

**Curriculum Vitae**

**of**

**Dr. Georgios D. Kokkoris**

## Curriculum Vitae

**Dr. Georgios D. Kokkoris**

### Home Address

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### Job Address

Dept. of Marine Sciences  
Faculty of Environment  
University of the Aegean  
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### **PERSONAL DATA**

Date of Birth: 29-09-1963  
Marital Status: Married, father of two children  
Military obligations: Fulfilled (1/1991 – 8/1992)

### **PRESENT POSITION**

Assistant Professor, Statistical and Mathematical Ecology, Dept. of Marine Sciences, University of the Aegean, Mytilene, Lesvos Island, Greece. Since October 2003.

### **EDUCATION**

- *Post-Doctoral Positions*
  - ▶ Laboratoire d'Ecologie, Ecole Normale Supérieure, Paris, France. Research carried out: "Mathematical models of biological invasions in space". Supervisor: Professor Michel Loreau. October - December 2001.
  - ▶ Laboratoire d'Ecologie, Ecole Normale Supérieure, Paris, France. Research carried out: "Phenomenological and Mechanistic Models of Biological Invasions and Community Assembly: From Community to Ecosystem Level of Organization". Supervisor: Professor Michel Loreau. April - July 2000.
  - ▶ Biodiversity Conservation Lab, Dept. of Environmental Sciences, University of the Aegean, Mytilene, Greece. Research carried out: "EPIDEMIE - Exotic Plant Invasions: Deleterious Effects on Mediterranean Island Ecosystems". Supervisors: P.E. Hulme, A.Y. Troumbis. February 2001 – August 2002.
- *Doctorate (Ph.D.) in Environmental Sciences*, Biodiversity Conservation Laboratory, Section of Ecosystem Management, Department of Environmental Studies, University of the Aegean, Mytilene, Greece. June 1999. Dissertation Title: "Biological Invasions, Assembly Rules and Dynamics of competition communities: Theoretical Study Using Simulations." Supervisor: Professor A. Y. Troumbis.
- *M.S. in Mathematics*, University of Tennessee, Knoxville, USA, December 1990. Thesis Title: "Effects of temperature on growth and other physiological parameters of *Daphnia magna*" Supervisor: Professor T. G. Hallam.
- *Ptychion (B.S.) in Mathematics*, University of Patras, Greece, July 1987.

## PUBLICATIONS

### BOOKS

1. Dimitrakopoulos P. G., Matsinos Y. **Kokkoris G. D.**, Koutsoubas D. (eds). 2006. *Proceedings of the Annual Conference of the Hellenic Ecological Society*. V. Giourdas. ISBN 960-387-432-9. (In Greek)
2. **Kokkoris G. D.**, Dimitrakopoulos P. G., Dalias P. 2005. Biological Diversity. Ministry of Environment. ISBN 960-7284-19-4. (In Greek)

### PAPERS

1. Giakoumi, S., Cebrian, E. , **Kokkoris, G.D.** Ballesteros, E. and Sala, E. (In Press). The structure of shallow rocky sublittoral communities in the Cyclades, Eastern Mediterranean: Relationships between fish, sea urchins and macroalgae. *Estuarine Coastal and Shelf Sciences*

Impact Factor: 1.970

Citations SCI: ,

2. Spatharis, S., Roelke, D.L. Dimitrakopoulos, P.G. and **Kokkoris, G.D.** 2011. Analyzing the (mis)behavior of Shannon index in eutrophication studies using field and simulated phytoplankton assemblages. *Ecological Indicators* 11: 697-703.

Impact Factor: 3.102

Citations SCI:

3. Giakoumi, S., Grantham, H.S., **Kokkoris, G.D.** and Possingham H.P. 2011. Designing an efficient network of marine reserves in the Mediterranean sea with limited socio-economic data. *Biological Conservation* 144: 753-763.

