



**July 2004**

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## **Message from the Chair**

*Grey Pendleton*

Time flies when you're having fun; it seems like I just wrote one of these notes for the last BWG newsletter.

1. As this is our 'election issue', I'd encourage you to read the candidate biographies. For the second year, we will be able to vote via the TWS web site; you will be contacted in late-July with voting instructions including your TWS member number and a password that will enable you to vote. Please take the opportunity to vote. BWG is a small organization and it's important to have as much participation as possible. Many of the 'races' are decided by narrow margins, although it often is hard to choose among candidates as they are all well qualified.

2. All of the BWG-sponsored workshops and symposia were again successful in making it into the program for the TWS annual meeting to be held 18-22 September in Calgary. The success of 'our' events is due to the efforts of the BWG member organizers and the strong proposals that they put forward. I'd like to thank them for their hard (and continuing!) work. BWG-sponsored workshops that will be held on 18 September are "Linear and Non-Linear Mixed Models for Correlated Data: Concepts and Applications," organized by

Mary Christman, and "Using MCMC in Winbugs and Python to fit Random Effects and Hierarchical Models," organized by Mike Conroy, Chris Fonnesebeck, and James Peterson. The Random Effects-Hierarchical Models workshop will have a 'pre-workshop' course of introductory material available via the internet ([http://fisher.forestry.uga.edu:9673/bayes/tws\\_workshop](http://fisher.forestry.uga.edu:9673/bayes/tws_workshop)). This 'pre-course' is available to all, not just those who are able to attend the workshop in Calgary. Thanks go to Mike, Chris, and James for taking this extra step to provide a training opportunity to BWG members, and others, who are unable to attend the TWS annual meeting. This is a big step in the right direction in fulfilling the BWG goals of providing services to all of our membership. If you are able to go to Calgary, I'd encourage you to attend these workshops, largely for the excellent training but also to support BWG financially. This year, we are offering reduced-cost workshop registration of students. To be able to continue this in the future, we will need a healthy attendance at our sponsored workshops.

The BWG-sponsored symposium that will be held in Calgary "Collaboration of Biometricians and Researchers in Large-Scale Research: Lessons from Case Studies" (21 Sept.), organized by Duane Diefenbach and Lyman McDonald, has an excellent lineup of speakers. Descriptions of the workshops and the symposium are on the

TWS web site (<http://www.wildlife.org>).

3. As can be seen from item 2, and from past TWS meetings, workshops and symposia have been the mainstays of BWG's program to encourage dissemination of biometrics knowledge. So, if you have an idea for a workshop or symposium here's your chance. In Calgary at the BWG business meeting (please attend 12:00-2:00 Monday 20 Sept.), we will discuss proposals for the 2005 TWS meeting to be held in Madison, WI. As we did last year, we will distribute 1-page summaries of the workshop/symposium ideas prior to the Calgary meeting. This greatly facilitated discussion of ideas at last year's business meeting because most were familiar with the ideas. If you would like to submit a proposal, please send a 1-page summary to Bill Thompson, BWG technical sessions committee chair ([bill\\_thompson@nps.gov](mailto:bill_thompson@nps.gov)) by 20 August. This will give us time to distribute the proposals prior to the Calgary meeting.

4. One final item. In the January newsletter, I asked for suggestions for ways BWG could meet our goals, especially in providing services to those who cannot attend the annual TWS meeting. I indicated that I would report back on those suggestions. To date, I haven't received any, but it's not too late. I would still like your input, especially those members who have not been able to attend TWS meetings. How can we be of help to you?

## **BWG Elections**

It's again time to elect BWG officers for the coming year. We will be voting over the internet via the new TWS server (see The Message from the Chair); details about voting procedures will be sent to BWG members within the next few weeks. Please

read the following profiles of the current candidates in preparation for the election.

