunities and challenges", Recent Developments on Species Distribution Modeling Workshop, RMIT University, Melbourne, Australia. [Invited Plenary]
- 2 Dec 2015: "Using Bayesian methods in the analysis of ecological data: Opportunities and challenges", Indian Statistical Institute, Bangalore, India. **[Invited]**
- 3 Dec 2015: "Using Bayesian methods in the analysis of ecological data: Opportunities and challenges", National Centre for Biological Sciences, Bangalore, India. **[Invited]**
- 4 Jun 2015: "Bayesian data analysis in ecology: motivations, methods, and benefits", University of Lisbon, Lisbon, Portugal. **[Invited]**
- 5 Oct 2014: "Accounting for imperfect detection and survey bias in statistical analysis of presence-

only data", University of Tsukuba, Tokyo, Japan. **[Invited]**

- 6 May 2013: "Estimating abundances of interacting species using morphological traits, foraging guilds, and habitat", University of Florida, School of Forest Resources and Conservation, Gainesville FL. **[Invited]**
- 7 Sep 2011: "Estimating the geographic distribution of a species using presence-only records", University of Florida, Department of Statistics, Gainesville, FL. [Presented]
- 8 Apr 2011: "Modern methods of estimating biodiversity from presence-absence surveys", San Francisco State University, Colloquium in Ecology, Evolution, and Conservation, San Francisco CA. **[Invited]**
- 9 Oct 2008: "Estimation of manatee abundance from aerial surveys using dual observers and removal sampling", University of Minnesota, School of Public Health, Division of Biostatistics, Minneapolis MN. **[Invited]**
- 10 Sep 2008: "Estimating changes in species composition and richness while accounting for imperfect detectability: a case study from the Biodiversity Monitoring Program in Switzerland", University of Florida, Department of Wildlife Ecology and Conservation, Gainesville FL. **[Invited]**
- 11 Sep 2008: "Estimation of manatee abundance from aerial surveys using dual observers and removal sampling", University of Florida, Department of Statistics, Gainesville FL. [Presented]
- 12 October 2007: "Conventional vs. ecological models for the analysis of repeated measurements in spatially referenced samples", University of Florida, Department of Statistics, Gainesville FL. [Presented]
- 13 Nov 2006: "Analysis of presence/absence data: models for estimating site occupancy and the risk of local extinction", University of Florida, Department of Statistics, Gainesville FL. [Presented]
- 14 Oct 2006: "Robust alternatives for modeling heterogeneity in abundance and detectability", University of Zurich, Zoological Institute, Zurich, Switzerland. **[Invited]**
- 15 Fall 2005: "Hierarchical models of animal abundance and occurrence for spatially-referenced counts", University of Florida, Department of Statistics, Gainesville FL. [Presented]
- 16 Fall 2004: "Improving removal-based estimates of local abundance in a metapopulation of endangered fishes", Winemiller Symposium on "New Developments of Statistical Analysis in Wildlife, Fisheries, and Ecological Research", University of Missouri, Department of Statistics, Columbia MO. **[Invited]**
- 17 2004: "Research opportunities for students", University of Florida, Department of Statistics, Student Seminar Series, Gainesville FL. **[Invited]**
- 18 2003: "Estimating size and composition of biological communities by modeling the occurrence of species", University of Florida, Department of Statistics, Gainesville FL. [Presented]
- 19 2002: "Bayesian inference and decision theory - a coherent framework for decision making in natural resource management", University of Missouri, Department of Statistics, Columbia MO. **[Invited]**
- 20 1999: "Estimation of individual growth rates from the sizes of recaptured fish, mollusks, and other Earthly beasts: problems, promises, and reality", University of Florida, Department of Statistics, Gainesville FL. [Presented]
- 21 1999: "A hierarchical Bayes approach for small-area estimation based on counts observed in multistage surveys", University of Florida, Department of Statistics, Gainesville FL. [Presented]
- 22 1987: "The limnology of Lake Michigan: trophic dynamics and natural variability", University of Rhode Island, Department of Zoology, Kingston RI. **[Invited]**

- 23 1986: "The limnology of Lake Michigan: trophic dynamics and natural variability", Michigan State University, Kellogg Biological Station, Kalamazoo MI. **[Invited]**
- 24 1983: "Statistical inference in life-table experiments: the finite rate of increase", University of Michigan, Great Lakes Research Division, Ann Arbor MI. [Presented]
- 25 1982: "Use of enclosure experiments to investigate the dynamics of natural zooplankton populations from Third Sister Lake, Michigan", University of Michigan, Great Lakes Research Division, Ann Arbor MI. [Presented]