Impact Factor: 3.714

Citations SCI:

4. Primpas I, Tsirtsis G. Karydis M. and **Kokkoris G.D.** 2010. Principal component analysis: Development of a multivariate index for assessing eutrophication according to the European water framework directive. *Ecological Indicators* 10(2): 178-183.

Impact Factor: 3.102

Citations SCI: 5

5. Christianou, M., **Kokkoris, G.D.** 2008. Complexity does not affect stability in feasible model communities. *Journal of Theoretical Biology* 253(1): 162-169.

Impact Factor: 3.714

Citations SCI: 3

Comments published by peers: Exceptional (8,0)

Faculty of 1000 Biology: evaluations for Christianou M & Kokkoris GD *J Theor Biol* 2008 Mar 18 : <http://www.f1000biology.com/article/id/1105270/evaluation>

6. **Kokkoris G. D.** 2005. Population Dynamics and Food Webs: Drifting Away from the Lotka-Volterra Paradigm. pp. 71-73 in de Ruiter P.C., Wolters V., and Moore

J. C. (eds) *Dynamic Food Webs: Multispecies Assemblages, Ecosystem Development and Environmental Change*. Academic Press.

7. Dell A., **Kokkoris G. D.**, Banasek-Richter C., Bersier L.-F., Dunne J. A., Kondoh K., Romanuk T. N. and Martinez N. D. 2005. How do complex food webs persist in nature? pp. 425-436 in de Ruiter P.C., Wolters V., and Moore J. C. (eds) *Dynamic Food Webs: Multispecies Assemblages, Ecosystem Development and Environmental Change*. Academic Press.

Citations: 4

8. Sabo J. L., Beisner B. E. Berlow E. L., Cuddington K., Hastings A., Koen-Alonso M., **Kokkoris G. D.**, McCann K., Melian C., and Moore J. C. 2005. Population Dynamics and Food Web Structure – Predicting Measurable Food Web Properties with Minimal Detail and Resolution. pp. 437-450 in de Ruiter P.C., Wolters V., and Moore J. C. (eds) *Dynamic Food Webs: Multispecies Assemblages, Ecosystem Development and Environmental Change*. Academic Press.

Citations: 4

9. Berlow E. L., Neutel A-M, Cohen J. E., DeRuiter P., Ebeman B., Emmerson M., Fox J. W., Jansen V. A. A., Jones J. I., **Kokkoris G. D.**, Logofet D. O., McKane A. J., Montoya J. M., Petchey O. 2004. Interaction Strengths in Food Webs: Issues and Opportunities. *Journal of Animal Ecology* **73**: 585-598.

Impact Factor: 3.714

Citations SCI: 136

10. Jansen, V.A.A., **Kokkoris, G.D.** 2003. Complexity and stability revisited. *Ecology Letters* **6**(6): 498-502.

Impact Factor: 10.318

Citations: SCI: 40

11. Dalias, P., **Kokkoris, G.D.**, Troumbis, A.Y. 2003. Functional shift hypothesis and the relationship between temperature and soil carbon accumulation. *Biology and Fertility of Soils* **37**(2): 90-95.

Impact Factor: 1.757

Citations: SCI: 10

12. Troumbis, A.Y., Galanidis, A., **Kokkoris, G.D.** 2002. Components of short-term invasibility in experimental Mediterranean grasslands. *Oikos* **98**(2): 239-250.

Impact Factor: 3.147

Citations: SCI: 26,

13. **Kokkoris G.D.**, Jansen, V.A.A., Loreau, M., Troumbis, A.Y. 2002. Variability in interaction strength and implications for biodiversity. *Journal of Animal Ecology* **71**(2): 362-371.

Impact Factor: 3.714

Citations SCI: 47

14. **Kokkoris G.D.**, Troumbis, A.Y., Lawton, J.H. 1999. Patterns of Species Interaction Strength in Assembled Theoretical Competition Communities. *Ecology Letters* **2**(2): 70-74.

