university of groningen

Reneerkens, Jeroen <j.w.h.reneerkens@rug.nl>

RE: Kubelka et al nest predation paper in Science

1 message

Mark Hancock <mark.hancock@rspb.org.uk> 22 January 2019 at 15:09
To: "Reneerkens, Jeroen" <j.w.h.reneerkens@rug.nl>

Dear Jeroen,

Please find attached, a copy of the correspondence I had with Vojta Kubelka, including the simple 2x2 table of data by outcome and time period, that he requested.

I hope this helps you resolve this issue.

With best wishes,

Mark Hancock
Senior Conservation Scientist

RSPB North Scotland Office Etive House, Beechwood Park, Inverness, IV2 3BW
Tel 01463 715000

rspb.org.uk/science

From: Reneerkens, Jeroen [mailto:j.w.h.reneerkens@rug.nl]
Sent: 16 January 2019 11:05
To: Mark Hancock <mark.hancock@rspb.org.uk>
Subject: Kubelka et al nest predation paper in Science

Dear Mark Hancock,

We contact you about the following:

Recently (9 November 2018) a paper was published in Science "*Global pattern of nest predation is disrupted by climate*

change in shorebirds" by Kubelka *et al*.. I am sure that you have seen it. According to the acknowledgements, you contributed with unpublished data for this paper (M. Hancock *in litt*) with unpublished data on Greenshanks, or perhaps you answered some questions regarding your published work (Christian & Hancock 2009 in British Birds).

The study in Science has far-reaching implications for biology and conservation and we are currently looking into the details of the analysis that do not seem to hold, and we are preparing a response, as a Technical Comment to be published in Science.

Vojta Kubelka has sent us some of the original data that went into the analyses, but we are still unclear about some of these. We kindly ask you whether you would be willing to send us the data you have shared with Vojta, if any. This will help us in reanalyzing the data - among others using yearly estimates instead of aggregates - to better understand the patterns. We will of course not use those data for any other purposes and are happy to include you as a co-author on the Technical Comment, if you wish so. We have already received such data from several people, including Pavel Tomkovich (co-author of the original paper).

We all share a passion and fascination for shorebirds and we really would like to understand whether the patterns presented in the paper stand up to a more in-depth analysis. We would very much appreciate your support.

Best wishes,

Jeroen

on behalf of Martin Bulla, Emily Weiser, Rick Lanctot and Bart Kempenaers

---------- Forwarded message ----------
From: Mark Hancock <mark.hancock@rspb.org.uk>
To: "Vojtěch Kubelka" <kubelkav@gmail.com>
Cc:
Bcc:
Date: Thu, 25 Feb 2016 11:05:53 +0000
Subject: RE: your article - Tringa nebularia

HI Vojtech - one nest (2006) had a predated adult, perhaps by peregrine - I have included this in the data I sent you, as causing failure of this breeding attempt 'by predation'. The other 'predation' nest failures were assigned to predation based on nest contents. I presume in the paper we just included the 13 where the nest itself was predated.

hope that helps,

Mark

From: Vojtěch Kubelka [mailto:kubelkav@gmail.com]
Sent: 25 February 2016 11:00
To: Hancock, Mark
Subject: Re: your article - Tringa nebularia

Dear Mark,

thank you wery much!

This data I need. But was really together 14 nests predated? You mentioned 13 predated nests in your article...

For sure, I will let you know about the final result of my work.

Have anice day!

Vojta

Vojtěch Kubelka

katedra ekologie
PřF UK v Praze
Viničná 7, 128 44 Praha 2

Vojtech KUBELKA
Department of Ecology
Faculty of Science
Charles University in Prague
Vinicna 7, 128 44 Praha 2
Czech Republic

E-mail: kubelkav@gmail.com

2016-02-25 10:04 GMT+01:00 Hancock, Mark <mark.hancock@rspb.org.uk>:

HI Voltech,

here are results for two periods as requested, just for nests known to have hatched or ascribed to "predated", using the data used in the paper:

	N	Hatched	"Predated"
1983-2000	20	15	5
2001-2007	24	15	9

As you can see, more nests were found and had outcomes definitely determined, per year, in the later years.

Note that by choosing to divide the data in two like this, the choice of year where you make the division is somewhat subjective. Personally, I think the year vs. effect-estimate correlation I sent you before, is more objective. For example, in the table above, if hatching success were much higher in 1983-1992 compared to later in the study, this result might be 'lost' within the longer run of years used in the 1983-2000 category. But in the year-wise effects estimates you might see a run of high values at the start of the run of years - and get a significant correlation between estimate and year. Also, random effects estimates in mixed models like I sent you, account for varying sample sizes by year, and also 'shrink' the outlying estimates more towards the centre, using the whole distribution of year-wise means to inform the estimates of each individual year. Thus this is a more robust method in many ways. Just a thought.