## **Candidates for Chair-elect:**

**William Gould** is an associate professor in the University Statistics Center at New Mexico State University where he has been on faculty for the past 10 years. He spends most of his time consulting with faculty and students in biology and wildlife and fisheries and in teaching graduate and undergraduate statistics courses. His research interests pertain to sampling and estimation problems in biological populations. Recent endeavors have included mark-resight estimation of an elk population in northern New Mexico and aplomado falcon habitat use in Chihuahua, Mexico. He has served as a board member in the past and has particularly enjoyed chairing the student travel grant committee because he thinks we need to encourage more critical thinking in wildlife research. He believes the Biometrics Working Group has and will continue to be extremely important in that regard and wants to be a part of that mission. He has maintained memberships for several years in the American Statistical Association, the Biometric Society, the Wildlife Society and Gamma Sigma Delta.

**William Thompson** is an ecologist/biometrician with the National Park Service in Anchorage, AK where he helps design long-term monitoring programs for plants and animals in five national parks in southwestern Alaska. He has degrees in wildlife and fisheries biology (B.S., University of Vermont), fish and wildlife sciences (M.S., Pennsylvania State University), and biological sciences (Ph.D., Montana State University; statistics minor). Bill previously worked as an environmental research consultant in Bozeman, Montana, as a postdoctoral research fellow at

Colorado State University, Fort Collins, as a research biologist for the U.S. Forest Service, Boise, Idaho, and as Assistant Unit Leader (Wildlife) at the USGS AR Coop Unit in Fayetteville, before joining the National Park Service in February 2004. His interests include sampling and monitoring fish and wildlife populations, evaluating wildlife-habitat relationships, and applying the information-theoretic approach to modeling ecological data. He co-chaired (with Dr. Chris Ribic) a BWG-sponsored symposium on evaluating the usefulness of null hypothesis testing in wildlife science at the 5th Annual Conference of TWS in Buffalo in 1998, and chaired a BWG-sponsored symposium on sampling rare or elusive species at the 9<sup>th</sup> Annual Conference of TWS in Bismarck in 2002.

#### **Candidates for Secretary:**

**Mary Conner** is an adjunct professor at Utah State University where she teaches a population ecology course, participates on graduate committees, and works on several research projects. She also has been working for 4 Fox Wildlife Consultants on various long term data sets and experiments. Previously she worked as a post doctoral fellow on mule deer movements in relation to spatial patterns of chronic wasting disease prevalence in Colorado. The focus of her graduate and post graduate work has been on quantitative ecology, estimation of population parameters, and population dynamics modeling. Specifically, she uses these tools on long term data sets to evaluate effects of management actions or environmental factors on vital rates and population dynamics in the face of temporal and/or spatial variation. Through graduate and post graduate work, she has developed some expertise in simulation studies, experimental design, mark-resight analyses,

population delineation techniques, and animal movement analyses.

**Joshua Millsbaugh** is an Assistant Professor in the Department of Fisheries and Wildlife Sciences at the University of Missouri. Currently, his research focuses on the design and analysis of wildlife telemetry studies and assessment of population demographics from sex and age ratio data. In 2001, he co-edited "Radio Tracking and Animal Populations" and recently co-authored the book "Wildlife Demographics: Analysis of Field Survey Data" which will be published in 2005. He teaches wildlife research techniques and population dynamics to undergraduate students and a graduate level quantitative assessment of fish and wildlife populations course. He is also the faculty advisor to the University of Missouri Student Chapter of The Wildlife Society. Josh received a B.S. in Environmental and Forest Biology from SUNY College of Environmental Science and Forestry, a M.S. in Wildlife Science from South Dakota State University, and a Ph.D. in Wildlife Science from the University of Washington. Prior to his current position in Missouri, he was a Post-doctoral Fellow in the School of Fisheries at the University of Washington.