## OTHER PUBLICATIONS & INVITED LECTURES

15. Spatharis, S., Roelke, D.L., Dimitrakopoulos, P.G. and **Kokkoris, G.D.** 2010. Shannon diversity index: Analysis of its behavior and its relationship to productivity. 5<sup>th</sup> National Ecology Conference, Patras, Greece. October 2010.
16. Giakoumi, S., **Kokkoris, G.D.** 2010. Designing a network of marine reserves subjected to different human constraints: The Cyclades archipelago case study. 39<sup>th</sup> CIESM Congress. Venice, Italy. May 2010.
17. Giakoumi, S.P., Sini, M., **Kokkoris, G.D.** 2009. Structure of a shallow sublittoral fish community and its relationships to sea urchin and algal populations in Eastern Mediterranean. 10<sup>th</sup> International Congress of Ecology. Brisbane, Australia. August 2009.
18. Siamantzouras A. D., **Kokkoris G. D.**, Troumbis A. Y. 2008. Diversity-productivity patterns in experimental and natural Mediterranean grasslands. *Proceedings of the 2008 European Ecological Congress*. Leipzig, Germany September 2008. (Abstract).
19. Zervou, N., **Kokkoris G. D.** 2007. Fish invasions in the Mediterranean: The empty niche hypothesis. *Proceedings of the 13<sup>th</sup> Greek Conference of Ichthyologists: Aquatic Biological Resources and Ecosystems*. Mytilene, Greece. September 2007. (In Greek with a summary in English)
20. **Kokkoris G. D.** 2006. Complexity and stability relations in ecology with a particular emphasis on the role of interaction strength. International Conference *Biodiversity and Dynamics of Communities and Ecosystems: Structure, Processes and Mechanisms*. Osaka, Japan. March 2006. (Abstract). Invited Lecture.
21. Bazigou F., Teneketzis K., Margaritoulis D., **Kokkoris G. D.**, Koutsoubas D. 2006. Contribution to the study of nesting activity of the sea turtle *Caretta caretta* in the coasts of Koroni (SW Peloponnese, Ionian Sea), during the year 2003. In Dimitrakopoulos P. G., Matsinos Y. **Kokkoris G. D.**, Koutsoubas D. (eds). 2006. *Proceedings of the Annual Conference of the Hellenic Ecological Society*. V. Giourdas. ISBN 960-387-432-9. (In Greek with a summary in English)
22. Dimitriadis Ch., Koutsoubas D., **Kokkoris G. D.** Papadopoulou K. N., Karakassis I. 2005. Benthic Diversity Assessment Techniques in Coastal Areas with Aquaculture Activity. *Proceedings of the X European Ecological Congress*. Kusadasi, Turkey, November 2005 (Abstract).
23. **Kokkoris G.D.** 2004. Assembly mechanics, community properties and regional species pools. International Conference *LINKing Community and Ecosystem ECOlogy: Recent advances and future challenges* , Palma de Mallorca, Spain. May 2004. (Abstract). Invited Lecture.
24. Emmerson M. and **Kokkoris G. D.** 2003. Interaction Strengths in Food Webs. *Bulletin of the British Ecological Society*. **34**(1): 32.