Presentations 大会报告

100. ArchMiller A, Dorazio RM, St. Claire, K, and Fieberg, J., (2017) "Time series sightability modeling of animal populations", The Wildlife Society's 24th Annual Conference, Albuquerque, NM.
99. Meigs-Friend G, Dorazio, RM, Hart KM, Smith BJ, and Hunter ME, (2017) "Environmental DNA (eDNA) detection of Burmese pythons in the Greater Everglades Ecosystem and ARM Loxahatchee National Wildlife Refuge using state of the art droplet digital PCR", Greater Everglades Ecosystem Restoration 2017 Symposium, Coral Springs, FL.
98. Hunter ME, Dorazio RM, Meigs-Friend G, Smith BJ, Card DC, and Hart KM, (2017) "Genetic and genomic population structure and environmental DNA monitoring of Burmese pythons in the Greater Everglades Ecosystem", Greater Everglades Ecosystem Restoration 2017 Symposium, Coral Springs, FL.
97. Dorazio, R.M., (2016) "Quantification and modeling of environmental DNA: Opportunities and challenges", Workshop on Statistical Ecology and Related Topics, Indian Statistical Institute, Bangalore, India. **[Invited]**
96. Dorazio, R.M., (2016) "Hierarchical modeling in ecology: a conceptual middle ground", Workshop on Statistical Ecology and Related Topics, Indian Statistical Institute, Bangalore, India. [Invited Plenary]
95. Dorazio, R.M. and Hunter, M.E., (2016) "Generalized linear (and mixed) models for the analysis and design of digital PCR experiments", Next Generation Dx Summit - Digital PCR, Washington DC. **[Invited]**
94. Hunter, M.E. and Dorazio, R.M., (2016) "Limit of detection analysis in quantitative and digital PCR environmental DNA assays", First Annual Environmental DNA Training and Technical Exchange Workshop, Denver CO.
93. Dorazio, R.M. and Hunter, M.E., (2016) "Correct and incorrect applications of occupancy modeling in the analysis of eDNA surveys", First Annual Environmental DNA Training and Technical Exchange Workshop, Denver CO. **[Invited]**
92. Dorazio, R.M. and Hunter, M.E., (2016) "Detection limits of digital PCR assays and their influence in presence-absence surveys of environmental DNA", 2nd qPCR and dPCR Congress USA, Philadelphia PA. **[Invited]**
91. Dorazio, R.M. and D.P. Onorato, (2016) "Estimating spatial distribution and abundance from detections of marked and unmarked animals in camera traps", International Statistical Ecology Conference (ISEC) 2016, Seattle WA. [Presented]

90. Onorato, D., R.M. Dorazio, D.B. Schindle, M. Criffield, M. Lotz, D. Land, and M.W. Cunningham, (2016) "Determination of population density estimates for Florida panthers using a combination of trail camera data and spatial information", 96th Meeting of the American Society of Mammologists, Minneapolis MN.
89. Dorazio, R.M. and D.P. Onorato, (2016) "Estimating spatial distribution and abundance of Florida panthers using camera traps and telemetry", Florida Panther Recovery Implementation Team Meeting, Gainesville FL. **[Invited]**
88. Hunter, M., G. Meigs-Friend, L.K. Diagne, F. Luna, A.K. Takoukan, R. Dorazio, and J. Reid, (2015) "Sight-unseen: environmental DNA (eDNA) detection of vulnerable manatee species using state-of-the-art digital droplet PCR", 21st Biennial Conference on the Biology of Marine Mammals, San Francisco CA.
87. Jelks, H.L, F. Jordan, W. Tate, and R.M. Dorazio, (2015) "Range-wide evaluation of abundance, distribution, and habitat of imperiled Okaloosa darters following downlisting", Annual Meeting of the American Fisheries Society, Portland OR.
86. Hunter, M.E., R.M. Dorazio, and K.M. Hart, (2015) "Efficacy of eDNA as an early detection and rapid response indicator for Burmese pythons in the northern Greater Everglades Ecosystem and ARM Loxahatchee National Wildlife Refuge", Greater Everglades Ecosystem Restoration 2015, Coral Springs FL.
85. Hunter, M.E., S.J. Oyler-McCance, R.M. Dorazio, J.A. Fike, B.J. Smith, R.N. Reed, and K.M. Hart, (2015) "Sampling environmental DNA (eDNA) improves occurrence and detection estimates of invasive Burmese pythons and other giant constrictors", Greater Everglades Ecosystem Restoration 2015, Coral Springs FL.
84. Dorazio, R.M., (2014) "Bayesian data analysis in ecology: motivations, methods, and benefits", 30th Annual Meeting of the Population Ecology Society, Tsukuba, Japan. **[Invited Plenary]**
83. Dorazio, R.M., (2014) "Accounting for imperfect detection and survey bias in statistical analysis of presence-only data", 2014 Graybill/ENVR Conference, Fort Collins CO. **[Invited]**
82. Hunter, M.E., S.J. Oyler-McCance, R.M. Dorazio, R.N. Reed, J.A. Fike, B.J. Smith, C.T. Hunter, and K.M. Hart, (2014) "Environmental DNA (eDNA) detection of the invasive Burmese python (*Python molurus bivittatus*) to enhance detection probabilities, rapid response, and removal efforts", Invasion Genetics, Monterey CA.
81. Dorazio, R.M., (2014) "New approaches for estimating the spatial distribution and abundance of a species", Joint Meeting of Working Group & Science Coordination Group, South Florida Ecosystem Restoration Task Force, West Palm Beach FL. **[Invited]**
80. Dorazio, R.M., (2013) "Bayes and empirical Bayes estimators of abundance and density from spatial capture-recapture data", Joint Statistical Meetings, Montreal, Quebec. **[Invited]**
79. Dorazio, R.M. and E.F. Connor, (2013) "Estimating abundances of interacting species using morphological traits, foraging guilds, and habitat", International Environmetrics Society (TIES) Meeting, Anchorage AK. **[Invited]**
78. Dorazio, R.M., (2013) "Bayes and empirical Bayes estimators of abundance and density from spatial capture-recapture data", EURING2013 Technical Meetings, Athens GA. **[Invited]**

