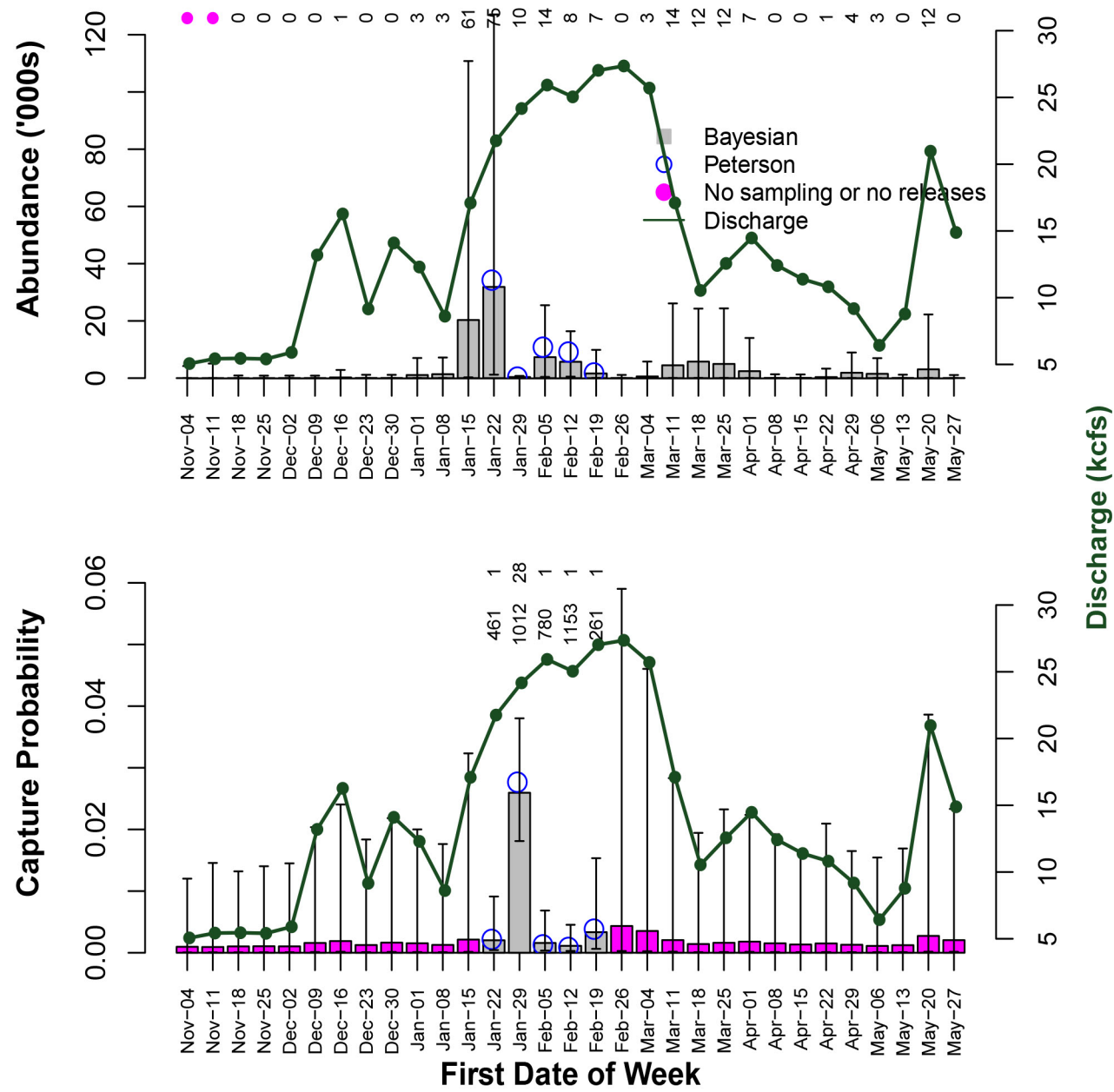


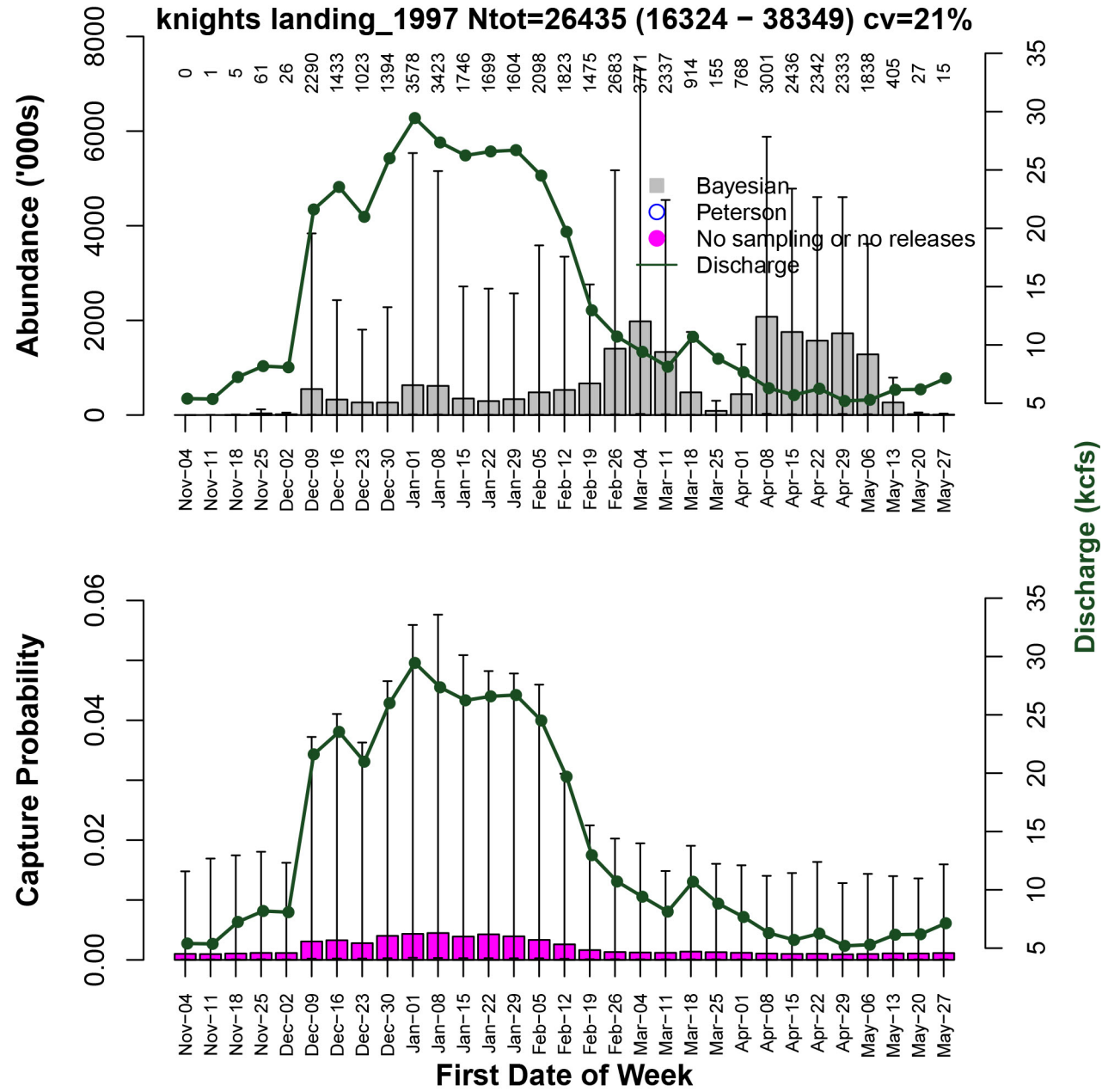
A. Predictions of Weekly Capture Probabilities of Chinook Salmon Abundances (All Runs)

Figures in this appendix show predicted abundance of juvenile outmigrant Chinook salmon (i.e., all run types and fry and smolt life stages combined; top panel) and capture probability (bottom panel) by weekly strata for select rotary screw trap sites and run years.

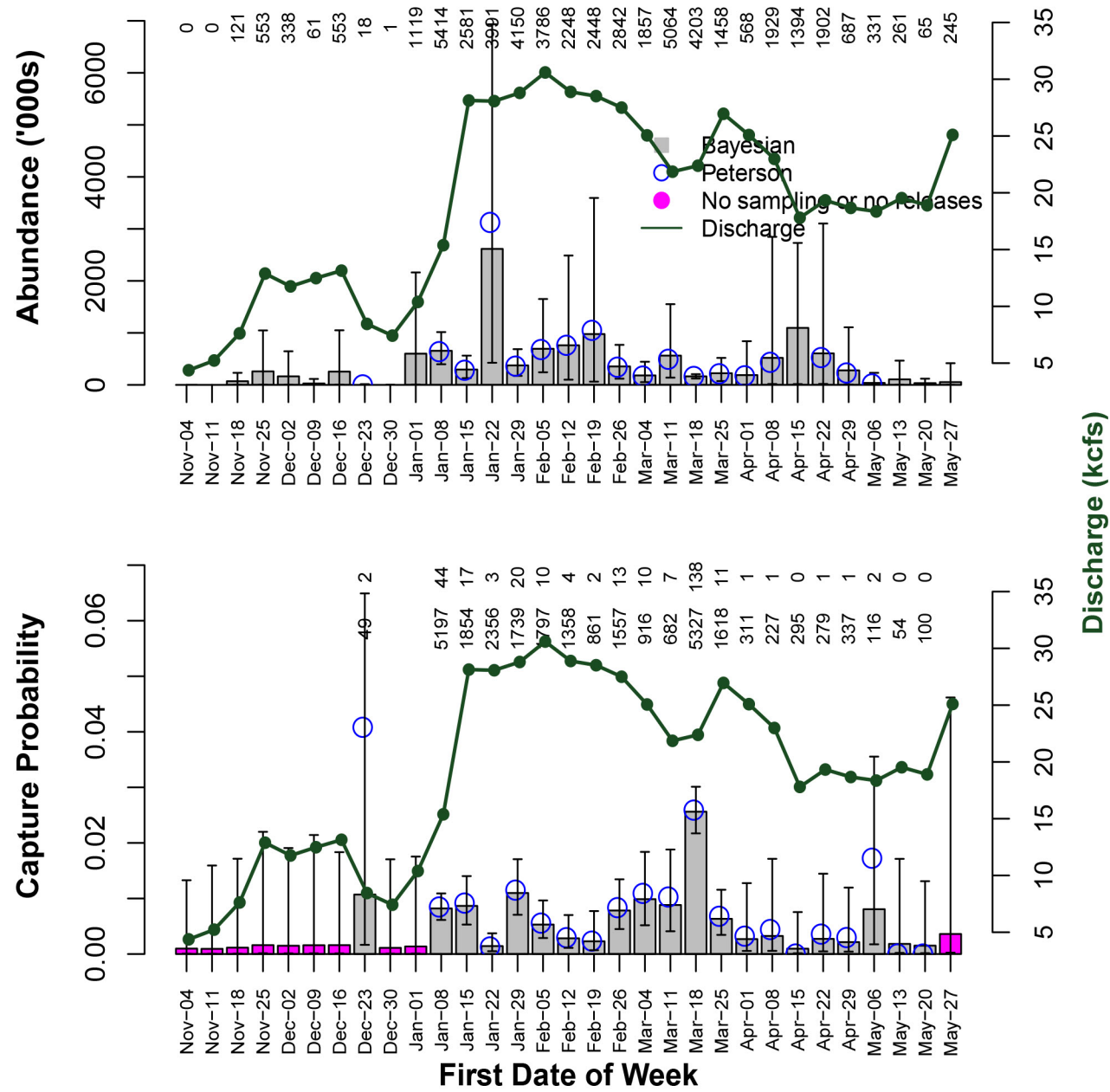
- The height of the bars and error bars show the medians and 95% credible intervals predicted by the model.
- Numbers at the top of each plot show the unmarked catch (u , top panel), and the number of recaptures (r) and releases (R , bottom panel).
- Bars in the top panels with dots above them and no open circles or numbers above them identify strata with no sampling data; bars in the bottom panel with no numbers above them identify strata with no mark-recapture data.
- Open circles show the Peterson estimates of abundance ($U=u/p$; error bars show 95% confidence intervals) and capture probability ($p=r/R$).
- The line with points shows the average weekly discharge.
- Figure titles show the median total abundance estimate for the run year with 95% credible intervals in parentheses.
- Coefficient of variation of the annual abundance estimate is also shown.

knights landing_1996 Ntot=128 (61 - 253) cv=36%



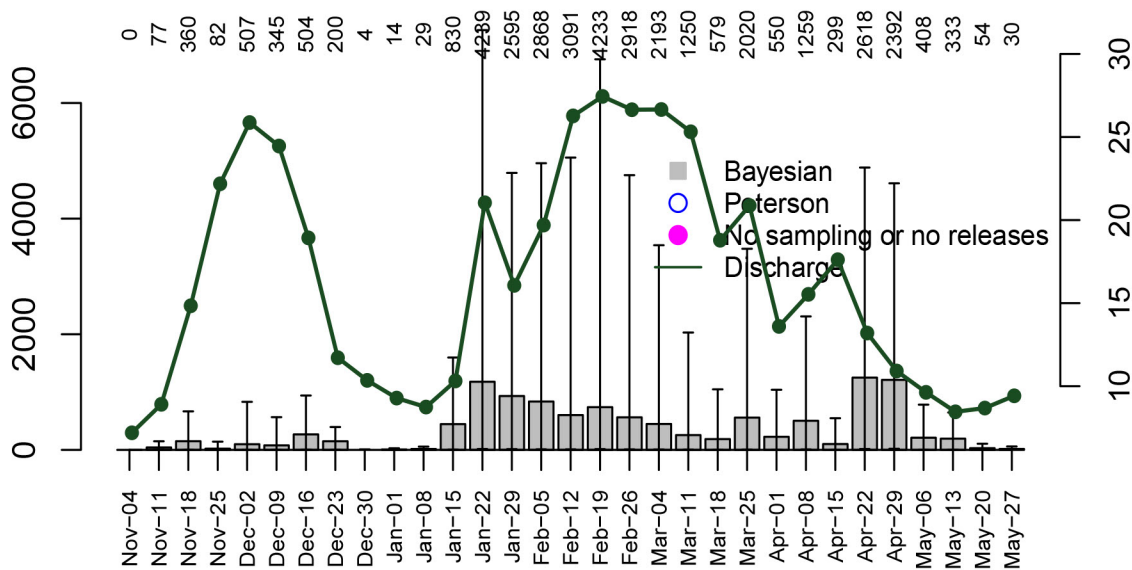


knight's landing_1998 Ntot=13975 (9757 - 19758) cv=18%



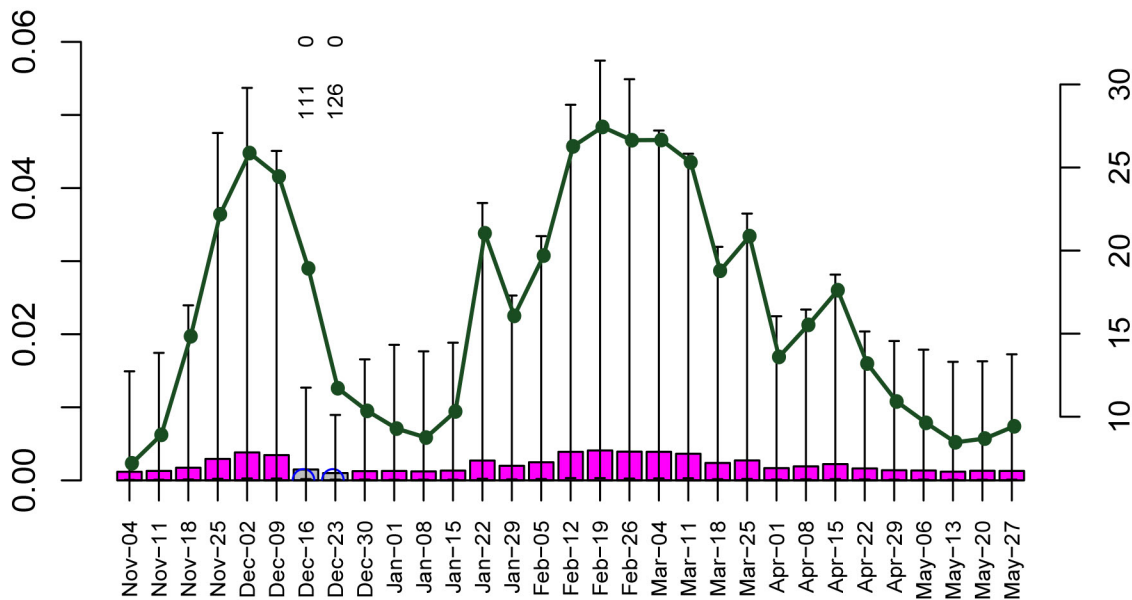
knights landing_1999 Ntot=17150 (9376 – 26990) cv=26%

