Hi Andy,  
  
I enjoyed reading your draft of Chapt 6. I think it reads pretty well, so I have only a few minor suggestions for improvement (see below). Hope they are useful.  
  
Best,  
Bob  
  
  
1. Page 13, lines 76.5, 99.5: Add bold font to y.  
  
2. Page 13, line 93: Never heard of the rectangular rule for integration. The method you're using is actually just repeated applications of the trapezoidal rule. For example, in one dimension the average of two endpoints is multiplied times the horizontal distance between endpoints, which in your case is pixel size.  
  
3. Page 14, line 110: It's not clear to me what you mean by "the trap array is buffered by 2 units". If a 5 x 5 trapping array lies within the center of an 8 x 8 state space, aren't there 1.5 units on each side of the trapping array?  
  
4. Page 15, line 142: X is not defined in the R code on the previous page. This may be corrected by subsituting "X <- data$traplocs" for line 117.  
  
5. Page 18: Eq. 6.2.1 seems to appear from thin air. Maybe just add some text to indicate that it arises from multinomial dependence and perhaps cite Chapt 6 of Royle and Dorazio (2008), where this relationship is derived.  
  
6. Page 20, lines 368-374: You might point out that these warnings often can be minimized, if not eliminated, by picking judicious starting values of parameters.  
  
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8. Page 22, line 441: I think there's a wording problem in this sentence. Not sure what you're trying to say.  
  
9. Page 22, lines 453-460: Might want to mention that with realistic sample sizes GOF tests usually lack power to reject so they're not really all that useful. Also, for discrete data the reference distribution of the test statistic can be very weird (see Agresti's papers on chi-squared statistics).  
  
10. Page 34, line 871.5: You may have made an algebra error. I think exp(-Lambda \* pi\_0) should be replaced by exp(-Lambda \* (1 - pi\_0) )

Re: review of SCR stuff  
Robert M Dorazio   
to:  
Andy Royle  
10/26/2012 08:33 PM  
Cc:  
"Dorazio"  
Show Details  
  
  
  
History: This message has been replied to and forwarded.

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Robert M. Dorazio  
Southeast Ecological Science Center  
U.S. Geological Survey  
  
Web site: <http://ifasstat.ifas.ufl.edu/DorazioWebSite/index.shtml>  
  
-----Andy Royle/BRD/USGS/DOI wrote: -----

To: Robert M Dorazio/BRD/USGS/DOI@USGS  
From: Andy Royle/BRD/USGS/DOI  
Date: 10/26/2012 01:45PM  
Subject: review of SCR stuff  
  
hi Bob,  
I know you're doing this FSP for my post-doc visitor guy -- no rush on that -- we appreciate it.  
  
Anyhow, I mentioned that we're writing this book on SCR stuff. As you've recently read the Borchers MLE stuff I wonder if you could give a friendly review of our book chapter on likelihood estimation? In this chapter our aim is to make people familiar with how MLE works in the context of the random effect so we build a likelihood estimation routine as an R function and have them try it out. Then we analyze a data set which was previously analyzed in the book. Then we show people how the R package secr works to accomplish the same thing -- and we discuss some technical details of secr.  
  
If you could take a little bit of time to at least skim the technical parts, we would appreciate it. I have good reviewers lined up for most other chapters but this one is more technical than the rest so I need a higher-end guy for that!  
  
regards,  
andy

*(See attached file: previewch6.pdf)*  
J. Andy Royle  
Research Statistician  
USGS Patuxent Wildlife Research Center  
12100 Beech Forest Rd.  
Laurel, MD 20708  
<http://profile.usgs.gov/professional/mypage.php?name=aroyle>  
andy\_royle@usgs.gov  
phone: 301-497-5846  
fax: 301-497-5545  
  
Book: "Hierarchical Modeling and Inference in Ecology: The Analysis of Data from Populations, Metapopulations and Communities" by J. A. Royle and R.M. Dorazio.   
  
unmarked: A very useful R package for fitting certain hierarchical models using likelihood methods. Available from: <http://cran.case.edu/web/packages/unmarked/index.html>  
  
A 5 hour "introduction to unmarked" Webinar can be found here: <http://www.pwrc.usgs.gov/Royalvideo.cfm>

[attachment "previewch6.pdf" removed by Robert M Dorazio/BRD/USGS/DOI]