77. Benson, A.J., R.M. Dorazio, F.A. Johnson, M. Turtora, and P.L. Fuller, (2013) "Mechanisms of aquatic species invasions across the south Atlantic states, USA", 18th International Conference on Aquatic Invasive Species, Niagara Falls, Ontario, Canada.
76. Dorazio, R.M., J. Martin, and H.H. Edwards, (2012) "Estimating abundance while accounting for excess zeros, correlated behavior of animals, and other sources of dependence", Wildlife Society 19th Annual Conference, Portland OR. **[Invited]**
75. Hua, F., R.J. Fletcher Jr., K.E. Sieving, and R.M. Dorazio, (2012) "Too scared to settle: predation risk shapes breeding bird community in ways predictable from functional traits", 97th Annual Meeting of Ecological Society of America, Portland OR.
74. Dorazio, R.M., (2012) "Predicting the geographic distribution of a species from presence-only data subject to detection errors", Joint Statistical Meetings, San Diego CA. **[Invited]**
73. Dorazio, R.M., (2011) "Estimating the geographic distribution of a species using presence- only records", USGS Webinar hosted by Southeast Ecological Science Center, Gainesville FL. **[Presented]**
72. Dorazio, R.M. and E.F. Connor, (2011) "Estimating abundance-based patterns of species co-occurrence using foraging guilds and spatial covariates", Joint Statistical Meetings, Miami Beach FL. **[Invited]**
71. Dorazio, R.M. and E.F. Connor, (2011) "Estimating abundance-based patterns of species co-occurrence using foraging guilds and spatial covariates", International Environmetrics Society (TIES) North American Regional Meeting, La Crosse WI. **[Invited]**
70. Dorazio, R.M. and E.F. Connor, (2010) "Estimating patterns of co-occurrence in species abundances using point counts and foraging guilds", Binary Matrices Working Group Meeting, National Institute for Mathematical and Biological Synthesis, Knoxville TN. **[Invited]**
69. Dorazio, R.M. and E.F. Connor, (2010) "Estimating patterns of co-occurrence in species abundances using point counts and foraging guilds", XXVth International Biometric Conference, Florianópolis, Brazil. **[Presented]**
68. Waddle, J.H., R.M. Dorazio, and S.C. Walls, (2010) "Presence of invasive Cuban treefrog reduces probability of occurrence of native treefrog species in southern Florida", Joint Meeting of the American Society of Ichthyologists and Herpetologists, Providence RI.
67. Dorazio, R.M., M. Kery, J.A. Royle, and M. Plattner, (2009) "Models for inference in dynamic metacommunity systems", EURING2009 Science Meeting and Workshop, Pescara, Italy. **[Presented]**
66. Waddle, H., S.C. Walls, and R.M. Dorazio, (2009) "Occupancy dynamics in a Louisiana assemblage of anurans", Joint Meeting of the American Society of Ichthyologists and Herpetologists, Portland OR.
65. Dorazio, R.M., M. Kery, J.A. Royle, and M. Plattner, (2009) "Models for inference in dynamic metacommunity systems", International Environmetrics Society (TIES) North American Regional Meeting, Corvallis OR. **[Presented]**
64. Dorazio, R.M., (2009) "An overview of models for estimating occurrence of imperfectly detected species", Binary Matrices Working Group Meeting, National Institute for Mathematical and Biological Synthesis, Knoxville TN. **[Invited]**
63. Dorazio, R.M., M. Kery, and J.A. Royle, (2008) "Dynamic, multispecies occupancy models for