Abundance ('000s)



Discharge (kcfs)

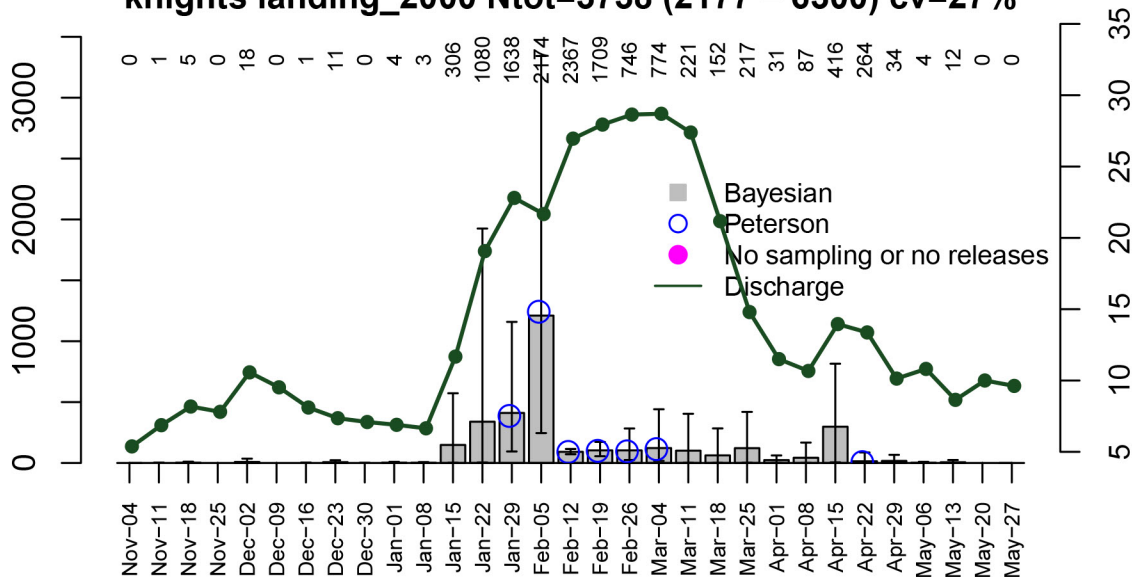
Capture Probability



First Date of Week

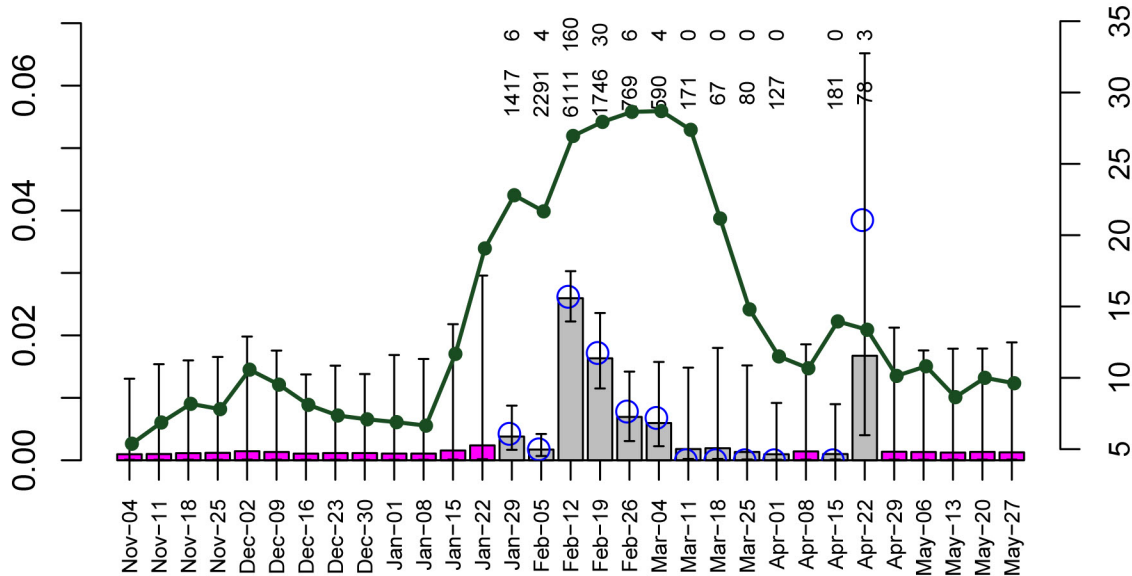
knight's landing_2000 Ntot=3738 (2177 - 6300) cv=27%

Abundance ('000s)



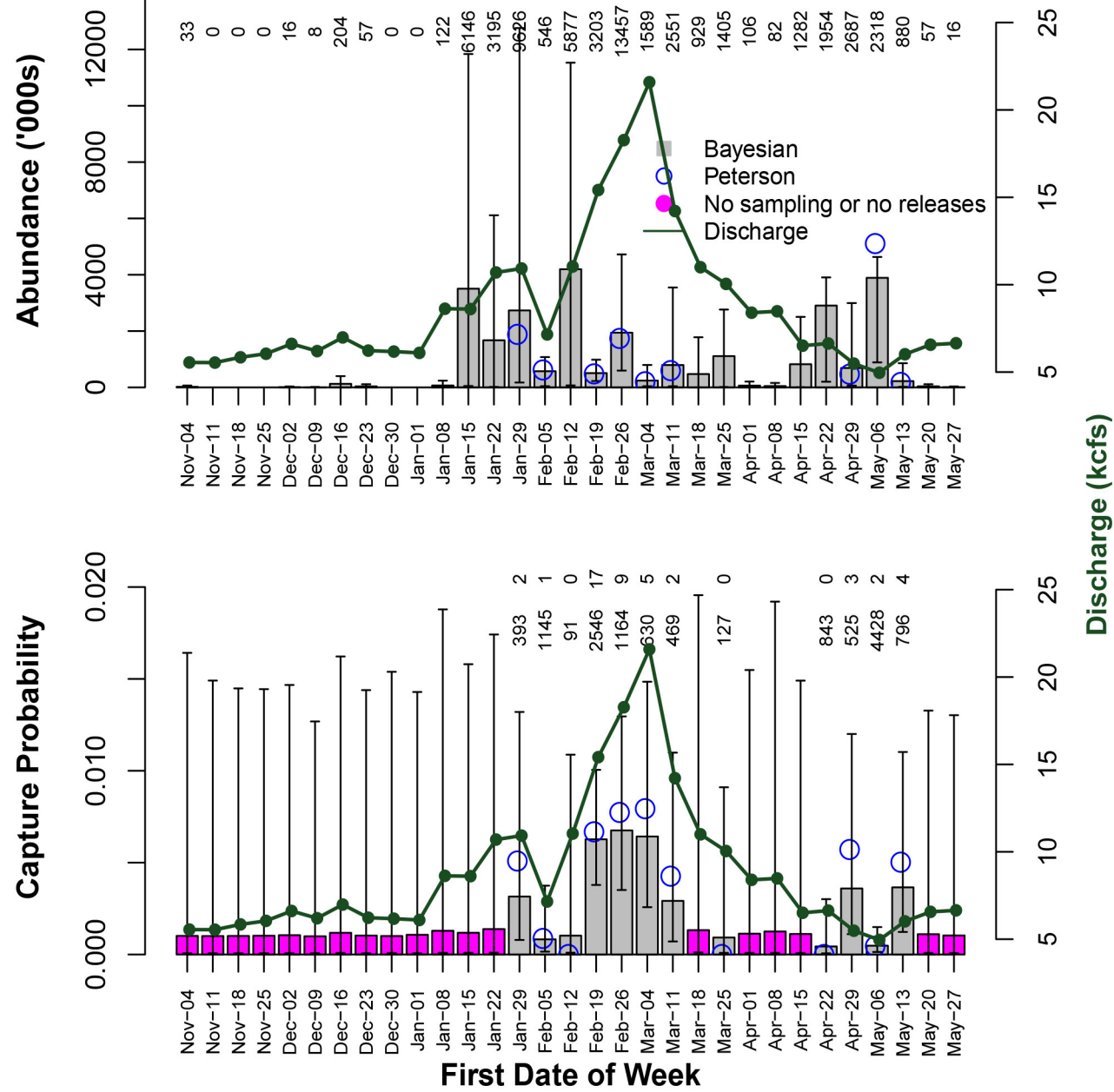
Discharge (kcfs)

Capture Probability

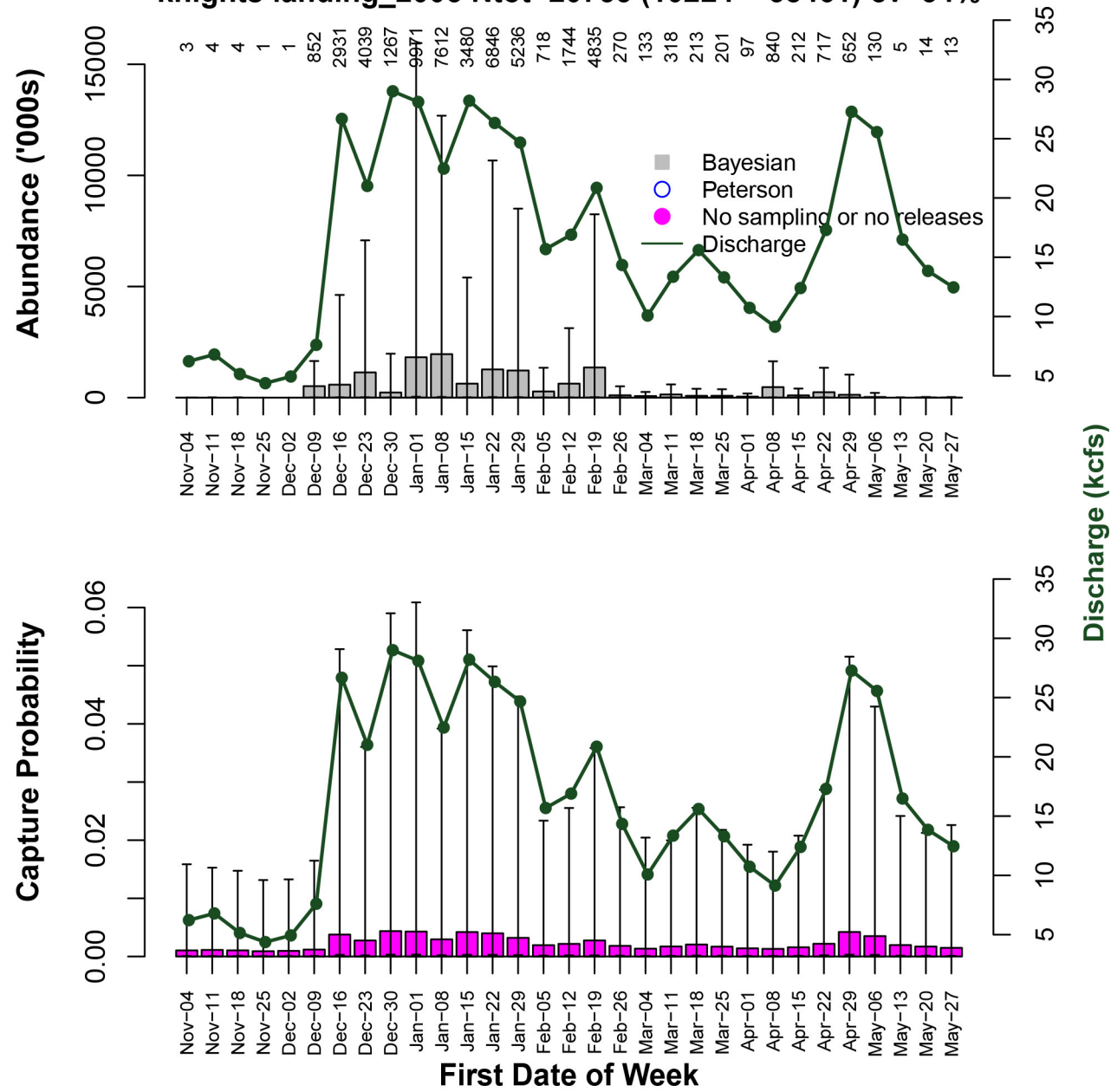


First Date of Week

knight's landing_2001 Ntot=29755 (18566 - 44406) cv=22%

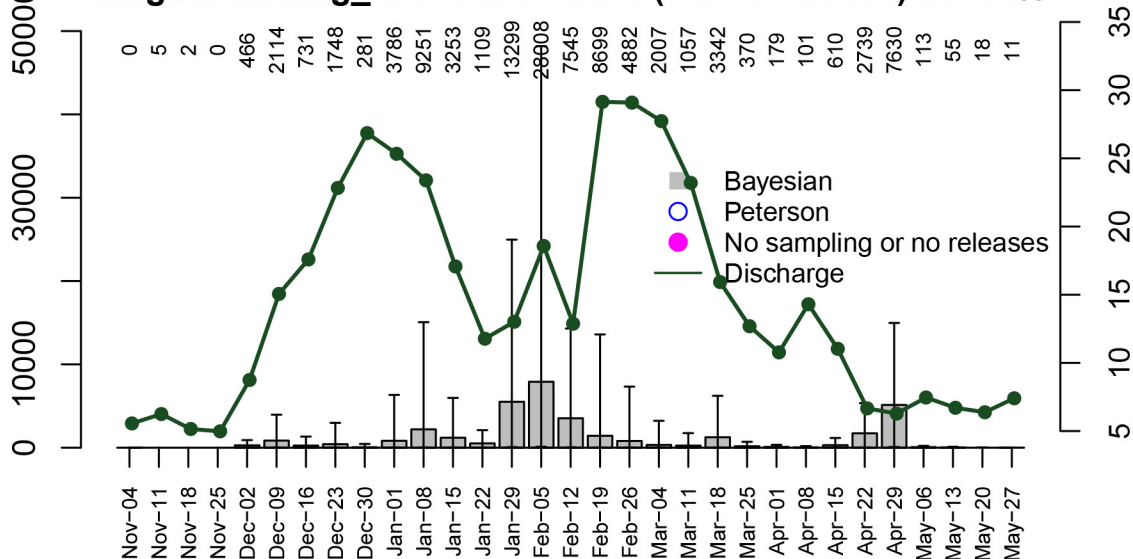


knights landing_2003 Ntot=20755 (10224 - 38461) cv=34%

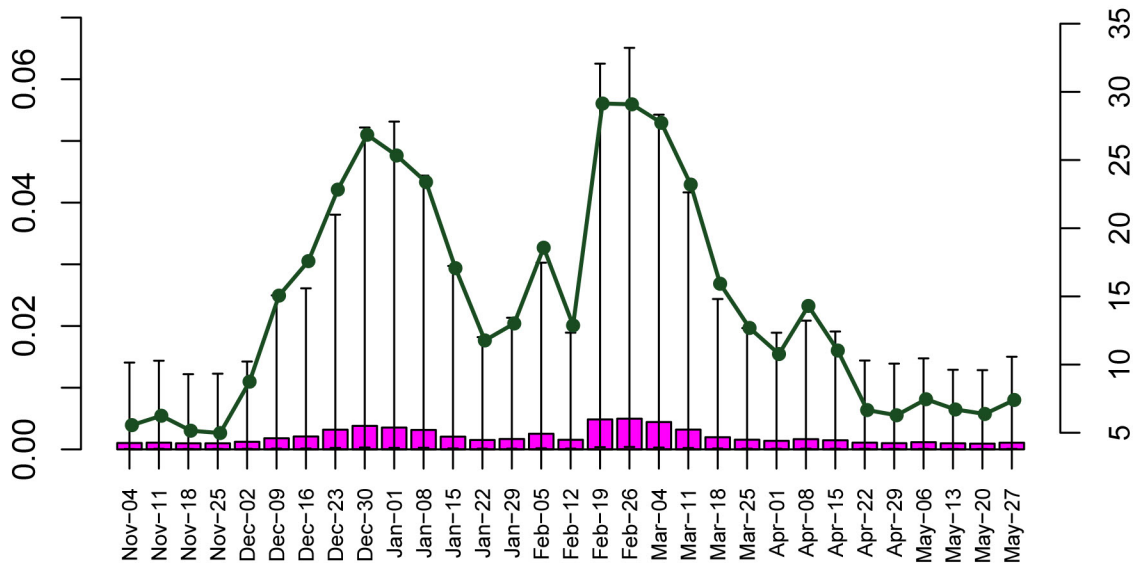


knights landing_2004 Ntot=49520 (24321 - 93535) cv=34%

Abundance ('000s)