Good luck with the PhD,

All the best,

Mark

From: Vojtěch Kubelka [mailto:kubelkav@gmail.com]
Sent: 24 February 2016 22:15

To: Hancock, Mark
Subject: Re: your article - Tringa nebularia

Dear Mark,

thank you very much for your reply.

For sure, I understnad your field constrains and it is really admirable achevement to find so many Greenshank nests!

In this case, the four numbers and two time-spans - highlighted in previously attached table - would be great for me.

I have no need for any testing right now. Could you please fill this simple table for me?

I am interested in predated and hatched nests only, please omit other nest failures.

I am looking forward to your response.

With kind regards,

Vojta Kubelka

Vojtěch Kubelka
katedra ekologie
PřF UK v Praze
Viničná 7, 128 44 Praha 2

Vojtech KUBELKA
Department of Ecology
Faculty of Science
Charles University in Prague
Vinicna 7, 128 44 Praha 2
Czech Republic

E-mail: kubelkav@gmail.com

2016-02-24 15:50 GMT+01:00 Hancock, Mark <mark.hancock@rspb.org.uk>:

HI again Vojtech,

glad to see you have the full article (publication year was 2009 by the way...)

Yes you are right that the paper does not clearly state the nest visit interval. In general, this was a single visit when the nest was located in the first visit (early May) and a single visit to establish whether the nest had hatched, in the later visit (late May). You will appreciate, with the work load in finding even just one greenshank nest, and the fact that several were located each year, plus the fact that it was only possible to spend about two weeks total, in the study area each year (this is a very remote area - by UK standards), there was simply not the resource to enable multiple nest visits. The value of this study is mainly in the large number of nests found, and overall study length (33 years to date!), rather than detailed work on individual nests.

I've checked with Nick - this is really his data - and he is happy for me to let you have the year-wise estimates of relative hatch success, from the analyses we did for the paper. Note that these are random effects estimates from a mixed model. These numbers are estimates - relatively speaking - of how good each year is for hatching success, relative to a mean of zero. Here are the estimates:

1983	0.2335
1987	0.3248
1989	-0.2625
1990	-0.4454
1991	-0.4454
1993	0.7085
1994	-0.8885
1995	0.4181

1996	0.5986
1997	0.4181
1998	-0.2673
1999	0.5574
2000	-1.1657
2002	0.2158
2003	-0.4415
2004	0.7609
2005	0.6907
2006	-0.4725
2007	-0.5376

Essentially, the numbers in the right hand column give a measure of relative likelihood of hatch for that year, compared to other years. Thus, (for example) 2004 & 1993 were relatively good years, and 2000 & 1994 were bad years (etc.). There is no correlation between year and these indices (r=-0.045, N=19 - a long way from statistical significance) i.e. there is no tendency for the index to rise or fall, on average, over the 1983-2007 period. If you prefer, you could test the early and late years with a t-test as two samples - but you would get a similar result. Note that some early years are missing because in those years, it was not possible to re-locate nests to establish hatching. These are featureless remote areas of course - and nests are nothing more than shallow scrapes. Over time, Nick has got more skilled at re-locating the empty nests later in the season - mainly due to his very intimate knowledge of the study area (individual rocks, hummocks etc!)

The latitude of the study area is 58°32' and it is a different study area from the Nethersole-Thompson one: the two areas are about 40km apart.

Hope that helps,

all the best,

Mark

From: Vojtěch Kubelka [mailto:kubelkav@gmail.com]
Sent: 22 February 2016 16:30

To: Hancock, Mark
Subject: Re: your article - Tringa nebularia

Dear Mark,

thank you very much.

I am lucky to have your article in high resolution (see it attached in case you do not have it in this format).

But I haven't been able to find any information about average interval between subsequent nest checks in the article.

I know that there is no significant difference, but anyway it would be better to have the long period divided into two subsets of more than 20 hatched or predated nest in each. Could I ask you for this? (see attached prefilled table).

Could you provide me with the exact latitude as well?

Is it moreless the same study site as in Thompson and Thompson (1991) paper or are you more than 50 km apart?

I would be happy to cite your article and your additional information as M. Hancock in litt.

I am looking forward to your response.