estimating changes in biodiversity and other community-level attributes", Annual ARMI (Amphibian Research and Monitoring Initiative) Meeting, Lafayette LA. **[Invited]**

62. Rota, C.T., R.J. Fletcher Jr., and R.M. Dorazio, (2008) "Estimating bird detectability from single visit point count surveys", Wildlife Society 15th Annual Conference, .

61. Rota, C.T., R.J. Fletcher Jr., and R.M. Dorazio, (2008) "Occupancy estimation from single visit surveys", Meeting of American Ornithologists' Union, Cooper Ornithological Society, and Society of Canadian Ornithologists, .

60. Dorazio, R.M., C.A. Langtimm, B.M. Stith, and T.J. Doyle, (2008) "Estimation of manatee abundance from aerial surveys using double observers and removal sampling", Joint Statistical Meetings, American Statistical Association, Denver CO. [Presented]

59. Dorazio, R.M., M. Kery, and J.A. Royle, (2008) "Predicting seasonal changes in species composition and richness while accounting for imperfect detectability of species", Joint Statistical Meetings, American Statistical Association, Denver CO. **[Invited]**

58. Robblee, M.B., R.M. Dorazio, J.A. Browder, A. Daniels, and V. Roy, (2008) "Comparison of juvenile pink shrimp abundance in South Florida mangrove and seagrass-dominated estuaries", Greater Everglades Ecosystem Restoration Conference, Naples FL. [presented]

57. Dorazio, R.M., C.A. Langtimm, B.M. Stith, and T.J. Doyle, (2008) "Estimation of manatee abundance from aerial surveys using double observers and removal sampling", Greater Everglades Ecosystem Restoration Conference, Naples FL. [Presented]

56. Dorazio, R.M., C.A. Langtimm, B.M. Stith, and T.J. Doyle, (2008) "Hierarchical models for the estimation of manatee abundance from aerial surveys", International Indian Statistical Association Annual Meeting, Storrs CT. **[Invited]**

55. Dorazio, R.M., (2007) "Hierarchical models for the analysis of aerial survey data", Manatee Aerial Survey Workshop, St. Petersburg FL. **[Invited]**

54. Dorazio, R.M., (2007) "Implications of sampling methods and protocol for the estimation of site occupancy and local extinction", 14th European Congress of Herpetology, Porto, Portugal. **[Invited]**

53. Dorazio, R., B. Mukherjee, L. Zhang, and M. Ghosh, (2007) "Modeling unobserved sources of heterogeneity in animal abundance using a Dirichlet process prior", Joint Statistical Meetings, Salt Lake City UT. [Presented]

52. Dorazio, R.M., (2006) "Implications of sampling design for the estimation of site occupancy and local extinction", Annual ARMI (Amphibian Research and Monitoring Initiative) Meeting, Point Reyes National Park CA. **[Invited]**

51. Dorazio, R., B. Mukherjee, L. Zhang, and M. Ghosh, (2006) "The Dirichlet process: a robust alternative for modeling heterogeneity in abundance and detection", NSF Sponsored Workshop ("Uncertainty in Ecological Analysis"), Mathematical Biosciences Institute, Ohio State University, Columbus, OH. **[Invited]**

50. Royle, J.A. and R.M. Dorazio, (2005) "Estimation of species richness and related summaries of community structure", Centre D'Ecologie Fonctionnelle & Evolutive (CEFE), CNRS, Montpellier, France.

49. Hooten, M.B., C.K. Wikle, R.M. Dorazio, and J.A. Royle, (2005) "Hierarchical Bayesian matrix

models for describing the spatio-temporal population dynamics of invasive species", Joint Statistical Meetings, Minneapolis MN.

48. Dorazio, R.M., H.L. Jelks, and F. Jordan, (2005) "Improving removal-based estimates of local abundance in a metapopulation of endangered fishes", Joint Statistical Meetings, American Statistical Association, Minneapolis MN. **[Invited]**

47. Jelks, H.L., F. Jordan, and R.M. Dorazio, (2005) "Removal sampling of an endangered darter: advantages for estimating populations", Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, Herpetologists' League, and Society for the Study of Amphibians and Reptiles, Tampa FL.