#### **Candidates for Treasurer:**

**Christine Bunck** is the Deputy Center Director at the USGS National Wildlife Health Center (NWHC) in Madison, Wisconsin and served as the Acting Center Director for extended periods from mid 2002 through the fall of 2003. She completed a B.S. in biological sciences and mathematics at Florida State University, a M.S. in zoology and wildlife biology at Ohio State University, and a M.A.S. in statistics at Ohio State University. She worked as a biometrician at the Patuxent

Wildlife Research Center from 1979 to 1995 and served as the Leader of the Biometrics Group from 1986 to 1995. In 1995 she became the National Coordinator of the Biomonitoring of Environmental Status and Trends Program and worked closely with USGS Science Centers and the U.S. Fish and Wildlife Service to develop strategies for regional and national assessment and monitoring of the effects of environmental stressors on wildlife. Her research interests include design of nationwide monitoring and assessment programs, estimation of survival rates, multiple comparison methods, and general linear models. She was active in the formation of the BWG and has held various offices during that time. With the arrival of a new Center Director at NWHC, she is looking forward to making time to return to quantitative topics.

**Glen Sargeant** is currently a Research Biologist with the USGS Northern Prairie Wildlife Research Center in Jamestown, North Dakota, and an Adjunct Assistant Professor at the University of North Dakota (UND). He holds a B.S. in Fisheries and Wildlife Biology from UND (1986), an M.S. in Wildlife Resources from the University of Idaho (1991), and an M.S. in Biometrics (1996) and Ph.D. in Wildlife Ecology (1997), both from the University of Wisconsin in Madison. Glen's research has focused lately on wildlife population dynamics and assessment, especially for carnivores and ungulates, and his work on bear population dynamics recently led to a "Best Paper" award from the International Association for Bear Research and Management. Glen is currently serving as treasurer of the BWG. He previously served as a Board Member (1999-2000), as Treasurer (2000-2001), as co-organizer of a symposium on regression analysis (2002), and as a member of the Student Travel Grant Committee (2002-2004).

#### **Candidates for board members (4 positions):**

**Stephen J. Dinsmore** is an avian ecologist in the Department of Wildlife and Fisheries at Mississippi State University, where he has been employed since 2001. He received a B.S. in Fisheries and Wildlife Biology from Iowa State University (1990), a M.S. in Zoology from North Carolina State University (1994), and a Ph.D. in Fishery and Wildlife Biology from Colorado State University (2001). Throughout his undergraduate and graduate education, he was particularly interested in quantitative ecology and the application of contemporary statistical tools to wildlife-related questions. His graduate work with two species of shorebirds included the estimation of vital rates such as annual survival, estimating annual population size and trend, and modeling reproductive success. His broad research interests are in the areas of avian ecology and population biology. Recently, he has focused on topics such as avian nest survival modeling, survival estimation, and sampling techniques, and he currently supervises four graduate students working in these areas.

**Paul Doherty** is currently an assistant professor in the Fishery and Wildlife Department at Colorado State University. He has degrees in Entomology and Applied Ecology (B.S. University of Delaware); Zoology; and Evolution, Ecology and Organismal Biology (M.S., Ph.D. The Ohio State University). He has performed post-doctoral work at the University of Georgia, USGS Patuxent Wildlife Research Center, and at the Université Pierre & Marie Curie (Paris 6)/Ecole Normal Supérieur/CNRS in France. He was also employed by the U.S. Fish and Wildlife Service as a biomonitor to aid in the design of wildlife studies. His general interests are in applying quantitative methods to evolutionary and ecological

problems. He believes that the Biometrics Working Group has been a productive and important group and he would like to more fully support the group.

**Paul Lukacs** is a Ph.D. candidate in the Colorado Cooperative Fish and Wildlife Research Unit at Colorado State University graduating in 2005. His current research focus is aimed at expanding capture-recapture theory to handle the unique situations encountered in DNA-based capture-recapture studies. Paul's other research interests include passive distance sampling methods and sampling designs for studying rare species. Paul received a BWG student travel grant to attend the TWS 2004 annual meeting and would like to contribute his time back to the working group. Paul is a member of The Wildlife Society and the International Biometrics Society.