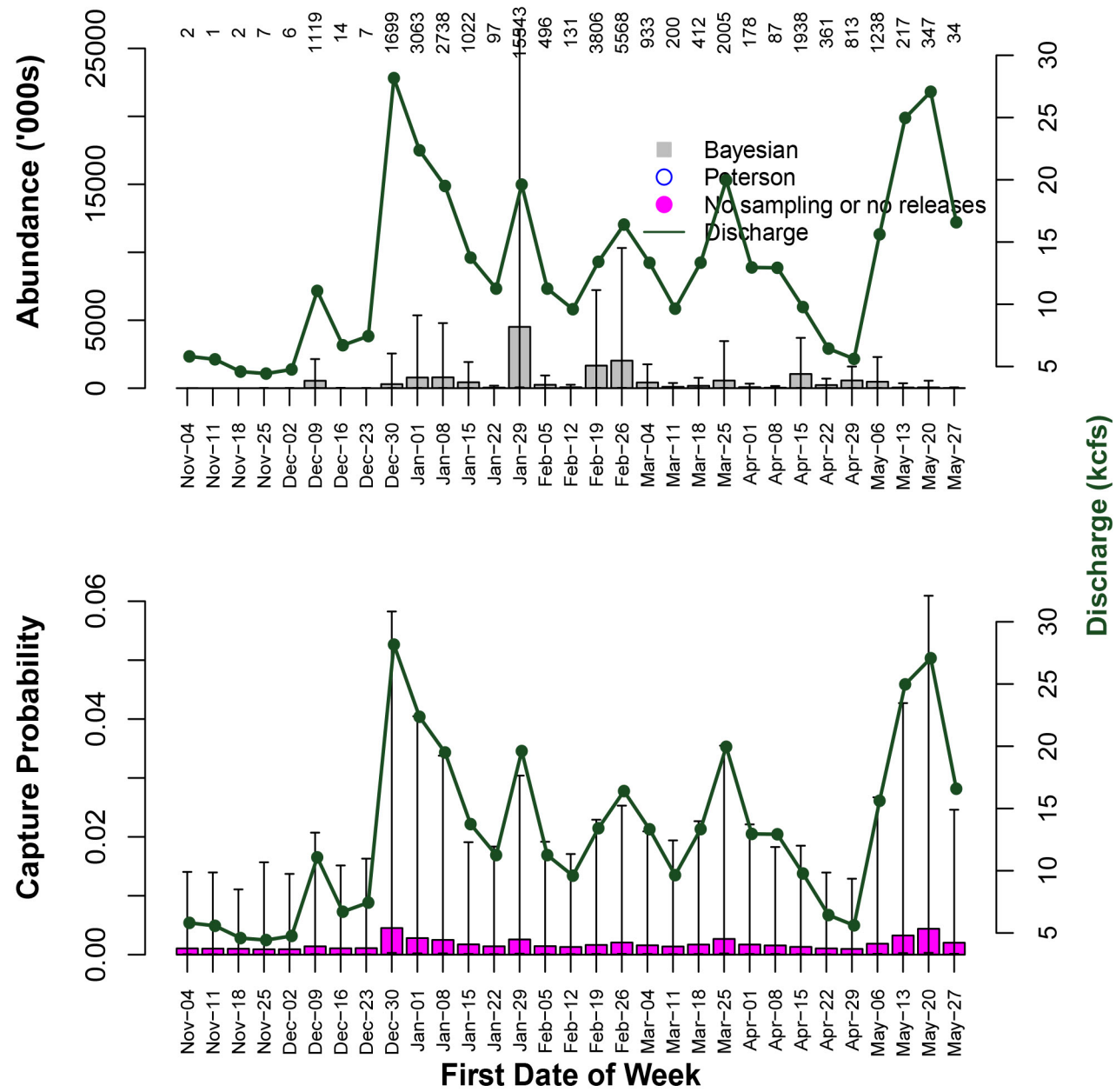
Capture Probability



First Date of Week

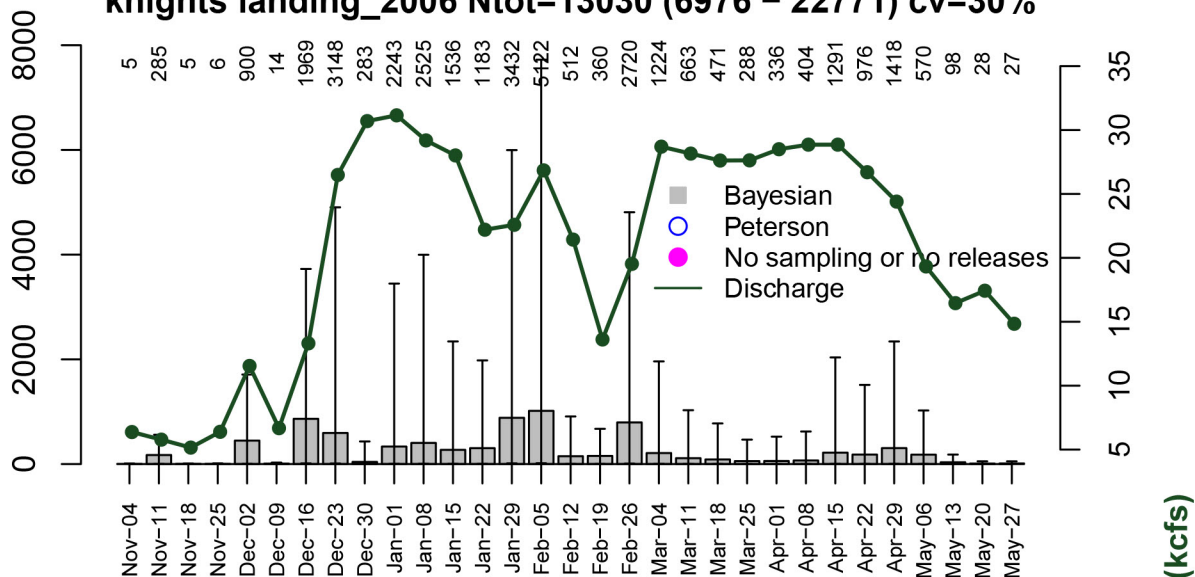
Discharge (kcfs)

knight's landing_2005 Ntot=20920 (10350 - 43604) cv=38%

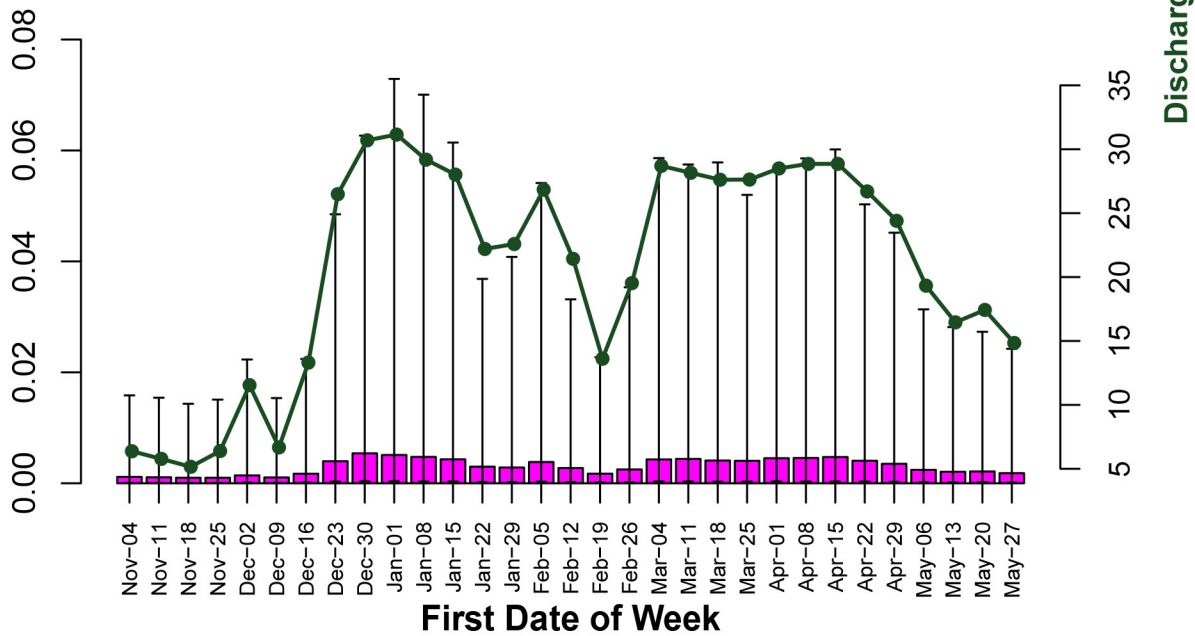


knights landing_2006 Ntot=13030 (6976 - 22771) cv=30%

Abundance ('000s)



Capture Probability

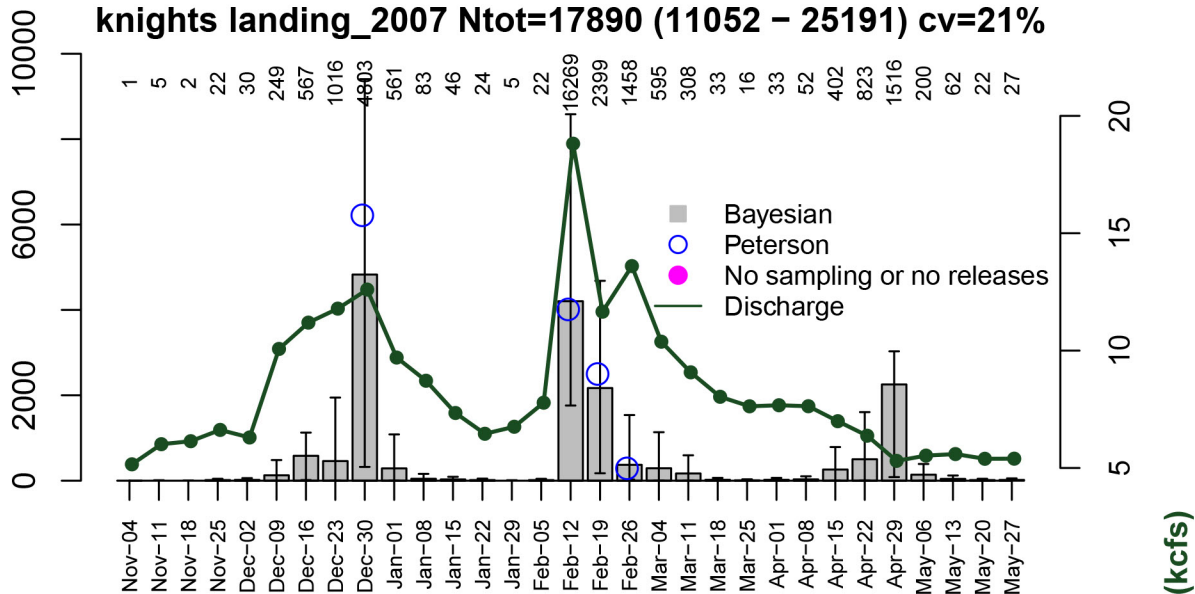


First Date of Week

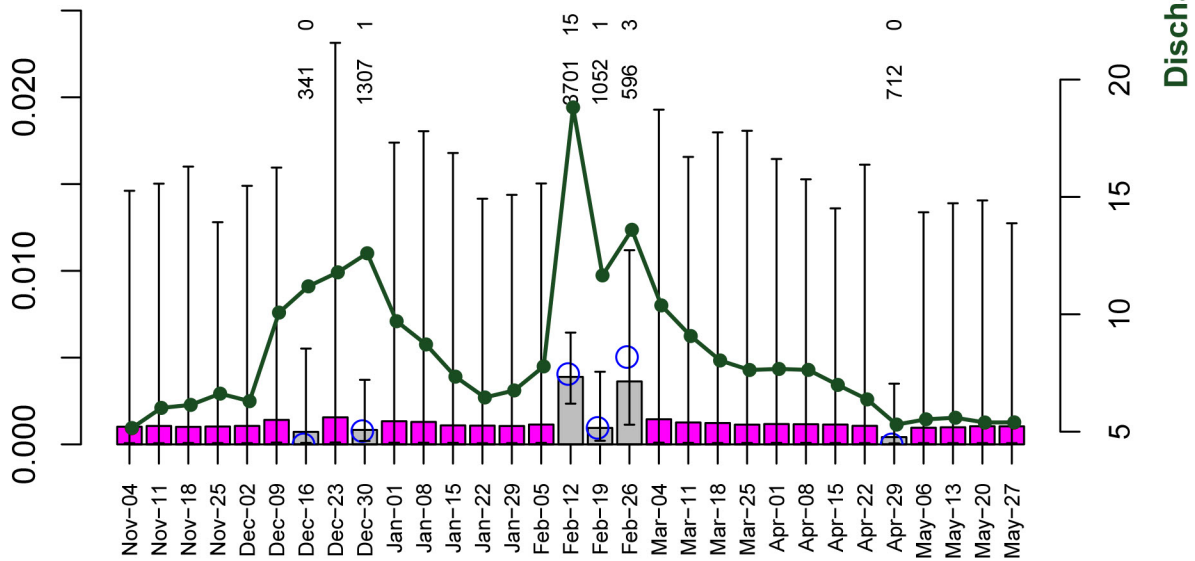
Discharge (kcfs)

knights landing_2007 Ntot=17890 (11052 - 25191) cv=21%

Abundance ('000s)