46. Johnson, F., D. Breininger, B. Duncan, R.M. Dorazio, (2005) "Adaptive management of Florida scrub-jays: A question of scale", Adaptive Resource Management Conference Serie ("Adaptive Management for Threatened and Endangered Species"), National Conservation Training Center, Shepherdstown WV.

45. Dorazio, R.M., H.L. Jelks, and F. Jordan, (2004) "Improving removal-based estimates of local abundance in a metapopulation of endangered fishes", Winemiller Symposium ("New Developments of Statistical Analysis in Wildlife, Fisheries, and Ecological Research"), University of Missouri, Columbia MO. **[Invited]**

44. Dorazio, R.M., J.A. Royle, and C.K. Wikle, (2004) "Spatio-temporal dynamics of an invasive species: modeling counts of imperfectly detected animals", Invasive Species Monitoring Protocol Development Workshop, USGS/NPS, Portland OR. **[Invited]**

43. Dorazio, R.M., (2004) "Beyond point counts: estimating local and regional abundance of Okaloosa darters", Okaloosa Darter Recovery Implementation Group Meeting, Eglin Air Force Base, Niceville FL. **[Invited]**

42. Dorazio, R.M. and J.A. Royle, (2004) "Estimating size and composition of biological communities by modeling the occurrence of species", Joint Statistical Meetings, American Statistical Association, Toronto, Ontario, Canada. [Presented]

41. Dorazio, R.M. and J.A. Royle, (2004) "Estimating size and composition of biological communities by modeling the occurrence of species", International Society for Bayesian Analysis 2004 World Meeting, Vĩ na del Mar, Chile. [Presented]

40. Dodd, C.K. and R.M. Dorazio, (2004) "Using counts to estimate abundance and detection probabilities in a salamander community", Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, Herpetologists' League, and Society for the Study of Amphibians and Reptiles, Norman OK.

39. Dorazio, R.M. and J.A. Royle, (2003) "Mixed models for estimating the number of distinct species in replicated wildlife surveys", Annual Spring Meeting, International Biometric Society, Tampa FL. [Presented]

38. Dorazio, R.M., (2003) "Simulation-based approaches for computing an optimal sequence of adaptive management decisions", Adaptive Resource Management Conference Series, Laurel MD. **[Invited]**

37. Dorazio, R.M. and F.A. Johnson, (2001) "Bayesian inference and decision theory - a coherent framework for decision making in natural resource management", Adaptive Resource Management

Conference Series, Laurel MD. **[Invited]**

36. Fabrizio, M.C., R.M. Dorazio, and S.T. Schram, (2001) "Dynamics of individual growth in a recovering population of lake trout", Annual Meeting, American Fisheries Society, Phoenix AZ.

35. Dorazio, R.M., (2001) "Adaptive management of wildlife habitat using Bayesian inference and decision theory - a case study at Goodwin Wildlife Management Area", Adaptive Resource Management Conference Series, Gainesville FL. **[Presented]**

34. Dorazio, R.M., (1999) "Estimation of individual growth rates from the sizes of recaptured fish, mollusks, and other Earthly beasts: problems, promises, and reality", U.S. Geological Survey, Center for Coastal Geology, St. Petersburg FL. **[Invited]**

33. Fabrizio, M.C., R.M. Dorazio, and S.T. Schram, (1999) "Modeling individual growth variability in a recovering population of tagged lake trout", Annual Meeting, American Fisheries Society, Charlotte NC. **[Invited]**

32. Dorazio, R.M. and H.N. Blalock, (1999) "A hierarchical Bayes approach for small-area estimation based on counts observed in multistage surveys", Annual Spring Meeting, International Biometric Society, Atlanta GA. **[Presented]**

31. Dorazio, R.M. and H.N. Blalock, (1999) "Multistage sampling designs and hierarchical models for estimating the abundance of mussels in streams", First Symposium of the Freshwater Mollusk Conservation Society, Chattanooga TN. **[Presented]**

30. Kernaghan, N.J., D.S. Ruessler, R.M. Dorazio, and T.S. Gross, (1999) "The effect of contaminants in host fish on the survival of juvenile freshwater mussels (Unionidae)", First Symposium of the Freshwater Mollusk Conservation Society, Chattanooga TN.