**Wayne Thogmartin** is a Statistician (Biology) with the USGS Upper Midwest Environmental Sciences Center in La Crosse, WI. Currently, he works with hierarchical spatial models of abundance for imperiled birds. He received his Ph.D. from Southern Illinois University's Cooperative Wildlife Research Laboratory and is a Certified Associate Wildlife Biologist. As a member of The Wildlife Society since 1995 and a participant in the Biometrics Working Group since 2000, Wayne considers it an honor to run for the Board. Wayne is committed to the BWG mission of studying and transferring information relative to biometrical methods appropriate for use in research and management of wildlife resources. In this regard, he co-authored a joint-BWG and Remote-sensing/GIS/Telemetry Working Group symposium proposal for the 2005 Wildlife Society meeting in Madison, WI, titled 'Overview and Treatment of Spatial Errors in GIS Applications'.

## **Student Travel Grant Recipients**

Paul Conn and Debra Montgomery were selected as winners of BWG travel grants for 2004. Paul and Debra will each receive \$250 to help defray costs of attending the 11th Annual Conference of The Wildlife Society, in Calgary, Alberta. Paul and Debra were selected, after careful consideration, from a field of exceptional candidates.

Paul completed an undergraduate degree in mathematics at Grinnell College in 1998 and a Master's degree in biomathematics at North Carolina State University in 2001. He is currently pursuing a Ph.D. in Fishery and Wildlife Biology at Colorado State University, where he is working with Gary White and Ken Burnham. Paul will present a paper titled "A general model for the analysis of mark-resight, mark-recapture, and band recovery data under tag loss." Bill Kendall and Mike Samuel are coauthors.

Debra completed an undergraduate degree in biomathematics at Rutgers University in 2001. She is currently pursuing Master's degrees in wildlife biology and statistics at the University of Idaho, where she is working with Oz Garton. Debra will present a paper titled "Estimating age of rocky mountain elk calves from morphometric measurements." Oz Garton, Pete Zager, and John Cook are coauthors.

## **Call for 2005 Workshop/Symposium Proposals**

Do you have an idea for a biometrics workshop and/or symposium for the 2005 TWS conference in Madison, WI? Please consider submitting a 1-2 page proposal describing your idea. The proposal should include a brief introduction discussing the importance of the topic, a short description

of the symposium/workshop, and (for symposia) a list of potential speakers and/or topics. Please submit your proposals to Bill Thompson ([bill\\_thompson@nps.gov](mailto:bill_thompson@nps.gov)) by 20 August so that they can be distributed to BWG members prior to the business meeting in Calgary on 20 September 2004. Also, please feel free to contact Bill Thompson if you have any questions or you would like some assistance in developing an idea.

### **Sampling Rare or Elusive Species**

Island Press will be publishing a volume in November 2004 entitled "Sampling Rare or Elusive Species: Concepts, Designs, and Techniques for Estimating Population Parameters," which developed from a BWG-sponsored symposium held during the 9th Annual Conference of TWS in Bismarck. Bill Thompson edited the volume and many BWG members contributed to it. Please contact Bill at [bill\\_thompson@nps.gov](mailto:bill_thompson@nps.gov) if you would like more details.

### **Signing up for the BWG Listserve**

Go to <http://rana.er.usgs.gov>

Then select "**Monitoring Program Lists**", "**stat\_tws**", "**join stat\_tws**"

Alternatively one can go directly to

[http://rana.er.usgs.gov/scripts/lyris.pl?enter=stat\\_tws&text\\_mode=<=english](http://rana.er.usgs.gov/scripts/lyris.pl?enter=stat_tws&text_mode=<=english)

and select "**join stat\_tws**"

## **BWG Contact Information**

### **CURRENT OFFICERS**

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