25. **Kokkoris G.D.** 2003. Are Ecosystems complex adaptive systems? Presentation in the Workshop on *Ecosystem Evolution and Evolution in Ecosystems*. Ekenas, Sweden. June 2003. Invited Lecture.
26. **Kokkoris G.D.** 2003. Complexity and Stability: Three Decades Later. Presentation at the Annual Conference of the Hellenic Ecological Society. Thessaloniki, August 2003. (Abstract).
27. M. Vilà, J. Bohac, J. Dick, A. Hector, J. Joshi, I. Hanouskova, **G.D. Kokkoris**, J. Pereira, D. Prati, and F. Zemek. 2002. Report of the Working Group on Biological Invasions. ESF Review Meeting, Ceske Budejovice, Czech Republic, April 25-27, 2002
28. **Kokkoris G.D.**, Troumbis, A.Y. and Lawton, J.H. 2002. Community Level Competition: Some Theoretical Considerations. Proceedings of the World Congress on Natural Resource Modelling: Modelling Natural and Biotic Resources in a Changing Planet (Abstract). Sigri, Lesvos Island.
29. Troumbis A.Y. and **Kokkoris G.D.** 1999. Biological Invasions and Community Assembly: Does Competitive Hierarchy Matter? Proceedings of the 8<sup>th</sup> European Ecological Congress, Halkidiki, Greece.
30. Matsinos, Y.G. and **Kokkoris G.D.** 1998. From Disciplinary to Interdisciplinary: Challenges in Teaching Applied Mathematics Courses to Environmental Sciences Majors. Proceedings of the International Conference on the Teaching of Mathematics. Pythagorion, Samos, Greece. John Wiley pp. 209-211.
31. **Kokkoris G.D.**, Troumbis, A.Y. 1998. Species Interactions Strength: Novel Ideas and Optimization in Community Assembly. In Proceedings of the 12<sup>th</sup> National Conference of the Hellenic Society of Operation Research. Pythagorion, Samos, Greece. (In Greek with a summary in English).
32. **Kokkoris G.D.**, Christianou, M. Troumbis, A.Y. and Lawton, J.H. 1997. Biological Invasions of Competing Species: a Contribution to the Study of Community Assembly. In Th. Lekkas (ed.), Proceedings of the 5<sup>th</sup> Conference on Environmental Science and Technology. Molyvos, Lesbos, Greece.
33. Tzatzanis, M. A., Troumbis, A. Y., Akriotis, T., and **Kokkoris, G. D.** 1997. The Role of Assembly Rules in Avian Communities in the Aegean Archipelago. In Th. Lekkas (ed.), Proceedings of the 5<sup>th</sup> Conference on Environmental Science and Technology. Molyvos, Lesbos, Greece.
34. **Kokkoris G.D.** 1995. The Effects of Temperature on the Physiology of *Daphnia magna*. In T. Lekkas (ed.) Proceedings of the 4<sup>th</sup> Conference on Environmental Science and Technology. Vol. A pp. 667-674. Molyvos, Lesbos, Greece. (In Greek with a summary in English).

#### **OTHER PUBLICATIONS (of general interest)**

- Kokkoris G.D. 1993. Communities: Complexity and Stability. *Nea Oikologia* issue 99: 48-51 (In Greek).

My Research has been presented in national and local newspapers, television and radio stations

## **RESEARCH INTERESTS**

Mathematical Models in Ecology, Biological Invasions, Conservation Biology, Community Assembly, Null Models in Ecology.

## **SCHOLARSHIPS - FELLOWSHIPS**

- *Post-Doctoral Fellowship* by the Centre National de la Recherche Scientifique to visit the Laboratoire d'Ecologie, Ecole Normale Supérieure, Paris, France. Title of the research project: *Mathematical Models of Biological Invasions in Space*. Host: Professor Michel Loreau. October to December 2001.
- European Science Foundation (Scientific Programme in Linking Community and Ecosystem Ecology) to visit the Laboratoire d' Ecologie, Ecole Normale Supérieure, Paris, France. Title of the research project: *Phenomenological and Mechanistic Models of Biological Invasions and Community Assembly: From Community to Ecosystem Level of Organization*. Host: Professor Michel Loreau. April to July 2000.
- *Fellowship* by the European Science Foundation (Scientific Programme in Population Biology) to visit the Centre for Population Biology, Imperial College, University of London, UK. Title of the research project: *Stability and Permanence of Species in Ecological Communities: The Case for Biological Invasions* Host: Professor John H. Lawton. April to June 1996.
- *Scholarship* by The British Council, Greece, for the attendance of the “*Advances in Ecology*” short course presented by the Dept. of Biology, Imperial College, University of London, UK. May 1995.
- *Graduate Teaching Associateship*, Dept. of Mathematics, University of Tennessee, Knoxville, USA September 1987 to May 1990.