Best wishes,

Vojta

Vojtěch Kubelka
katedra ekologie
PřF UK v Praze
Viničná 7, 128 44 Praha 2

Vojtech KUBELKA
Department of Ecology
Faculty of Science
Charles University in Prague
Vinicna 7, 128 44 Praha 2
Czech Republic

E-mail: kubelkav@gmail.com

2016-02-22 16:58 GMT+01:00 Hancock, Mark <mark.hancock@rspb.org.uk>:

Hi Vojtech.

Please find attached the full text of the paper - in case you do not have it - which has the details on timing of visits and other methods - note that flotation was not used.

You will see that our analyses found no time effect on productivity (see Appendix). I hope this gives you what you need.

regards,

Mark

From: Vojtěch Kubelka [mailto:kubelkav@gmail.com]
Sent: 22 February 2016 15:31
To: Hancock, Mark
Subject: Re: your article - Tringa nebularia

Dear Mark, thank you very much for your reply,

As a part of my PhD, I am interested in nest predation of shorebirds in Europe.

In this case, it would by nice to see, how much are later years different from early ones. If they are pretty same, still it would be better to have them separately (as well whan only traditional method is aplicable).

Have you asessed the start of incubation (e.g. with flotation method)? It could make Mayfield method more feasible.

What was the average interval between visits?

With kind regards,

Vojta Kubelka

Vojtěch Kubelka
katedra ekologie
PřF UK v Praze
Viničná 7, 128 44 Praha 2

Vojtech KUBELKA
Department of Ecology
Faculty of Science
Charles University in Prague
Vinicna 7, 128 44 Praha 2
Czech Republic

E-mail: kubelkav@gmail.com

2016-02-22 13:34 GMT+01:00 Hancock, Mark <mark.hancock@rspb.org.uk>:

Hi Vojtěch,

many thanks for your email.

When Nick and I looked at the nest data from his long-term study, for the 2009 British Birds paper, we felt that the nest visits were too infrequent to allow the use of Mayfield methods. Please see the Appendix of the paper where this is explained.

Are you interested in investigating whether predation becomes more or less frequent, as incubation progresses? In greenshank specifically, or for a range of wader or bird species?

I've copied Nick, and a colleague (Ron Summers) who is currently collaborating with Nick, in case they wish to comment.

best wishes,

Mark

Mark Hancock
Senior Conservation Scientist

RSPB North Scotland Office Etive House, Beechwood Park, Inverness, IV2 3BW
Tel 01463 715000

rspb.org.uk/science

From: Vojtěch Kubelka [mailto:kubelkav@gmail.com]
Sent: 21 February 2016 19:27
To: Hancock, Mark
Subject: your article - Tringa nebularia

Dear Dr. Hancock,

I have read your interesting article:

A 25-year study of breeding Greenshanks Territory occupancy, breeding success and the effects of new woodland

By: Christian, Nick; Hancock, Mark H.

British Birds Volume: 102 Issue: 4 Pages: 203-210 Published: APR 2009

Would it be any chance to ask you for daily nest predation rate (computed by Mayfield method)? And would it be possible to split your 43 nests into two daily nest predation rates - early and late with more than 20 nests in each?

I am looking forward to your response.

With kind regards,

Vojtěch Kubelka

Vojtěch Kubelka
katedra ekologie
PřF UK v Praze
Viničná 7, 128 44 Praha 2

Vojtech KUBELKA
Department of Ecology
Faculty of Science
Charles University in Prague
Vinicna 7, 128 44 Praha 2
Czech Republic

E-mail: kubelkav@gmail.com

This email and any attachments may contain material that is confidential, subject to copyright and intended for the addressee only. If you are not the named recipient you must not use, disclose, reproduce, copy or distribute the contents of this communication. If you have received this in error, please contact the sender and then delete this email from your system. The Royal Society for the Protection of Birds (RSPB) is a registered charity in England and Wales no. 207076 and in Scotland no. SC037654.

This email and any attachments may contain material that is confidential, subject to copyright and intended for the addressee only. If you are not the named recipient you must not use, disclose, reproduce, copy or distribute the contents of this communication. If you have received this in error, please contact the sender and then delete this email from your system. The Royal Society for the Protection of Birds (RSPB) is a registered charity in England and Wales no. 207076 and in Scotland no. SC037654.

This email and any attachments may contain material that is confidential, subject to copyright and intended for the addressee only. If you are not the named recipient you must not use, disclose, reproduce, copy or distribute the contents of this communication. If you have received this in error, please contact the sender and then delete this email from your system. The Royal Society for the Protection of Birds (RSPB) is a registered charity in England and Wales no. 207076 and in Scotland no. SC037654.

noname.eml
134K