29. Kernaghan, N.J., D.S. Ruessler, R.M. Dorazio, and T.S. Gross, (1998) "The effect of contaminants in host fish on the survival of juvenile freshwater mussels (Unionidae)", Annual Meeting, Society of Environmental Toxicology and Chemistry, Charlotte NC.

28. Dorazio, R.M., (1997) "Statistical inference from surveys of freshwater mollusks and their environment", Annual Meeting, North American Benthological Society, San Marcos TX. **[Invited]**

27. Dorazio, R.M., (1997) "Statistical inference from surveys of freshwater mollusks and their environment", Freshwater Mollusks as Indicators of Water Quality: A Workshop, U.S. Geological Survey, Atlanta GA. **[Invited]**.

26. Brim-Box, J., J.D. Williams, R.M. Dorazio, and C. O'Brien, (1995) "An investigation of freshwater mussels, fish, and fine sediments in the ACF Basin, with special emphasis on imperiled mussel species", Conservation and Management of Freshwater Mussels II: Initiatives for the Future (symposium), Upper Mississippi River Conservation Committee, St. Louis MO.

25. Dorazio, R.M., (1994) "Tag-recovery estimates of migration of striped bass from spawning areas of the Chesapeake Bay", Annual Meeting, American Fisheries Society, Halifax, Nova Scotia. **[Presented]**

24. Dorazio, R.M., (1993) "Virtual population analysis of the Albemarle/Roanoke stock and implications for fisheries management", Annual Workshop, Emergency Striped Bass Study Research Workshop, Annapolis MD. **[Presented]**.

23. Dorazio, R.M., (1992) "Survival and recovery rates of Atlantic striped bass estimated from

recoveries of fish tagged during 1986-1991", Annual Meeting, Northeast Fish and Wildlife Conference, American Fisheries Society, Norfolk, VA. [Presented]

22. Dorazio, R.M., (1992) "Pre-release stratification in tag-recovery models", Annual Workshop, Emergency Striped Bass Study Research Workshop, Norfolk VA. [Presented]

21. Dorazio, R.M., (1992) "Analysis of tag recoveries from migratory populations of striped bass", Versar Incorporated, Columbia MD. [Presented]

20. Dorazio, R.M., (1991) "Population dynamics of striped bass in the Roanoke River/Albemarle Sound estuary: 1. Rates of total mortality and exploitation estimated from W.W. Hassler's tag-recovery data", North Carolina Striped Bass Study Management Board, Raleigh NC. [Presented]

19. Dorazio, R.M., (1991) "Survival and recovery of Chesapeake stocked fish during the first 3 years at large", Annual Workshop, Emergency Striped Bass Study Research Workshop, Norfolk VA. [Presented]

18. Dorazio, R.M., B.M. Florence, and C.M. Wooley, (1990) "Mortality and abundance estimates of wild and hatchery-reared young-of-the-year striped bass in the Patuxent River, Maryland", Annual Meeting, American Fisheries Society, Pittsburgh PA. [Presented]

17. Dorazio, R.M., (1990) "The coastwide migratory striped bass tagging program", Multiagency Workshop, Enhancing Catch/Tag and Release Fishing in the Northeast Region: Issues, Concerns, Potential, Woods Hole MA. **[Invited]**

16. Schill, W.B., and R.M. Dorazio, (1990) "Immunological discrimination of Atlantic striped bass stocks", Annual Workshop, Emergency Striped Bass Study Research Workshop, Mystic CT. [Presented]

15. Dorazio, R.M., B.M. Florence, and C.M. Wooley, (1990) "Mortality and abundance estimates of wild and hatchery-reared young-of-the-year striped bass in the Patuxent River, Maryland", Annual Workshop, Emergency Striped Bass Study Research Workshop, Mystic, CT. [Presented]

14. Dorazio, R.M., and P.J. Rago, (1989) "A preliminary summary of 1988 recovery data from striped bass marked during the coastwide, cooperative tagging program", Annual Workshop, Emergency Striped Bass Study Research Workshop, Richmond VA. [Presented]

13. Rago, P.J., and R.M. Dorazio, (1988) "Non-equilibrium analysis of the Maryland striped bass population", Annual Workshop, Emergency Striped Bass Study Research Workshop, Norfolk VA. [Presented]

12. Dorazio, R.M., (1988) "An equilibrium analysis of the Maryland striped bass population", Annual Workshop, Emergency Striped Bass Study Research Workshop, Norfolk VA. [Presented]

11. Dorazio, R.M., and P.J. Rago, (1988) "Prediction of maximum allowable fishing mortality rates for anadromous striped bass of Chesapeake Bay", Annual Meeting, Northeast Fish and Wildlife Conference, American Fisheries Society, White Sulfur Springs WV. [Presented]