## **DISTINCTIONS - AWARDS**

- Member of the Scientific and Coordinating Committee of the European Network *International Advancement of Community Ecology Theory (INTERACT)*. December 2001 – December 2004. Funded by the European Science Foundation - Life and Environmental Sciences Committee.
- Member of the European Research Network *Biodiversity and Ecosystem Processes in Terrestrial Herbaceous Ecosystems (BIODEPTH)*. The Network was a finalist for the Pan-European Science Award DESCARTES. Funded by the EU DGXII Environment and Climate Programme - Terrestrial Ecosystem Research Initiative. Contract No. ENV4-CT95-0008, 1996-1999.

## **TEACHING EXPERIENCE**

### WITH FULL RESPONSIBILITY

- Dept. of Marine Sciences, University of the Aegean. Mytilene, Lesbos Island. Since October 2003.

Graduate Programme “Coastal Areas Management”

### Courses Taught:

1. Applications of Quantitative Methods in Coastal Zone Management

Graduate Programme “Biodiversity Conservation”, in association with University of Montpellier II, France

### Courses Taught:

## 2. Theoretical Ecology

### Undergraduate programme

#### Courses Taught:

1. Statistics
2. Environmental Data Analysis
3. Quantitative Ecology

- Dept. of Sciences in Pre-School Education and Educational Design, Rhodes. University of the Aegean. October 2004 – February 2005.

### Graduate Programme “Environmental Education”

#### Courses Taught:

1. Introduction to Environmental Sciences

- Dept. of Mathematics, University of the Aegean. Karlovassi, Samos Island. February 2002 – August 2002.

### Graduate Programme “Mathematical Modelling in Natural Sciences”

#### Courses Taught:

1. Mathematical Models in Biological Sciences,
2. Mathematical Models in Environmental Sciences

- Dept. of Environmental Studies, University of the Aegean. Mytilene, Lesvos Island. September 1999 – January 2002.

### Undergraduate programme

#### Courses Taught:

1. General Ecology,
2. Biogeography.

- *Teaching associate*, Department of Mathematics, University of Tennessee, Knoxville, USA. September 1988 to July 1990

Courses Taught: Freshman and sophomore courses in mathematics for business, science and life sciences majors: Calculus, Ordinary Differential Equations, Calculus for Life Sciences, Calculus for Business, Statistics.

- *Mathematics Teacher*, Private High School “Platon”. Mytilene. September 1996 - August 1998.

- *Instructor*, Institute of Vocational Training (I.E.K.) of Mytilene.

Courses Taught: Actuarial Mathematics, Word Processing, UNIX, Data Structures, Database for Windows, Introduction in Computing. November 1993 – June 1999.

### AS AN ASSISTANT

- *Teaching Assistant*, Dept. of Environmental Studies, University of the Aegean, Mytilene.

Courses Taught: Introduction to Ecology, Population Ecology, Community Ecology. October 1993 – June 1999.

- *Teaching Assistant*, Department of Mathematics, University of Tennessee, Knoxville, USA. September 1987 to July 1988

Courses Taught: Mathematics of Finance Freshman and sophomore courses in mathematics for business, science and life sciences majors: Calculus, Calculus for Life Sciences, Calculus for Business, Mathematics of Finance.

*Instructor and Program Assistant*

School for International Training, College Semester Abroad, Lesbos Island, Greece.  
October 1993 – June 1999.