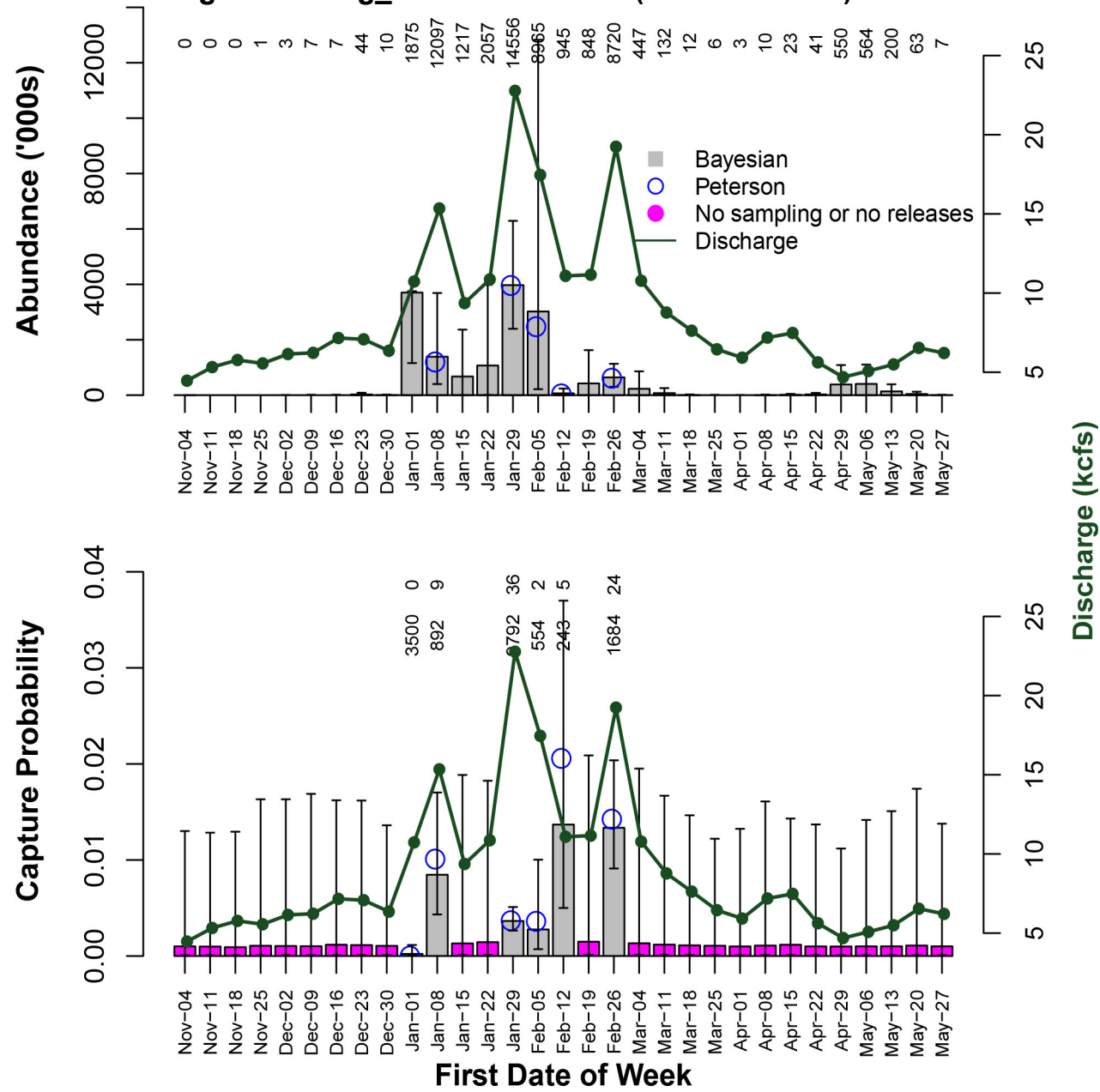
Capture Probability



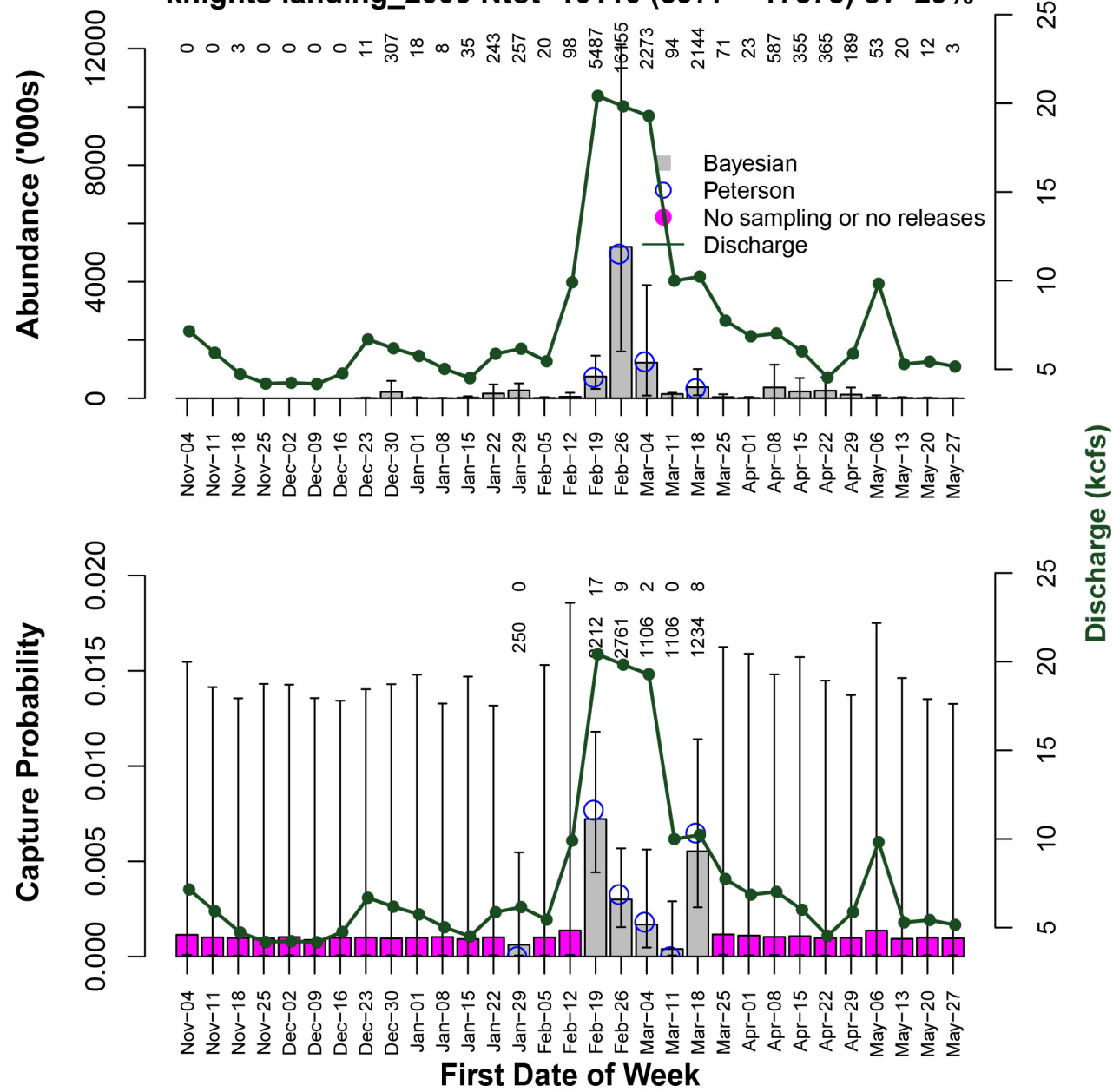
First Date of Week

Discharge (kcfs)

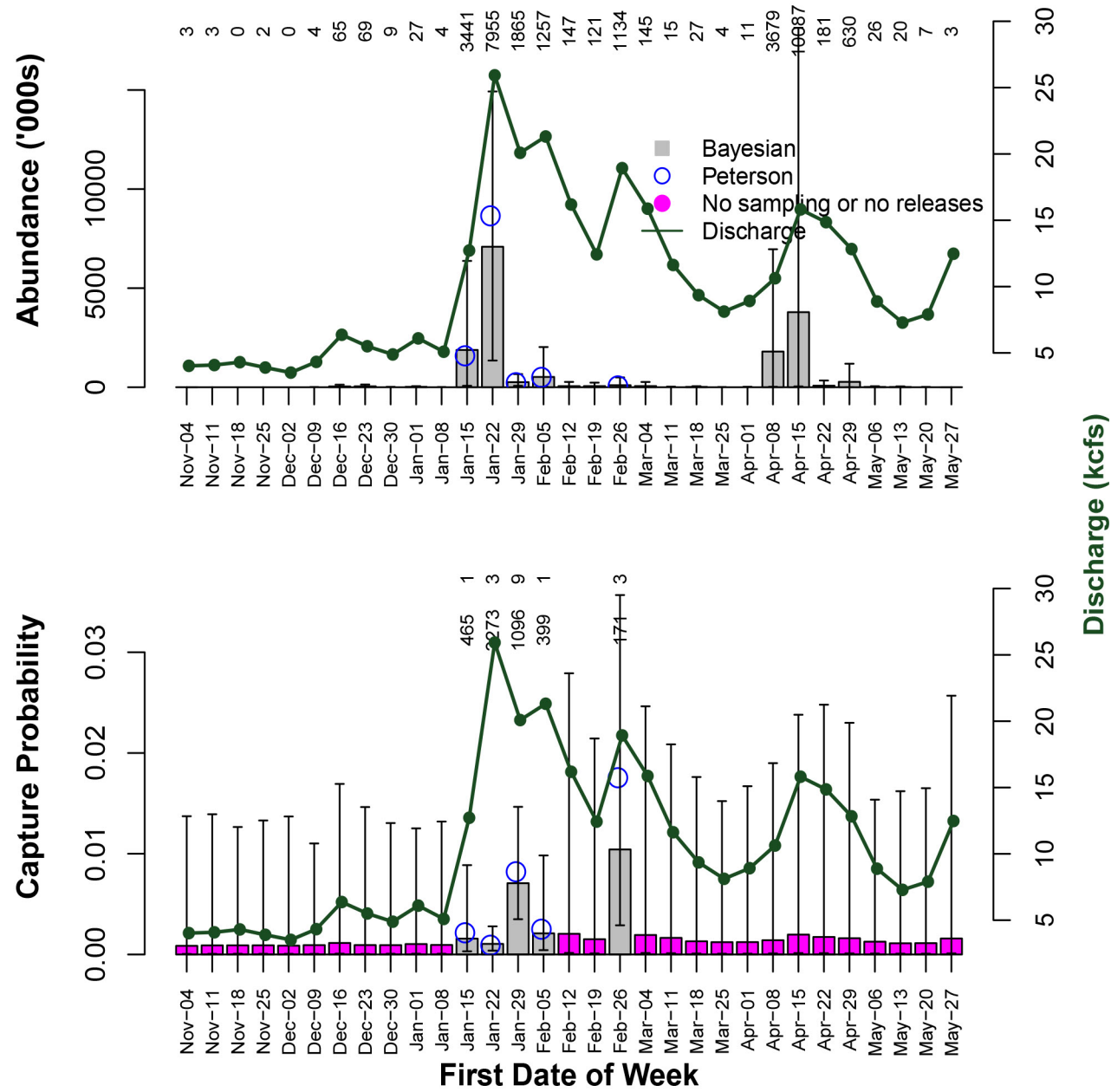
knight's landing_2008 Ntot=17400 (12077 - 27658) cv=21%