10. Dorazio, R.M., and P.J. Rago, (1988) "Estimation of region-specific rates of fishing mortality and migration using tag returns in adjacent fisheries", Annual Meeting, Northeast Fish and Wildlife Conference, American Fisheries Society, White Sulfur Springs WV. [Presented]

9. Dorazio, R.M., and P.J. Rago, (1988) "Estimation of region-specific rates of fishing mortality and migration using tag returns in adjacent fisheries", International Symposium and Educational

Workshop on Fish-Marking Techniques, American Fisheries Society, Seattle WA. [Presented]

8. Bowers, J.A., R.W. Gensemer, and R.M. Dorazio, (1987) "The role of diel vertical migration in the predator-prey relationships between Mysis relicta and Cladocera in Lake Michigan", Annual Meeting, American Society of Limnology and Oceanography, Madison WI.

7. Dorazio, R.M., and J.T. Lehman, (1987) "Vertical migration by zooplankton balances phytoplankton grazing losses and growth rates in Lake Michigan", Annual Meeting, American Society of Limnology and Oceanography, Madison WI. [Presented]

6. Dorazio, R.M., J.A. Bowers, and J.T. Lehman, (1986) "Food limitation and patterns of resource utilization by Daphnia and Diptomus in Lake Michigan", Annual Meeting, American Society of Limnology and Oceanography, Kingston RI. [Presented]

5. Kilham, P., and R.M. Dorazio, (1985) "Sulfate in African inland waters: geochemical processes governing the loss of sulfur", Annual Meeting, American Society of Limnology and Oceanography, Minneapolis MN. [Presented]

4. Dorazio, R.M., (1984) "Analyzing the seasonal succession of rotifers in a small Michigan lake with enclosure experiments", Annual Meeting, American Society of Limnology and Oceanography, Vancouver, British Columbia. [Presented]

3. Dorazio, R.M., (1983) "Analyzing the growth and decline of populations of the rotifer Asplanchna", Annual Meeting, American Society of Limnology and Oceanography, St. John's, Newfoundland. [Presented]

2. Dorazio, R.M., (1982) "Optimal life-history tactics predicted by an age-structured model of zooplankton populations", National Oceanic and Atmospheric Association, Great Lakes Environmental Research Laboratory, Ann Arbor MI. [Presented]

1. Lehman, J.T., and R.M. Dorazio, (1980) "An age-structured model of zooplankton dynamics", Annual Meeting, American Society of Limnology and Oceanography, Knoxville TN. [Presented]

Teaching Experience 教学经历

- 1 Spring 2019: Introduction to Statistical Modeling, Analysis, and Design, **1-credit course. (1 学分课程)** Dept. of Biology, San Francisco State University, San Francisco CA.
- 2 Nov 2017: Bayesian Species Distribution Modeling, 2.5-day workshop. Dept. of Wildlife Ecology and Conservation, University of Florida, Gainesville FL.
- 3 Nov 2016: Bayesian Species Distribution Modeling, 1.5-day workshop. School of Mathematical and Geospatial Sciences, Royal Melbourne Institute of Technology University, Melbourne, Australia.
- 4 Mar 2016: Analyzing Ecological Data with Hierarchical Models, 4-day workshop. Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami FL.
- 5 Dec 2015: Analyzing Ecological Data with Hierarchical Models, 5-day workshop. National Centre for Biological Sciences, Bangalore, India.
- 6 Sep 2013: Bayesian Inference and Hierarchical Modeling, 2-day workshop. Florida Atlantic University, Boca Raton FL.

- 7 Nov 2012: Introduction to Bayesian Inference, Guest lecture. Dept. of Wildlife Ecology and Conservation, University of Florida, Gainesville FL.
- 8 May 2012: Statistical Analysis of Data Using R, 2-day workshop. Dept. of Biology, San Francisco State University, San Francisco CA.
- 9 Feb 2012: Statistical Analysis of Data Using R, 2-day workshop. Florida Fish and Wildlife Research Institute, St. Petersburg FL.
- 10 Jan 2012: Applications of Linear Algebra Using R, Guest lecture. Dept. of Wildlife Ecology and Conservation, University of Florida, Gainesville FL.
- 11 May 2011: Introduction to R, 2-day workshop. Dept. of Statistics, University of Florida, Gainesville FL.
- 12 Dec 2010: Introduction to R, 1-day workshop. Dept. of Statistics, University of Florida, Gainesville FL.
- 13 Mar 2010: Introduction to R, 1-day workshop. Dept. of Statistics, University of Florida, Gainesville FL.
- 14 Fall 2007: Statistical Inference and Modeling for Research, **3-credit course.** (3 学分课程) Dept. of Statistics, University of Florida, Gainesville FL.
- 15 Sep 2007: Hierarchical Models in Ecology: inference in population, metapopulation, and community ecology, 5-day workshop. University of Zürich, Switzerland.
- 16 Oct 2006: Estimation of abundance, occupancy, and species richness in large-scale surveys, 4-day workshop. University of Zürich, Switzerland.
- 17 Nov 2005: Computing, Plotting, and Data Analysis in R: an introduction, 0.5-day workshop. Dept. of Statistics, University of Florida, Gainesville FL.

