

From: [McChesney, Gerry](#)
To: [Brown, Matthew D](#)
Subject: Fw: [EXTERNAL] FW: annual trend for ASSP captures on SEFI
Date: Tuesday, September 7, 2021 3:03:56 PM
Attachments: [image003.png](#)

Hi Matt,
I inquired with Pt Blue about the need for updated ashy storm-petrel trend info, and unbeknownst to me, they were already working on it. See below. I asked Pete to keep me posted and to send me a draft when it's ready.

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From: Pete Warzybok <pwarzybok@pointblue.org>
Sent: Thursday, September 2, 2021 9:53 AM
To: McChesney, Gerry <gerry_mcchesney@fws.gov>
Subject: [EXTERNAL] FW: annual trend for ASSP captures on SEFI

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Hey Gerry,
Here is the note from Nadav about the more recent analysis. The takeaway is that we have seen a 49% decline in the storm-petrel population index (adjusted ln-CPUE) between 2007 and 2019. 2020 bucked this trend with a sudden increase in capture rates for unknown reasons. Nadav is currently working on further analysis and writing this up for a short publication. I will be happy to share a draft of that once it is ready.
Thanks,
Pete

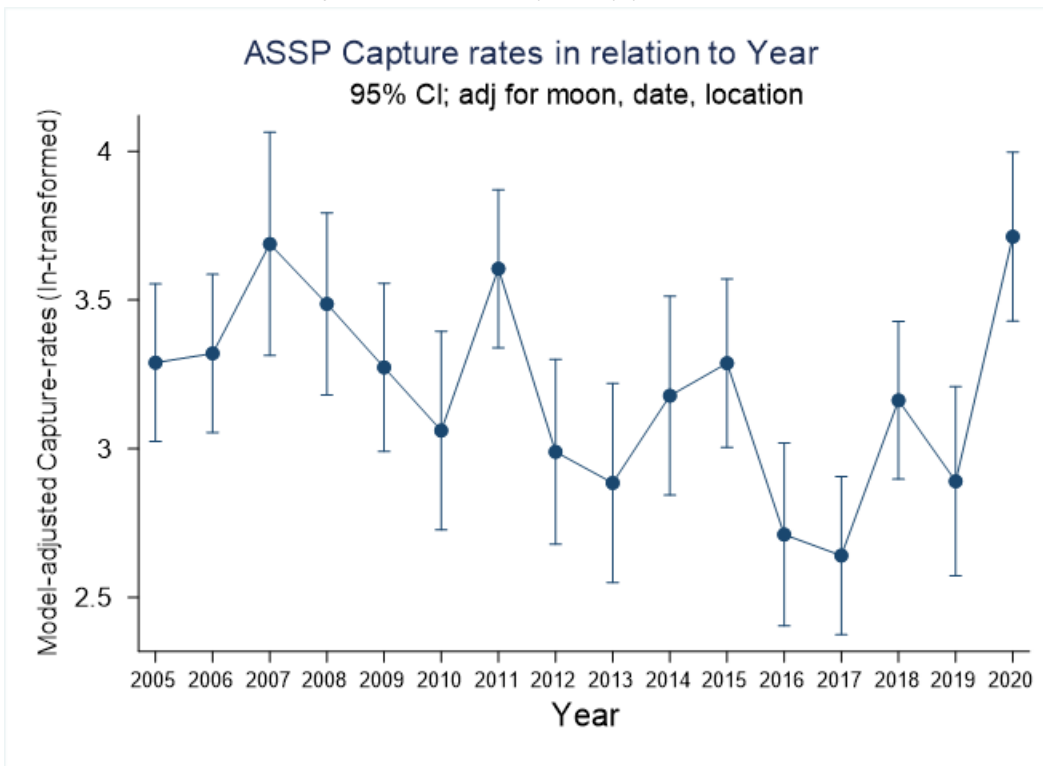
From: Nadav Nur <nnur@pointblue.org>
Sent: Wednesday, June 2, 2021 2:39 PM
To: Jaime Jahncke <jjahncke@pointblue.org>; Pete Warzybok <pwarzybok@pointblue.org>
Subject: annual trend for ASSP captures on SEFI

Hi Jaime and Pete,
Jaime, I have been working to help Pete complete the power analysis for SEFI and for other locations, and as part of that effort we needed to estimate the variation in capture rates across years. So I've worked on that lately.
Pete and I had decided we should look at 2005-2020 for a few reasons. And keep it to just

Lighthouse Hill and Carp Shop, and just April-July. The bulk of our captures.

One thing that came out of that analysis then is how capture rates have changed during that period, once we statistically adjust for seasonal effect (quadratic date) and moon visibility index (Pete can fill you in on that) and netting location (LHH vs CS). I'm writing this up now for our Report to NFWF.

Here is what the model-adjusted values are year by year:



That's a pretty consistent decline between 2007 and 2019. It is a very substantial decline between 2007 and 2017, and even if we look at 2007-2019, it is a substantial decline. The exception is 2020. For some reason, capture rates spiked upwards.

If we were to just fit a linear trend to 2007-2019, then we're seeing a 49% decrease in capture rates over the 12 years. And even if we include 2020, so 2007-2020, we see a 31% decrease (taken from the linear trend, over the 13 years, 2007-2020, not shown in the Figure).

Is this something we can publicize with regard to getting the Coastal Commission to approve eradication? Or share with our partners? That is, over a recent period, since 2007, when BUOW wintering numbers started to increase, until 2019, we see a 49% decrease. That speaks to the urgency of action.

2020 results complicate the picture, but I'm still impressed of this fairly continuous decline from 2007 to 2019.

Something to think about?

Nadav