knight's landing_2009 Ntot=10110 (5977 - 17373) cv=29%

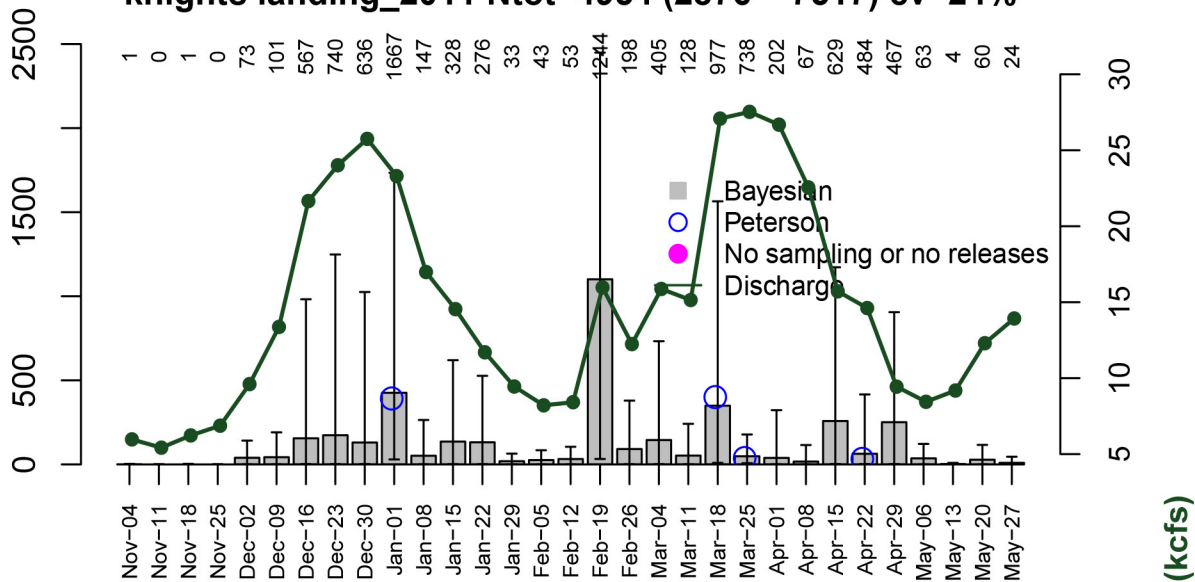


knight's landing_2010 Ntot=18995 (8522 - 34838) cv=35%

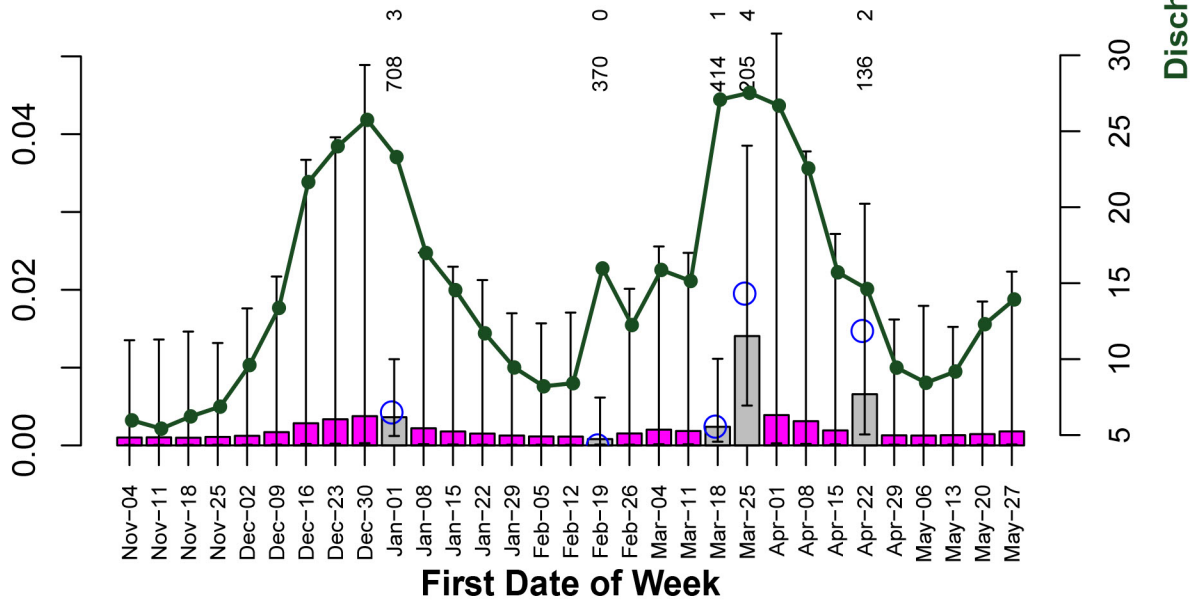


knights landing_2011 Ntot=4954 (2876 – 7517) cv=24%

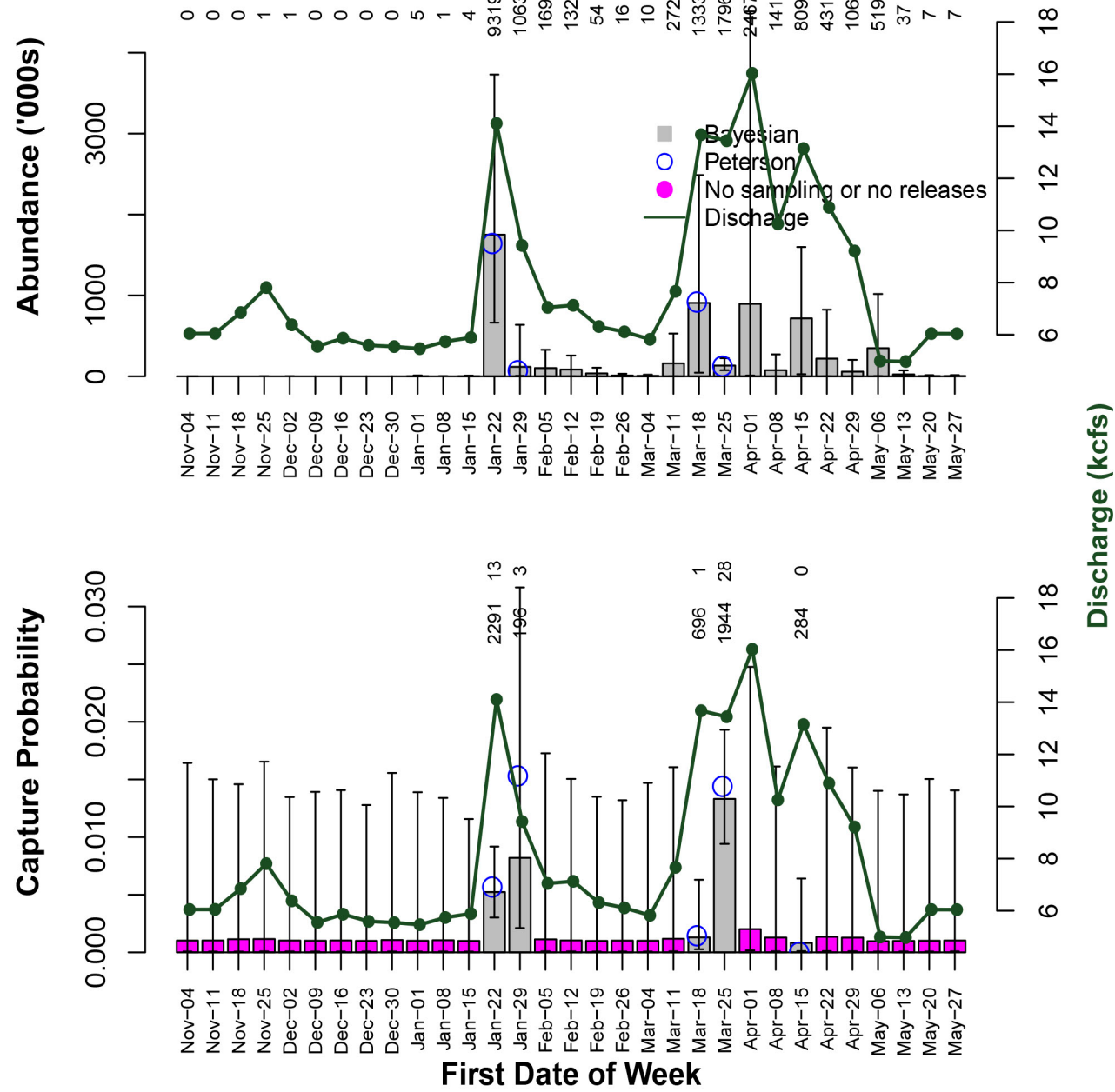
Abundance ('000s)



Capture Probability

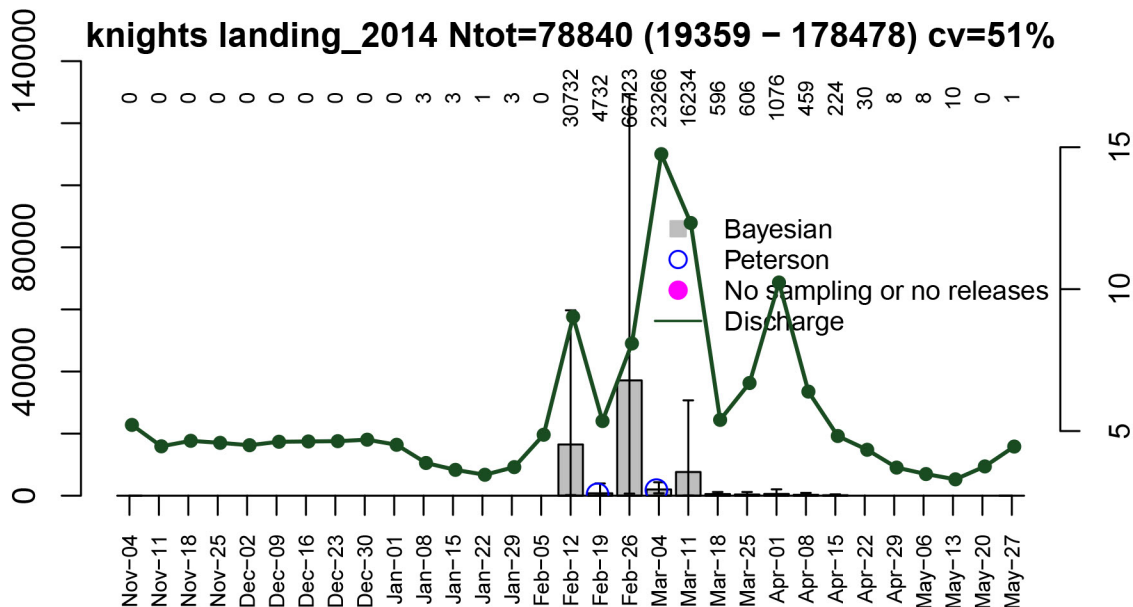


knights landing_2012 Ntot=6483 (3735 - 10678) cv=27%

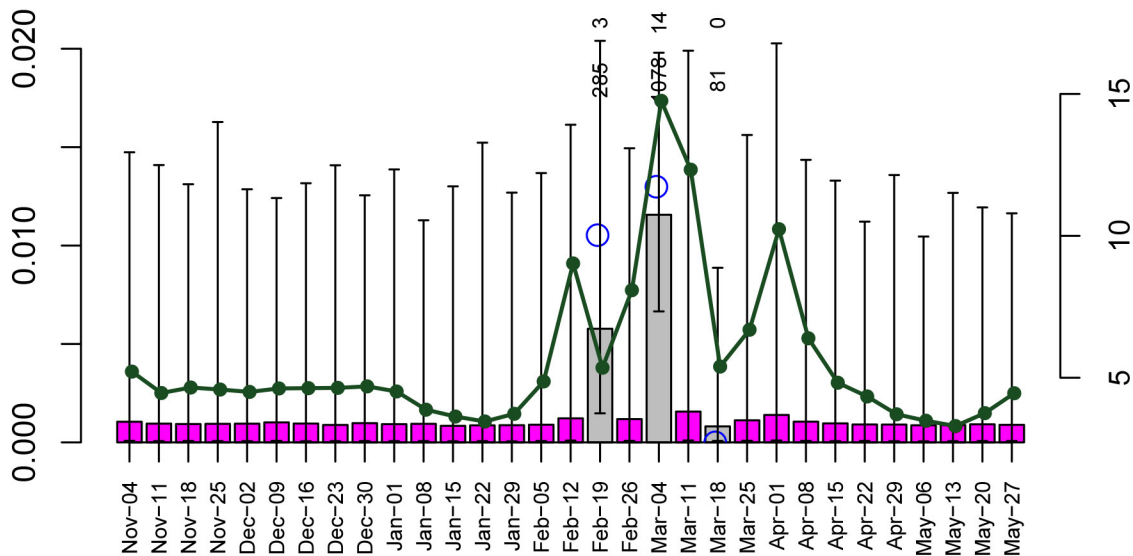


knight's landing_2014 Ntot=78840 (19359 - 178478) cv=51%

Abundance ('000s)