Impact factors of journals 发表杂志影响因子

15.24	Trends in Ecology and Evolution
7.090	Methods in Ecology and Evolution
7.049	Molecular Ecology Resources
6.350	Analytical Chemistry
5.780	Journal of Applied Ecology
5.667	Global Ecology and Biogeography
4.847	Proceedings of the Royal Society B
4.378	Ecological Applications
4.285	Ecology
3.478	International Journal for Parasitology
3.404	Freshwater Biology
3.057	PLOS ONE
2.915	Oecologia
2.706	Journal of the North American Benthological Society
2.567	Canadian Journal of Fisheries and Aquatic Sciences

2.325	Hydrobiologia
2.297	Journal of the American Statistical Association
2.122	Endangered Species Research
1.954	Regulated Rivers
1.897	Journal of Plankton Research
1.881	Journal of Wildlife Management
1.854	Wetlands
1.790	Journal of Computational and Graphical Statistics
1.755	Biometrics
1.563	Transactions of the American Fisheries Society
1.512	Population Ecology
1.511	North American Journal of Fisheries Management
1.472	Journal of Ornithology
1.333	Herpetologica
1.226	Environmental Biology of Fishes
1.203	Journal of Agricultural, Biological, and Environmental Statistics
1.019	Natural Resource Modeling
0.900	Journal of Tropical Ecology
0.759	Environmental and Ecological Statistics
0.756	Journal of Statistical Planning and Inference
0.429	African Journal of Herpetology

Reviews as associate editors and reviewers 作为副编辑和审阅者

Associate Editor, Transactions of the American Fisheries Society, American Fisheries Society, 1992–1994

副主编，美国渔业协会会刊，美国渔业学会，1992–1994

Associate Editor, Biometrics, International Biometric Society, 2006–2014

副主编，生物识别技术，国际生物识别学会，2006–2014

Associate Editor, Sankhya, Indian Statistical Institute, 2008–2009

副主编，Sankhya，印度统计研究所，2008–2009

No.	Name of journal or organization	No. reviews
1	Acta Oecologia	1
2	Animal Conservation	1
3	Annals of Applied Statistics	6
4	Archiv fur Hydrobiologie	1
5	Biological Conservation	1
6	Biometrics	6
7	Biometrics	60
8	Biomolecular Detection and Quantification	2

9	Canadian Journal of Fisheries and Aquatic Sciences	3
10	Conservation Genetics Resources	2
11	Diversity and Distributions	1
12	Ecography	2
13	Ecological Applications	10
14	Ecology	12
15	Ecology and Evolution	2
16	Environmental and Ecological Statistics	4
17	Environmetrics	2
18	Fish and Fisheries	1
19	Global Ecology and Biogeography	2
20	Journal of Agricultural, Biological, and Environmental Statistics	5
21	Journal of the American Statistical Association	1
22	Journal of Animal Ecology	4
23	Journal of Applied Ecology	6
24	Journal of Herpetology	1
25	Journal of the North American Benthological Society	1
26	Journal of Ornithology	2
27	Journal of the Royal Statistical Society, Series A	1
28	Journal of the Royal Statistical Society, Series B	1
29	Journal of Statistical Planning and Inference	3
30	Journal of Theoretical Biology	1
31	Journal of Wildlife Management	3
32	Methods in Ecology and Evolution	16
33	Molecular Ecology Resources	2
34	Marine Mammal Science	1
35	North American Journal of Fisheries Management	1
36	Nature Communications	1
37	Oecologia	2
38	Oikos	1
39	Plos One	5
40	Population Ecology	1
41	Statistica Sinica	2
42	Statistics in Medicine	1
43	Statistical Modelling	1
44	Theoretical Population Biology	1
45	Transactions of the American Fisheries Society	1
46	Trends in Ecology and Evolution	1
47	U.S. Geological Survey	23
	TOTAL	208