



Spring
2008

RMA Newsletter

Resource Modeling Association

www.resourcemodeling.org

From the President's Desk

— Bob Fray

This has been a year of significant changes in the Resource Modeling Association. Our new relationship with the Wiley-Blackwell Publishing Company will most definitely impact our journal, *Natural Resource Modeling* (NRM), in a positive way, and will probably affect the Association itself in a healthy manner.

These changes all began about two years ago with the efforts of Catherine Roberts, editor of NRM, to improve the journal. She assessed our relationship with the Rocky Mountain Mathematics Consortium (RMMC) and also investigated the possibility of contracting with a commercial publisher. This search led her to conversations with Blackwell Publishing Ltd. and with other small professional societies whose journals were published by Blackwell. After a thorough study she became convinced that such a relationship would benefit NRM. We began discussions with Blackwell, but soon thereafter, Blackwell was purchased by John Wiley & Sons, Inc. As a result, the discussions with Blackwell were suspended while the merged company reorganized.

At our conference last summer on Cape Cod, Anne-Marie Green from the merged Wiley-Blackwell Publisher attended a meeting of RMA's board and said that they were very interested in publishing NRM and ready to resume negotiations. On August 28, Catherine, Rollie Lamberson and I met in Boston with several individuals from Wiley-Blackwell to work out the basis for an agreement.

In order for Wiley-Blackwell to assume publication of NRM, it was necessary for them to have the copyright for our journal, which at that time was held by RMMC. This required the RMA to obtain the copyright from RMMC, then transfer it to Wiley-Blackwell, all of which was accomplished in late 2007. We greatly appreciate the assistance of the Consortium, especially their Executive Secretary, Tom Sherman, in helping us create the journal and working with us for twenty years to publish NRM.

The primary focus of the contract with Wiley-Blackwell is the publication of NRM, and, by now, you have seen the new form of the journal. The publisher will be initiating a marketing campaign to greatly increase the circulation of the journal. In addition to publishing the journal, Wiley-Blackwell will also assume the managing of the RMA membership, including sending out renewal notices. Incidentally, there are no current plans to increase the membership fee for RMA. The publisher will also be of assistance with our newsletter if we wish.

None of these changes would have occurred without

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2008 World Conference

Warsaw, Poland

June 15-19, 2008

— Chris Cieszewski and Mike Strub

The preparations for the conference in Warsaw are well underway. The conference will be held June 15 to 19 at the Warsaw University of Life Sciences. This is the oldest forestry-related faculty in Poland, being a successor of 1816-established Special Forestry School. The agenda for the conference includes an icebreaker social gathering and registration the evening of June 15. Papers will be presented June 16 and the morning of June 17. Attendees will tour historic Warsaw the afternoon of June 17. Finally June 18 will be presentations and business meeting with banquet in the evening. Oscar García, Ed Green and Kim Iles agreed to be our guest speakers from the North American continent. All our three speakers are exceptionally accomplished in their fields of expertise.

Oscar García is a Professor and Endowed Chair in Forest Growth and Yield at the University of Northern British Columbia, Canada. He received a professional forester degree (Ingeniero Forestal) and an M.Sc. in Mathematical Statistics & Operations Research from the University of Chile, and a Ph.D. in Forest Resources from the University of Georgia, USA. Between 1976 and 1992 he worked in New Zealand for the Forest Research Institute, developing forest management planning decision-support systems and being responsible for much of their plantation growth modeling program. Later, he led a Government/Industry cooperative eucalypt modeling project in Chile, and conducted forest planning research in Spain for the Galician Government. He occupied the Chair of Forest Mensuration at the Universidad Austral de Chile, and held Guest Professor position at the ENGREF in France, KVL in Denmark, and the Universidad Politécnica de Madrid in Spain.

Kim Iles is an expert in sampling and forest inventory and inventor of many new statistical estimators. He got his B.S. in Forest Management and M.Sc. in Forest Biometrics, from Oregon State University, and Ph.D. Forest Biometrics, from University of British Columbia in 1979. He was the Biometrician and Head of Growth and Yield Dept., MacMillan Bloedel Ltd., Nanaimo, B.C. for 12 years until 1991 and a consultant since then. He is the author of a textbook on Forest Inventory (now in second printing), and he was the principle inventory design consultant

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the indefatigable work of our editor, Catherine Roberts. Her tireless endeavors and cheerful demeanor have kept this whole process moving forward. The Resource Modeling Association will benefit greatly from her important contributions.