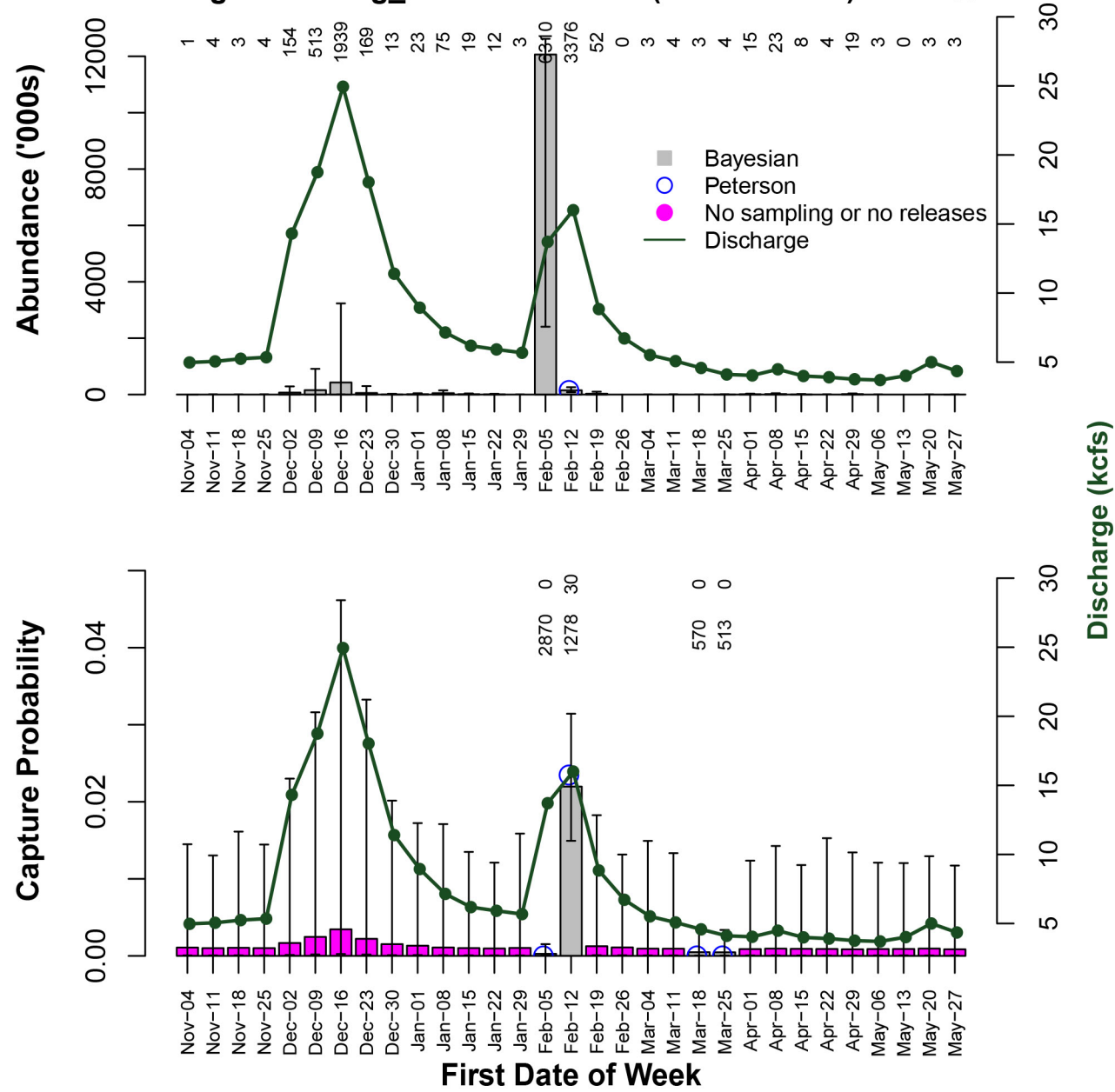


Capture Probability

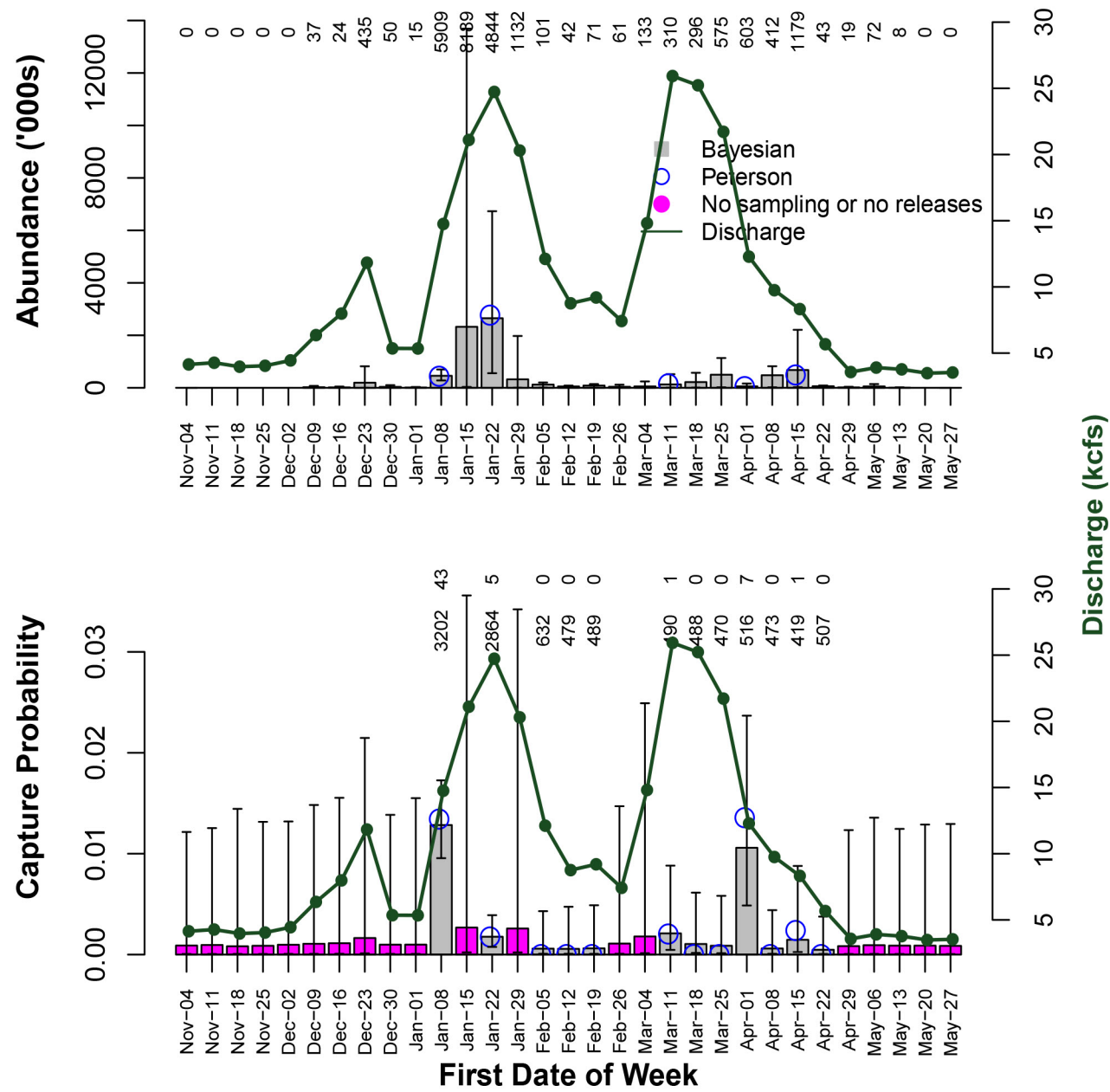


First Date of Week

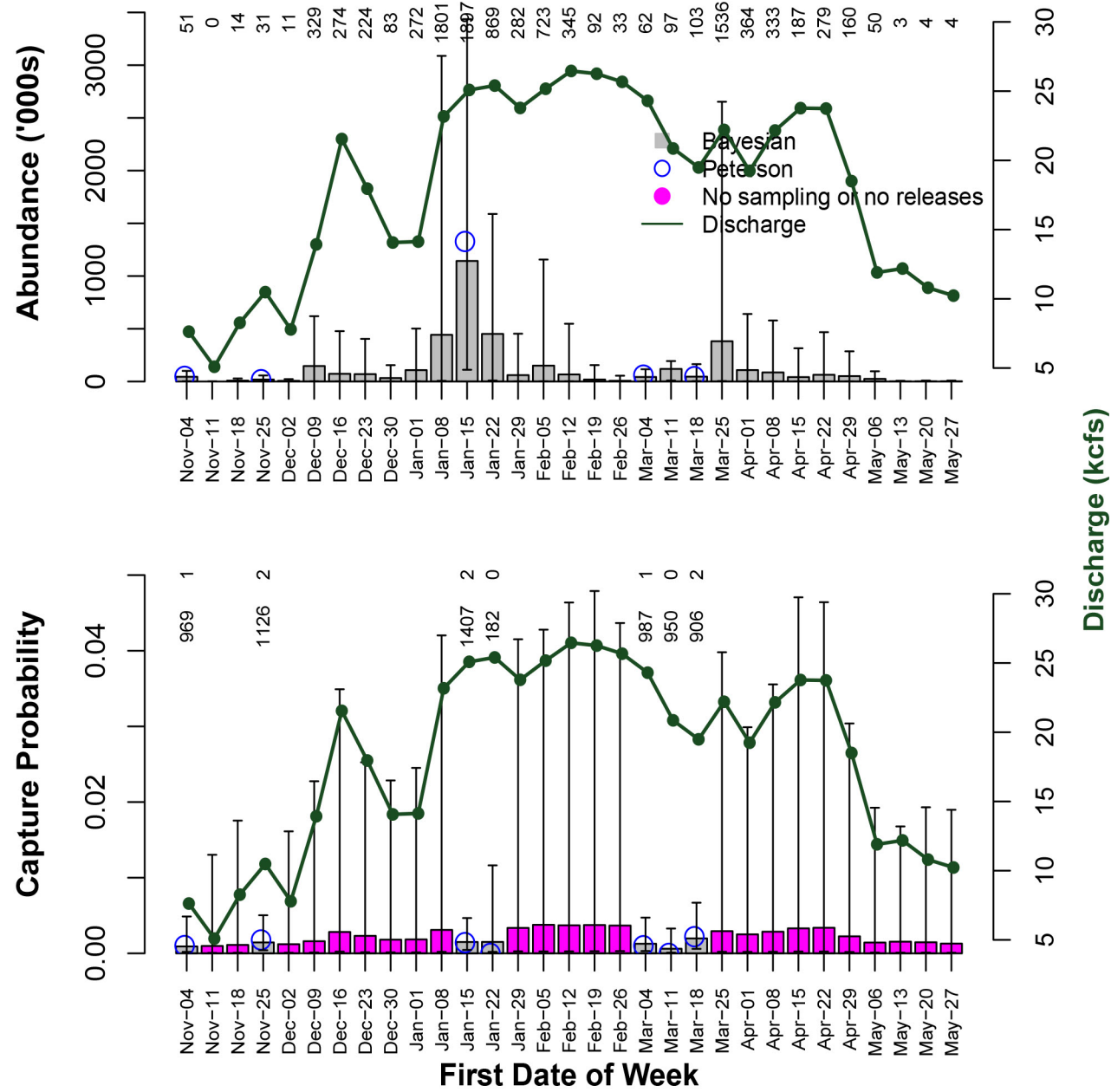
knights landing_2015 Ntot=13270 (3816 - 16220) cv=25%



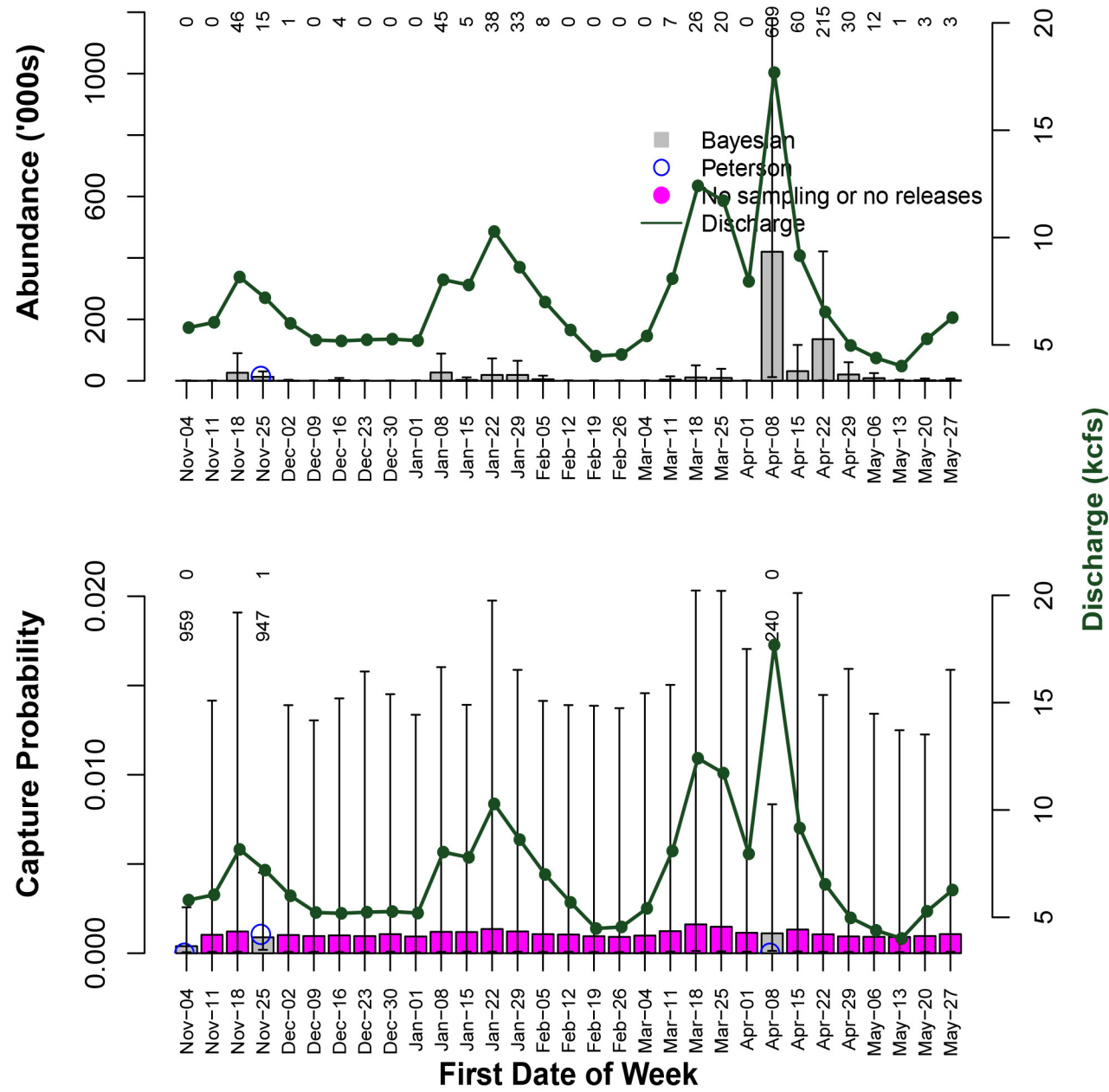
knights landing_2016 Ntot=9628 (5046 – 21101) cv=39%



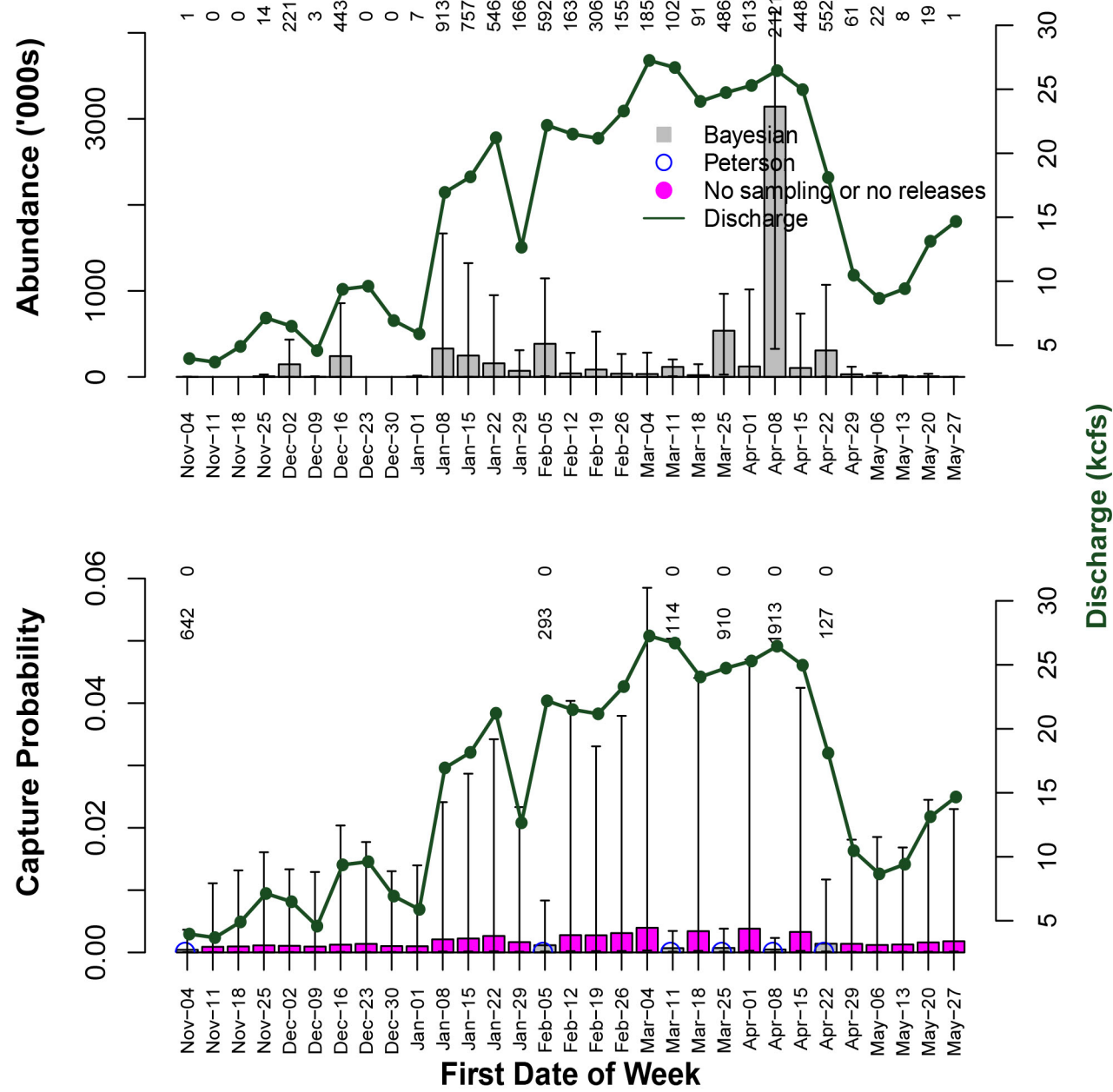
knights landing_2017 Ntot=5230 (2875 - 8749) cv=29%



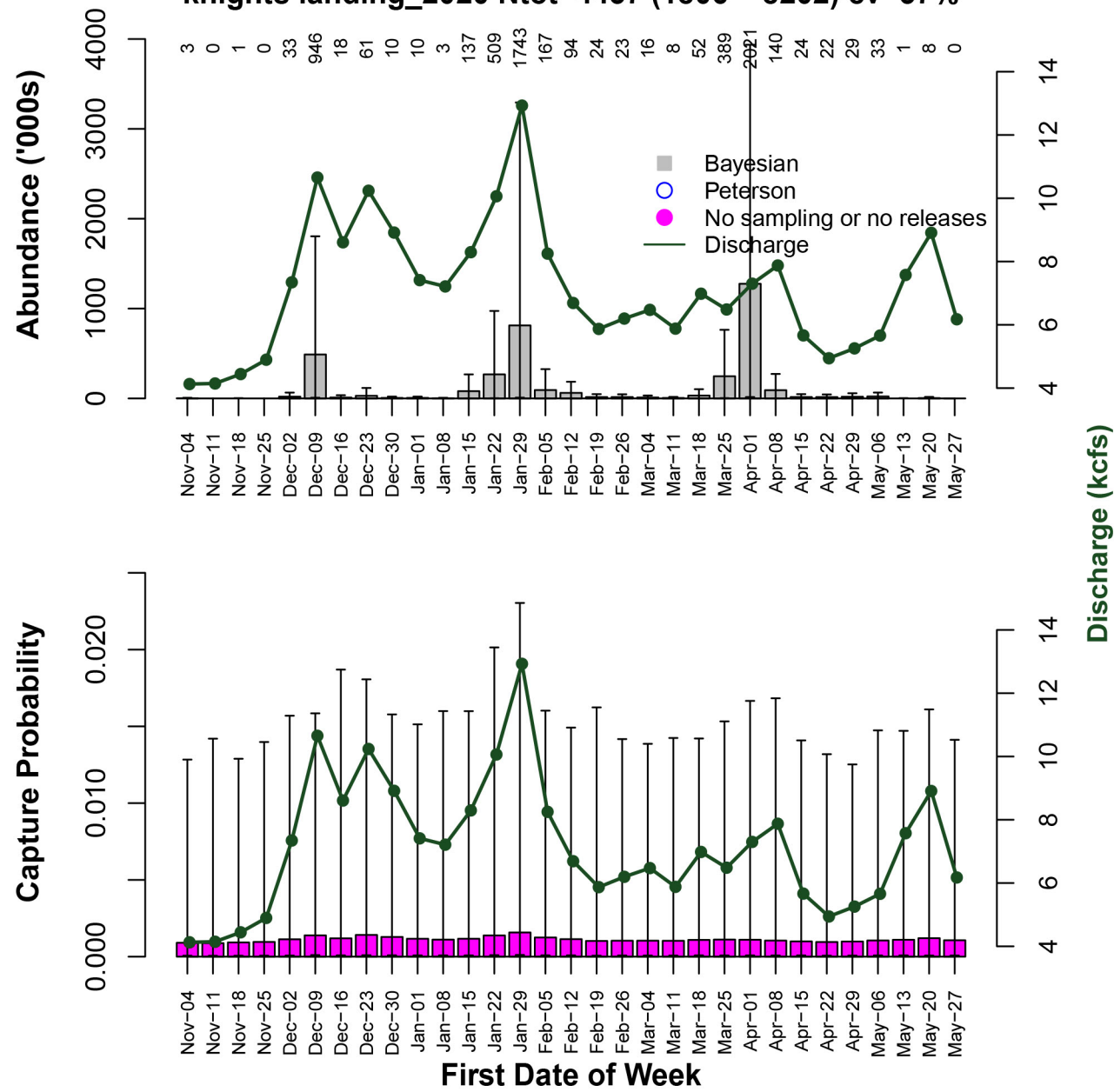
knights landing_2018 Ntot=860 (313 - 1668) cv=41%