### **REFeree FOR SCIENTIFIC JOURNALS**

American Naturalist

Ecology Letters

Ecological Complexity

Journal of Animal Ecology

Journal of Theoretical Biology

Oikos

### **REFeree FOR OTHER ORGANISATIONS**

European Commission, DG Research (since 2004)

Natural Environment Research Council, United Kingdom (since 2004)

### **SPECIAL GRADUATE COURSES ATTENDED**

(University of the Aegean, Imperial College-University of London)

“Advances in Ecology” short course

"Scientific Writing" short course

### **PROFESSIONAL ACTIVITIES**

Participation in Research Projects:

- *Design of a Network of Marine Protected Areas in Cyclades, Aegean Archipelago, Greece (2007-2009).* Director of Research G. D. Kokkoris. Funding by the Prefecture of Cyclades
- *Assesment of Migration Pattern of Large Fish species in the Aegean Sea. (2006-2008).* Researcher. Funded by EU and Greek Government.
- *Development of an Integrated Management System to support the sustainability of Greek Fisheries resources (IMAS-Fish). (2003-2006).* Researcher. Funding by EU and Greek Government.
- *EPIDEMIE - Exotic Plant Invasions: Deleterious Effects on Mediterranean Island Ecosystems (2001-2003):* Funded by EU DGXII Environment and Climate Programme - Terrestrial Ecosystem Research Initiative.
- *BIODEPTH - Biodiversity and Ecosystem Processes in Terrestrial Herbaceous Ecosystems (1996-1999).* Funded by EU DGXII Environment and Climate Programme - Terrestrial Ecosystem Research Initiative. Contract No. ENV4-CT95-0008.
- *Biological Invasions and Community Assembly. (1998).* Funded by the Research Committee of the University of the Aegean.
- *Development of a methodology for the design of a Network of Protected Areas In the NE Aegean and of an ecological database in order to improve the tools*

of an environmental policy for the protection of species and biotopes. (1995).  
Funded by the Research Committee of the University of the Aegean.

## **WORKING EXPERIENCE**

Scientific Advisor to the Minister of Environment of the Hellenic Government, November 2002 – March 2004. Responsibilities: Protection and Conservation of the Marine Environment, Biodiversity, GMO's.

## **OTHER INVITED PARTICIPATIONS IN CONFERENCES AND WORKSHOPS**

International Workshop *Body size, interaction strength, food web dynamics and community assembly*. York, UK. April 2001. Organised by Richard Law, Mark Emmerson and David Raffaelli.

International Workshop *Biodiversity and Ecosystem Processes: Theory and Modelling*. Silwood Park, UK. June 1997. Organised by J.H. Lawton, M. Loreau and S. Pacala. Sponsored by NERC, CNRS and NASA.

## **LECTURES SEMINARS GIVEN**

- *Complexity, stability and interaction strength*. York Center for Complex Systems Analysis. University of York, York, UK. May 2007.
- *Biofuels: Their ecological consequences*. Center of Environmental Education of Kastoria. May 2010.
- *Climate Change and Biodiversity*. Center of Environmental Education of Kastoria. May 2008.
- *Biological Diversity: Threats and Benefits*. Center of Environmental Education of Kastoria. May 2007.
- *Applications of Mathematics: The Case of Ecology*. Greek Mathematical Society. Polichnitos, Lesvos, Greece. May 2007.
- *Biodiversity-stability and Natural Ecosystems*. Department of Biological Applications and Technologies, University of Ioannina, Greece. May 2006.
- *Introduction to Biological Diversity*. Center of Environmental Education of Kastoria. May 2006.
- *Species interaction strengths and biodiversity*. Laboratoire d'Ecologie, Ecole Normale Supérieure, Paris, France. December 2001.

## **COMPUTING EXPERIENCE**

*Programming* in FORTRAN.

*Operating Systems*: Windows, UNIX.

*Word Processing*: Word.

*Spreadsheets*: Excel.

*Databases*: Access.

*Other*: Mathematica, SPSS, Statistica.

## **LANGUAGES**

Greek (native speaker), English (fluent), Spanish and French (working knowledge).

**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**

Ecological Society of America  
American Society of Naturalists  
Hellenic Mathematical Society

**EXTRACURRICULAR ACTIVITIES**

President, Hellenic Student and Scholar Association, University of Tennessee,  
(September 1989 to August 1990).