The other exciting event for our association is the upcoming World Conference on Natural Resource Modeling, which will be held at the Warsaw University of Life Sciences on June 15-18, 2008 in Warsaw, Poland. Chris Cieszewski, together with Mike Strub and their colleague Michal Zasada in War-

saw, have been working diligently to arrange a very special conference on resource modeling. The conference will begin with our usual reception on Sunday evening, June 15. Monday and Wednesday will be devoted to talks. Currently the invited addresses will be delivered by Professor Oscar Garcia of the University of Northern British Columbia, Professor Edwin J. Green, editor of Forest Science and Dr. Kim Iles, a consultant on forestry inventory; additional invited speakers will likely be added. On Tuesday afternoon there will be a tour of Old Warsaw, and the conference will end with our usual ban-

quet on Wednesday evening. In addition, there may be an all-day tour on Thursday, after the conclusion of the conference. Plans for this have not been completed at this time.

This conference promises to be a very special meeting of RMA, which is well-known for its interesting conferences. For more information, go to the R M A w e b s i t e a t <http://resourcemodeling.org>, then to Conferences. We all owe a debt of gratitude to Chris, Mike and Michal for their many hours of work organizing this conference.

Natural Resource Modeling

— Catherine A. Roberts, Editor

The journal Natural Resource Modeling has completed its move to a new publishing house, Wiley-Blackwell. The new website for the journal is <http://www.blackwellpublishing.com/nrm>. The first issue is already in print and the second is available online. If you haven't received your copy, please contact the journal at NRM@holycross.edu.

As you'll see, we've redesigned the cover and have included more information about the Resource Modeling Association in the journal. Papers that have been accepted for upcoming issues will now appear OnlineEarly. We will be represented at numerous conferences, beginning this spring. Our journal is being advertised to

subscribers of similar journals. A representative from Wiley-Blackwell will be in attendance at this summer's RMA conference in Poland. We are delighted to be included in Science Citation Index now, and our first impact factor rating will be calculated in 2009.

The editorial board has changed somewhat. We have a fully-formed Senior Advisory Council, made up of Linda JS Allen, Colin Clark, JM Cushing, Wayne M. Getz, Ray Hilborn, Roland Lamberson, Marc Mangel, Robert McKelvey and EJ Milner-Gulland. This group advises me on the appointments of new editors and on other matters related to our journal. We welcome some new people to the Editorial Board, as well. Peter WJ Baxter from the

University of Queensland in Australia will be handling conservation papers. Keith Criddle from the University of Alaska Fairbanks will be handling bioeconomics and marine policy papers. Suzanne Lenhart from the University of Tennessee will now be handling population and environmental modeling papers, and Olli Tahvonen from the Finnish Forest Research Institute will be handling resource economics and conservation papers. Visit the website to see a complete list of our editorial board.

I hope that you will continue to encourage your library to subscribe to NRM and that you will submit manuscripts to the journal.

(Conference, continued from page 1)

for the British Columbia Provincial Inventory design (this inventory covered an area of 100,000,000 hectares). Kim's specialties of Variable Plot Sampling and 3P sampling are the dominant inventory systems used in the North America. He has taught inventory techniques to several thousand professional cruisers on 3 continents, and is the major contributor to the Cruising and Inventory Newsletter published by John Bell & Associates. He has been a member of several committees of national standing, and has developed and introduced a number of innovations in cruising systems in North America.

Our third guest speaker is 3-term member of the Forest Science Editorial Board Ed Green, who will be also our host editor after the conference for the special issue of the Forest Science that will be dedicated to the papers pre-

sented at the conference. He's been the Forest Science Editor since 2004, when he was also elected as Fellow of ASA, and has since been re-appointed to serve a second term.

Ed received his BS in Forestry (76) and MS in Silviculture (79) from CESF, Syracuse. While pursuing MS in Silviculture, he took courses in sampling and regression from Mike Cunia, who shifted Ed's interests from Silviculture to Biometrics. Ed got his PhD from Virginia Tech under Harold Burkhart, and then joined Rutgers in 1981. At Rutgers Ed pursued his interest in Bayesian techniques and began to collaborate extensively with Bill Strawderman, a world-renowned expert in empirical Bayes methods, who drew Ed into becoming a more fully committed Bayesian. Ed is one of the founding members of the International Society for Bayesian Analysis.

Ed served 3 terms on the Editorial Board of Forest Science. In 2004 he was elected as Fellow of ASA and appointed Editor of Forest Science. He has since been re-appointed, and is the only Editor to serve a second term.

Ed will speak on Natural Resource Modeling — The View from Forest Science. In this presentation, he will discuss trends in modeling that he has observed as Associate Editor and Editor of Forest Science. He will include observations on where we've been and where we seem to be going.

Additional information about the meeting is available at <http://tyan.growthandyield.com/info/RMA2008.htm>

We look forward to meeting everyone in Warsaw in June.

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Student Reflections from CAPE COD 2007 CONFERENCE

— Joanna Bieri

At the 2007 RMA Conference we had a number of great lectures and a wide range of modeling topics were discussed. We also had the opportunity to hear three excellent keynote speakers, Marc Mangel, Colin Clark and Alan R. Ek.