knights landing_2019 Ntot=7061 (3824 - 9743) cv=22%

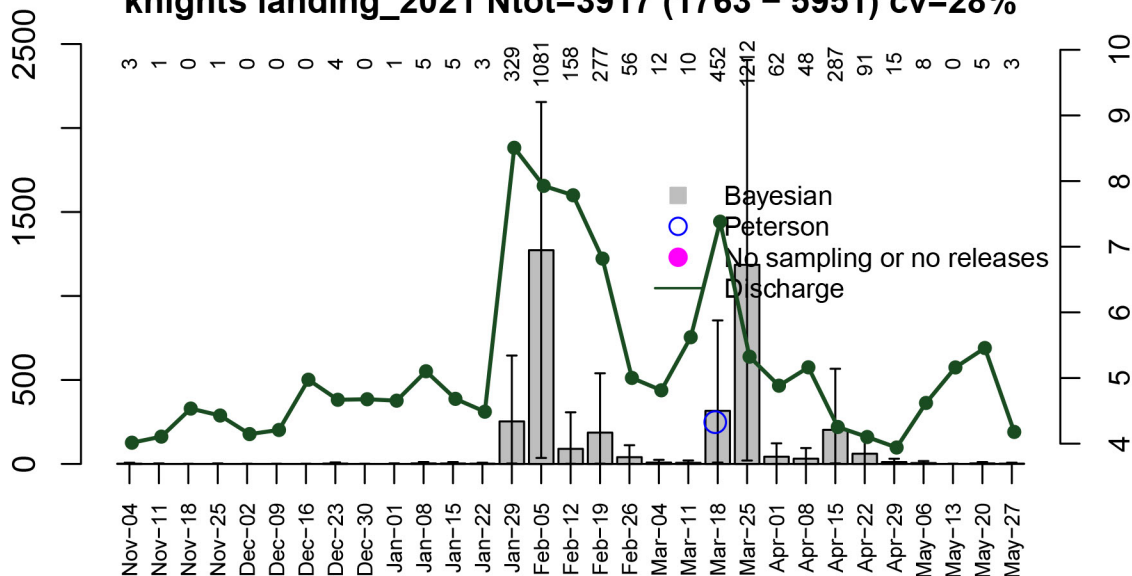


knights landing_2020 Ntot=4437 (1806 – 8202) cv=37%

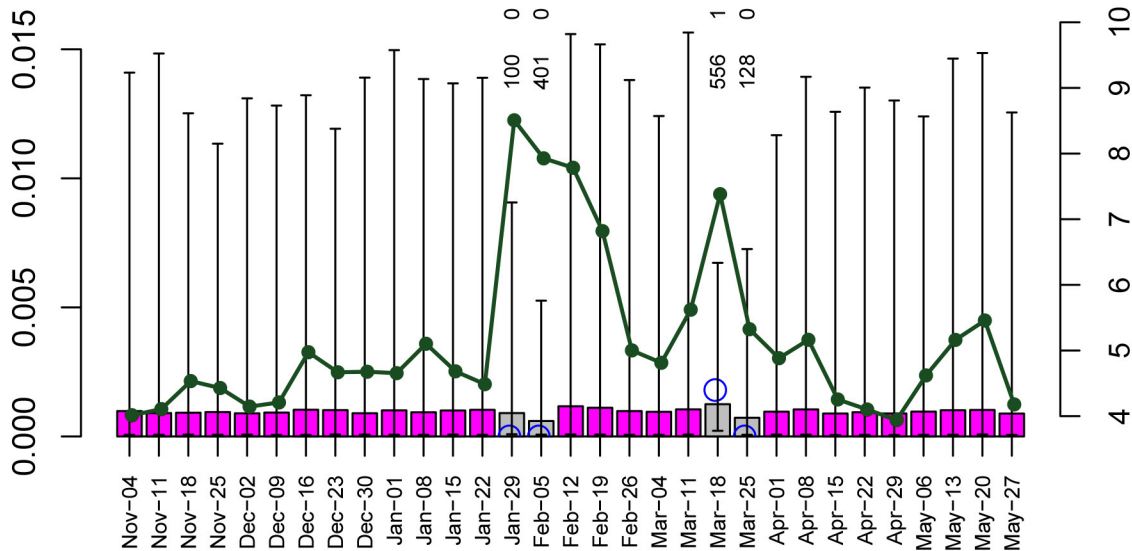


knights landing_2021 Ntot=3917 (1763 - 5951) cv=28%

Abundance ('000s)

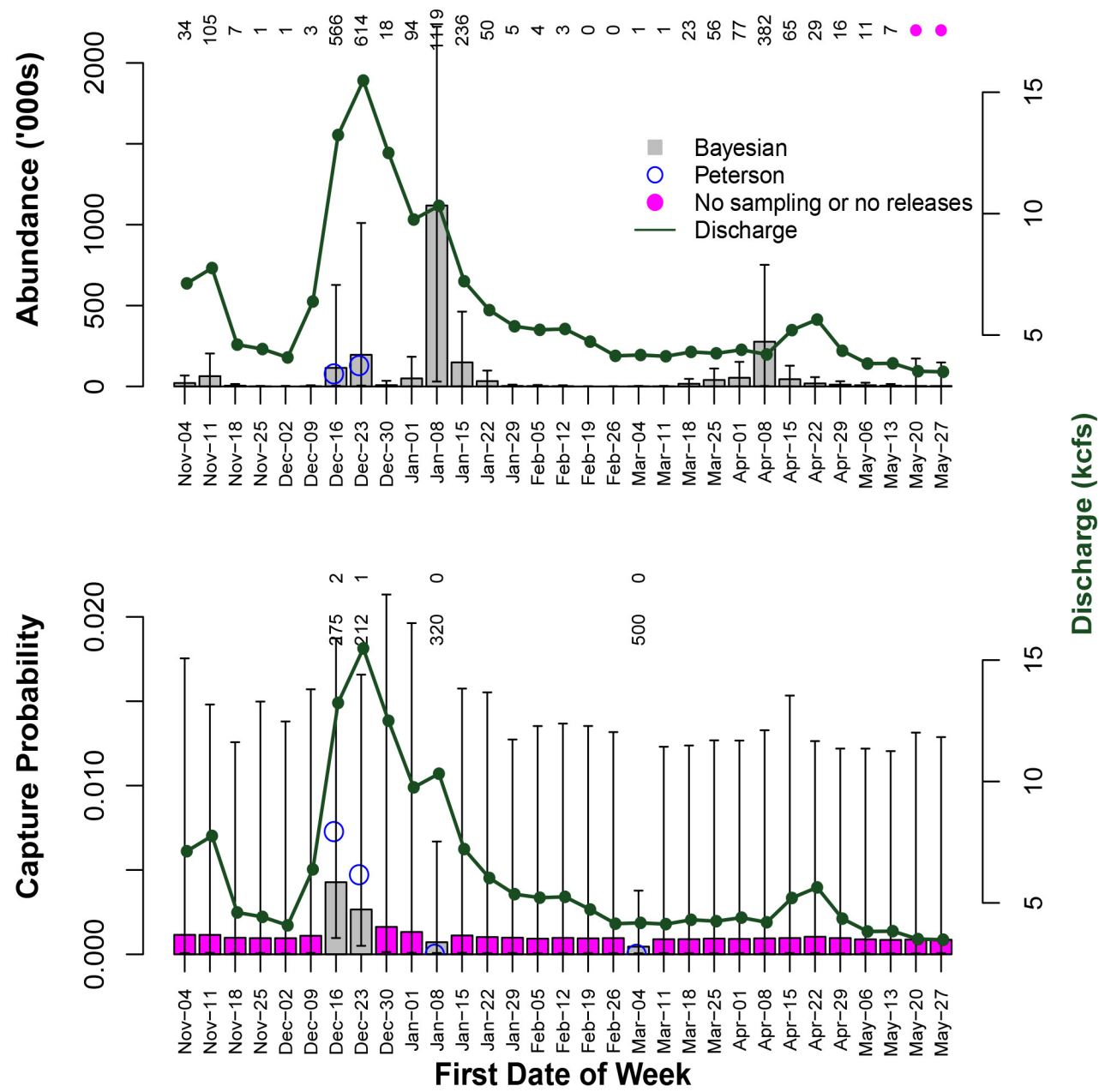


Capture Probability

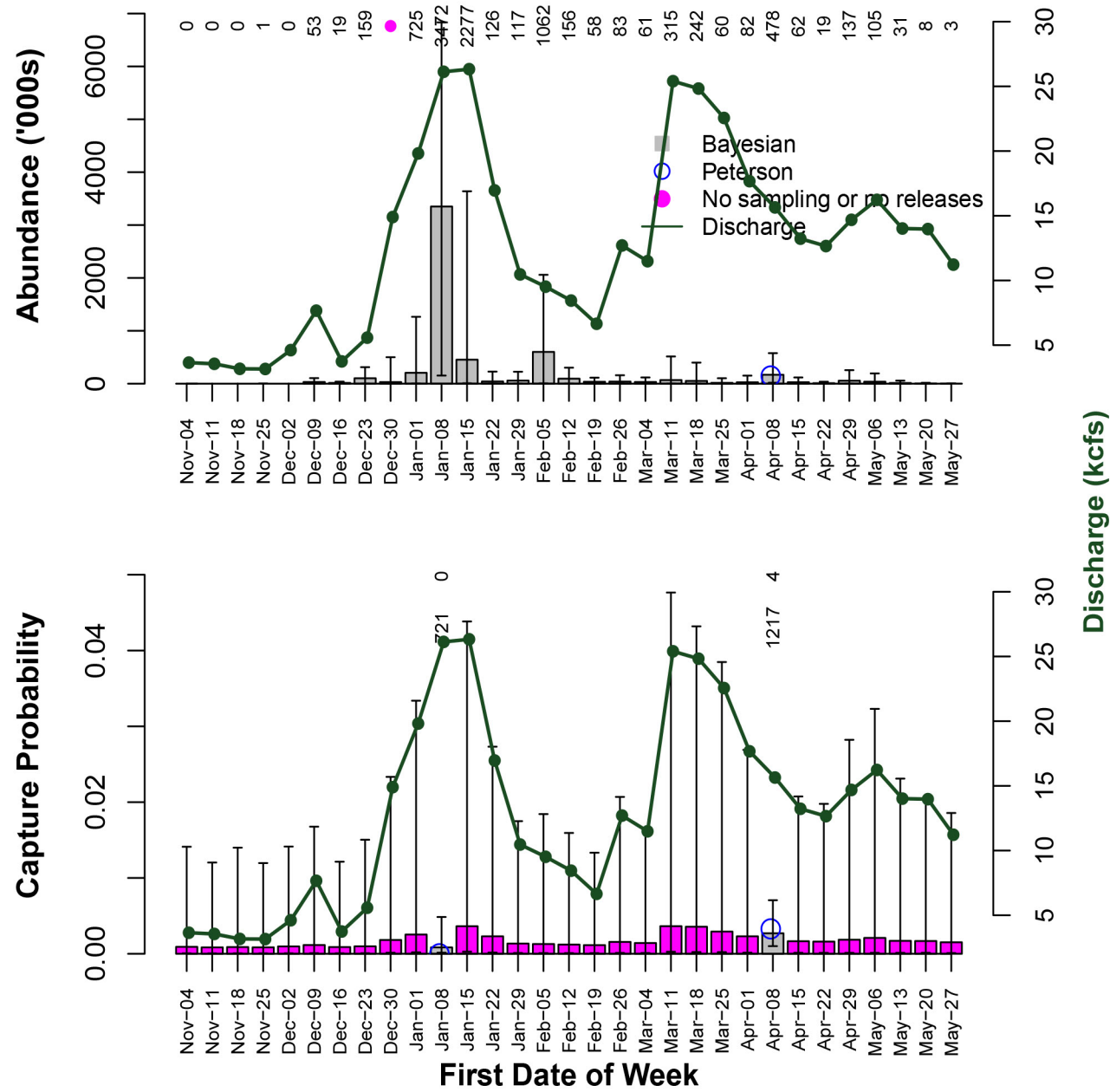


First Date of Week

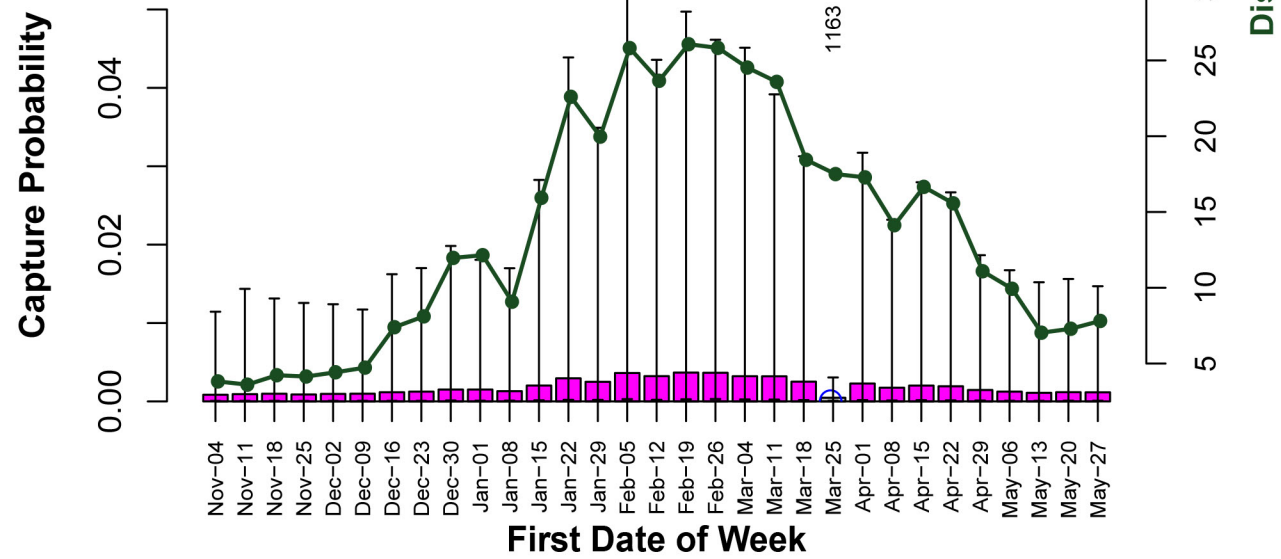
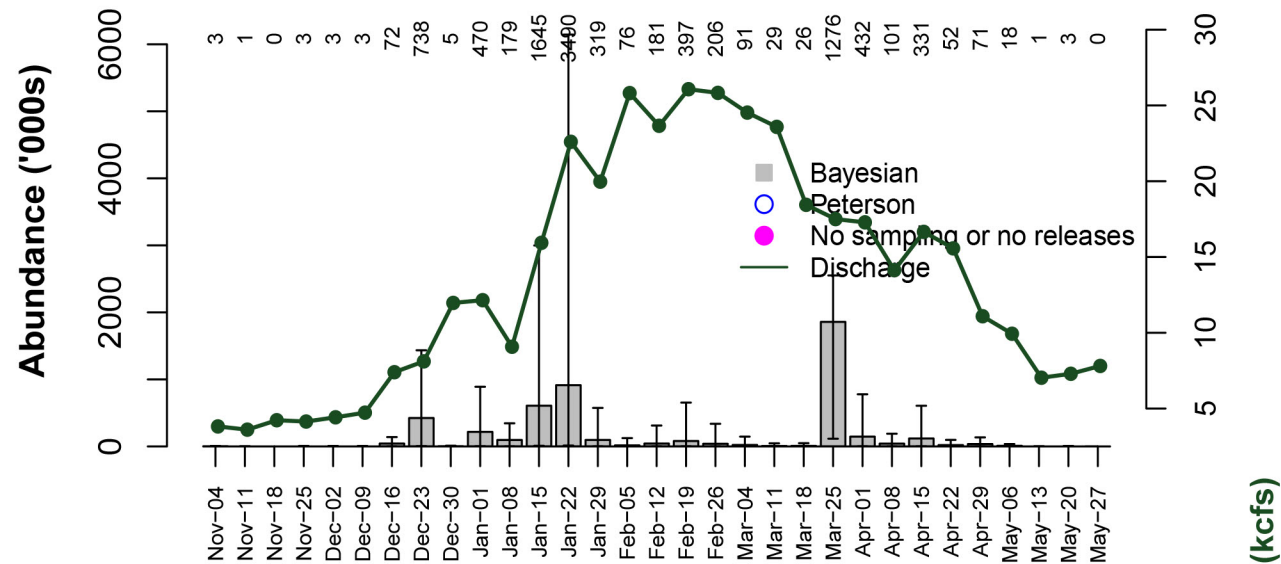
knights landing_2022 Ntot=2562 (1144 - 4164) cv=32%



