

From: [West, Sabrina](#)
To: [Grant, Colin](#)
Cc: [Angela Picco](#)
Subject: Re: Memo
Date: Thursday, August 8, 2013 5:22:47 PM
Attachments: [2013_8_6_Memo for Ashy Storm Petrel Finding_sw.docx](#)

Hi Colin,

This is a tough one. I do wonder about those paragraphs. Though their survey methodology could be better, I think the real trouble with the article is the method they use to estimate the population trends. I'm not an expert on t-tests, but it's a very odd way to calculate population trends, as their test doesn't seem to account for any of the variability in the data - it's just a comparison of means (and though the difference is significant, the standard errors are huge (see Table 7 and STAS, which is their acronym for the petrel).

I don't know if it's possible at this point to look at their statistics and find appropriate references - like I said, I don't know enough about t-tests. I'm not sure this means you should necessarily take those paragraphs out. I took a stab at editing the document to focus on the problems with their statistical methodology.

Hopefully this helps - let me know if you have any questions. Tomorrow is my flex day, but I'm in again on Monday.

Cheers,
Sabrina

Sabrina West
On detail - Pacific-Southwest Regional Office
Mailing address: Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, CA 92008

(760)431-9440 ext. 375
email: sabrina_west@fws.gov

On Wed, Aug 7, 2013 at 2:32 PM, Grant, Colin <colin_grant@fws.gov> wrote:
Hi Sabrina,

I am attaching four documents.

- 1) The memo
- 2) Ainley and Hyrenbach 2010

Two new papers that I just found today. These may or may not be needed.

- 3) Clarke et al. 2003
- 4) Karnovsky et al. 2005

I was hoping that you could review the entire memo if you have time. I have highlighted the new paragraphs that need work. If we don't need them, than they can just be dropped.

Like I said on the phone, it seems like there is a consensus among the sea bird biologists that colony data holds more weight than at-sea data. Especially for ASP. The closest I could come to a reference for this was the two new papers and there explanations of limitations for at-sea surveys. If we can come up with other references or justifications to show this, then we will not need these two papers.

Thanks

Colin Grant
Endangered Species Listing Biologist
Bay-Delta Fish and Wildlife Office
650 Capitol Mall, Suite 8-300
Sacramento, CA 95814
916-930-5651
colin_grant@fws.gov