Marc Mangel is an applied mathematics and statistics professor from the University of Southern California. His research focuses on mathematical and theoretical biology with a focus on using mathematical methods to solve biological and ecological problems. He talked at the RMA meeting about the Nature of Environmental Problems, focusing on the inherent difficulties encountered in resources modeling. Some of these difficulties include a lack of definitive formulation, no rule for when a problem is completely solved and a large amount of uncertainty. This makes solving resources problems very difficult and it makes it vital to think about how to use and interpret the data that is taken from ecological systems. Mangel talked about how a Bayesian Nonparametric approach can alleviate some of these problems and help to model the variability that is part of all natural resource models.

Colin Clark is an emeritus professor in the Department of Mathematics at the University of British Columbia. He has been a leader in resource modeling and currently studies behavioral ecology and economics of natural resources using dynamic optimization methods. He discussed Individual Quotas in Fisheries, how different management decisions can affect the behavior of fishermen and how we as scientists can model the effects of such management decisions. In particular, he discussed how TAC based management leads to a shortened fishing season and low economic benefits for fishermen whereas ITQ based management changes the fishermen's incentives and encourages cooperation. Although the ITQ model leads to questions regarding the equity of the system, the data analysis shows that it is preferable to TAC management both for the resource and the fishermen.

Alan R. Ek is a professor and head of the Department of Forest Resources at the University of Minnesota. His areas of research interest include development of forest regeneration models, survey and monitoring designs and long-term analysis of ecosystem trends. He spoke at the RMA meeting about Modeling for Resource Analysis, Planning and Environmental Review. The talk included a description of the environmental review process for large-scale forest based investments and suggestions for addressing the typical key questions involved in such a project. Work on these types of projects demands the integration of data from diverse sources, model synthesis, scenario development and impact assessment and it is important to make good choices in modeling approaches, error handling and reporting.

— Lisa Melanson and Andrew Kanarek

Amongst the quaint cabins of the Craigville Conference Center in Cape Cod, Massachusetts, the student attendees of the 2007 World Conference on Natural Resource Modeling had an invaluable opportunity to present their research and get feedback, network with fellow students and professionals, and learn about opportunities within the association, industry, and academia. From sitting on the village green with the founding members listening to their beginnings in resource modeling to discussing research interests over lobster, the conference provided a uniquely informal atmosphere in which students were able to share ideas and get a taste for a future in this field.

Following a night of wine, cheese, and introductions, the Conference kicked off with Keynote addresses by two of the most

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2009 RMA Conference Announcement

Please mark your calendar for the 2009 RMA
Conference, June 17-19, in Juneau, Alaska.



Are your 2008 RMA dues paid?

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influential and noteworthy contributors to the field of bioeconomics. These talks provided historical insight into resource modeling from its inception to the present day. To a newbie scientist, this perspective allowed one to realize the arduous task of (environmental) problem solving. All of the oral sessions that ensued undoubtedly affirmed this notion as they delved into system specific modeling projects.

In addition to the talks, the poster session also proved to be an enriching experience for both student attendees and presenters. Walking around in the nineteenth century tabernacle, students were exposed to a wide breadth of research areas from fishery models to fire response strategies. Presenters not only gained experience discussing their work but also received valuable feedback from professionals and peers alike. Student posters were judged by the RMA board, and the top two were recognized with awards.

One of the most valuable portions of the conference was the programming aimed specifically at graduate students. Organized by Brandy Weigers, these events allowed students to gather throughout the day and informally discuss topics ranging from what to expect during one's first year as a professor to opportunities in industry and government. Though these programs were designed with students in mind, it was wonderful to have other members attending these events, sharing their wisdom and experiences.

Overall, the meeting created an open environment in which students could discuss with older members the opportunities that exist within the field of resource modeling as well as leadership opportunities that are available within the RMA. Not only were the professional members a wealth of wisdom, but the students themselves were able to provide an excellent resource of knowledge for each other. Because they had come from a vast array of fields and were at different levels in their graduate careers, they shared advice on everything from tackling the job search to which upcoming conferences would be worth attending.

As the sunset cruise sailed around the bay, it was clear that everyone had a wonderful and constructive experience - and was surely looking forward to the meeting in Poland!

About the Authors:

Joanna has her undergraduate degree in mathematics and physics from Northern Arizona University (Flagstaff AZ) and she is currently a PhD student at the Applied Math and Engineering Sciences Department at Northwestern University (Evanston IL). Lisa has her undergraduate degree in mathematics and physics from the College of the Holy Cross (Worcester MA) and is now a PhD student at the Applied Math and Engineering Sciences Department at Northwestern University (Evanston IL). Andy has an undergraduate degree in biomathematics from Rutgers and a master's degree from Humboldt State. He is a Ph.D. student at Colorado State (Boulder CO).