knights landing_2023 Ntot=6604 (2451 - 11253) cv=35%

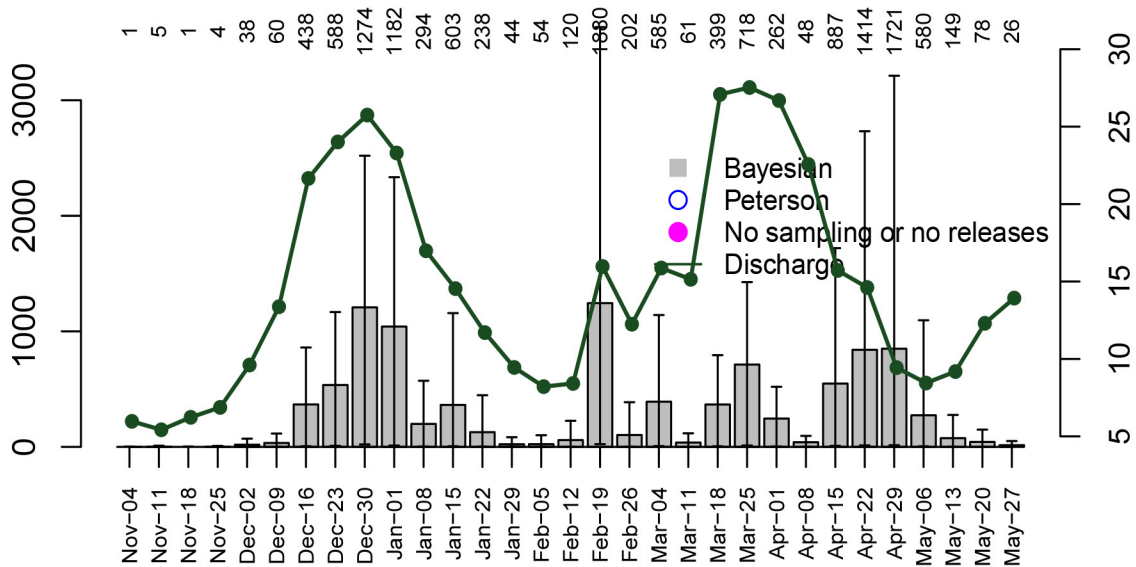


knight's landing_2024 Ntot=5865 (2864 - 11238) cv=34%

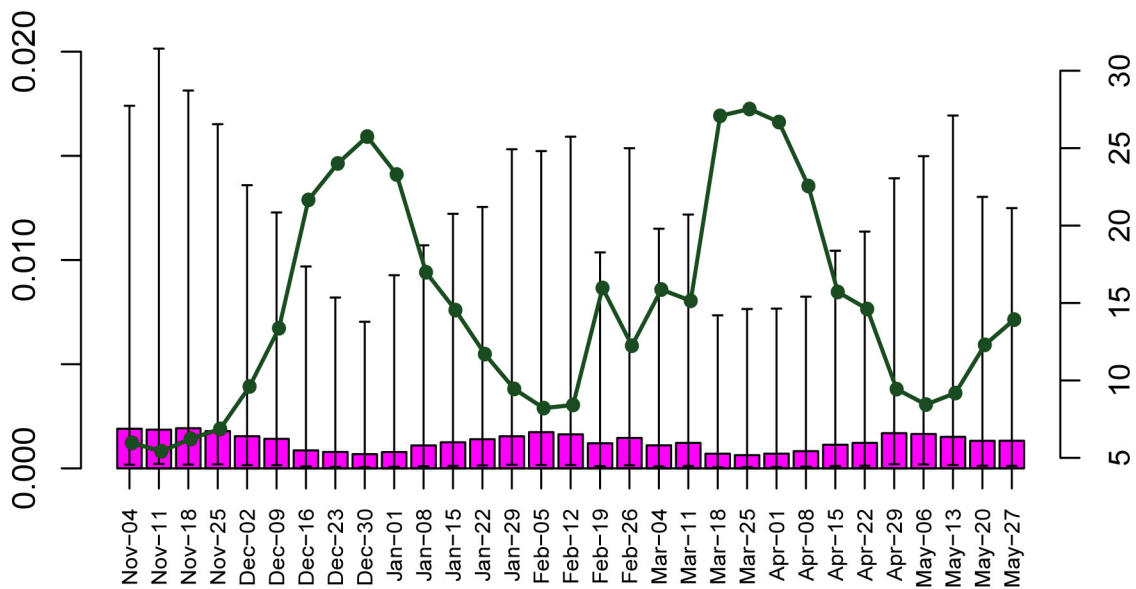


tisdale_2011 Ntot=11150 (7113 - 15513) cv=20%

Abundance ('000s)

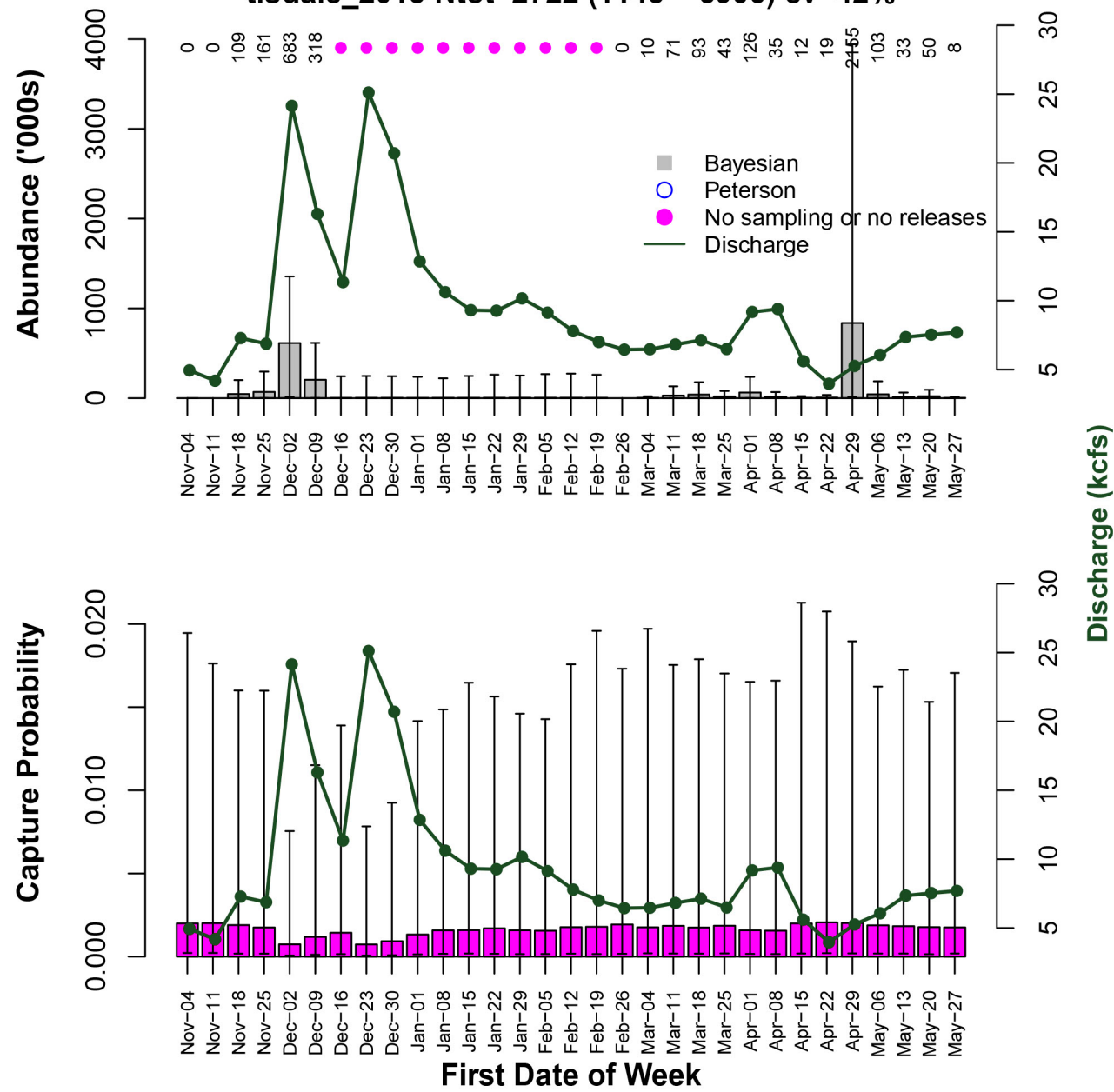


Capture Probability



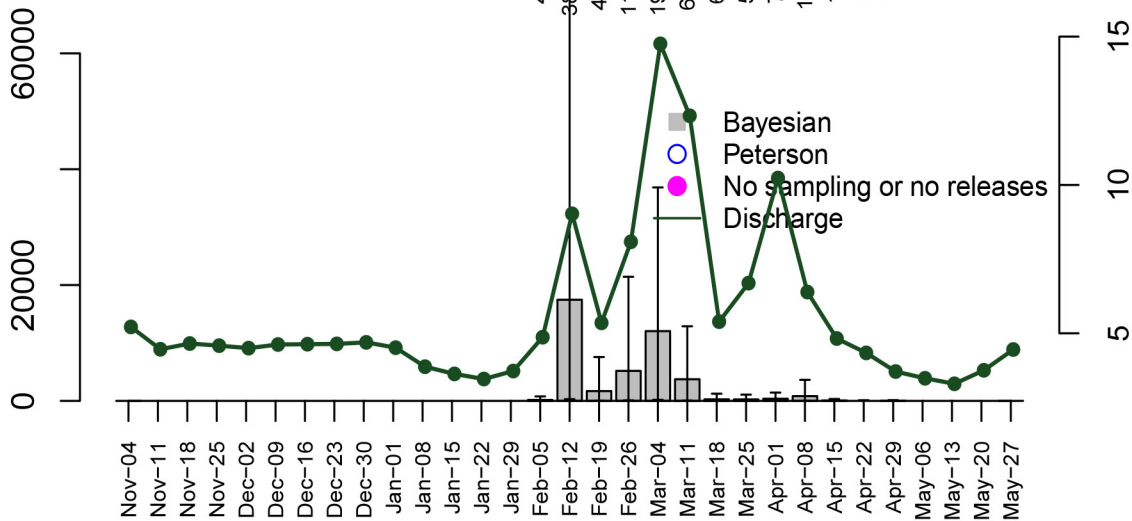
First Date of Week

tisdale_2013 Ntot=2722 (1145 – 5906) cv=42%



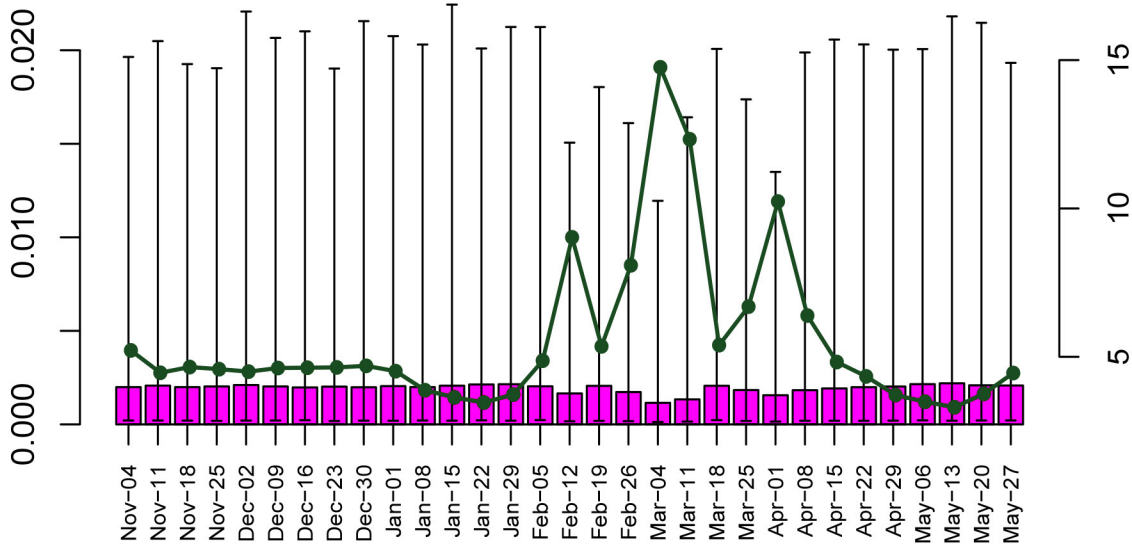
tisdale_2014 Ntot=51325 (17687 - 110333) cv=45%

Abundance ('000s)



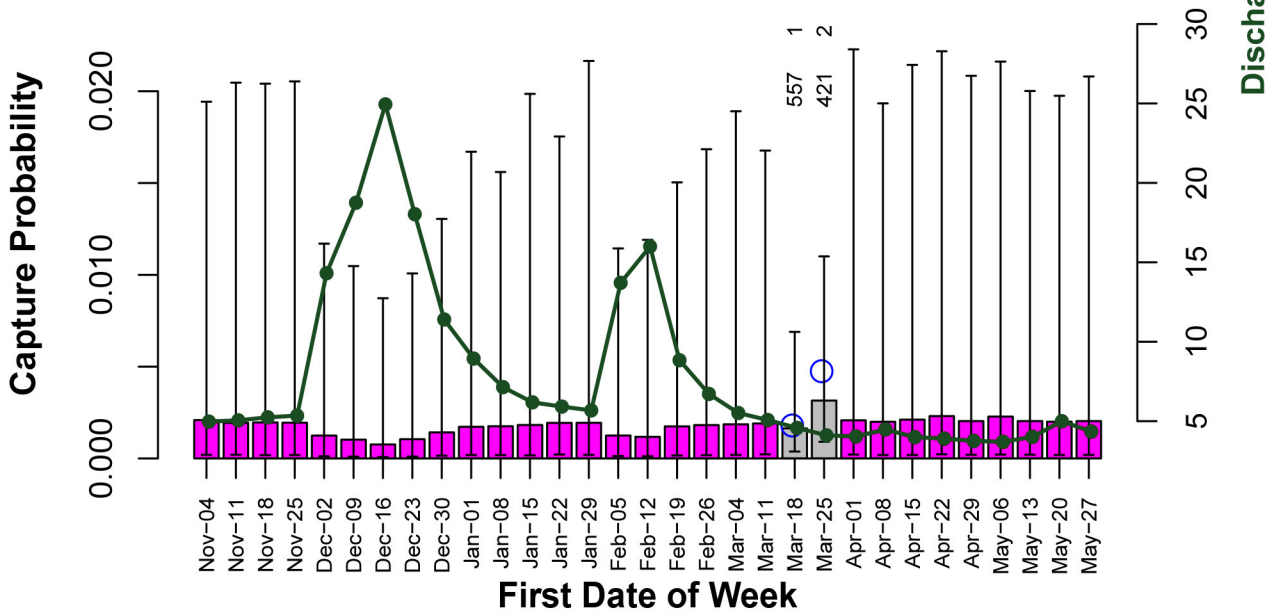
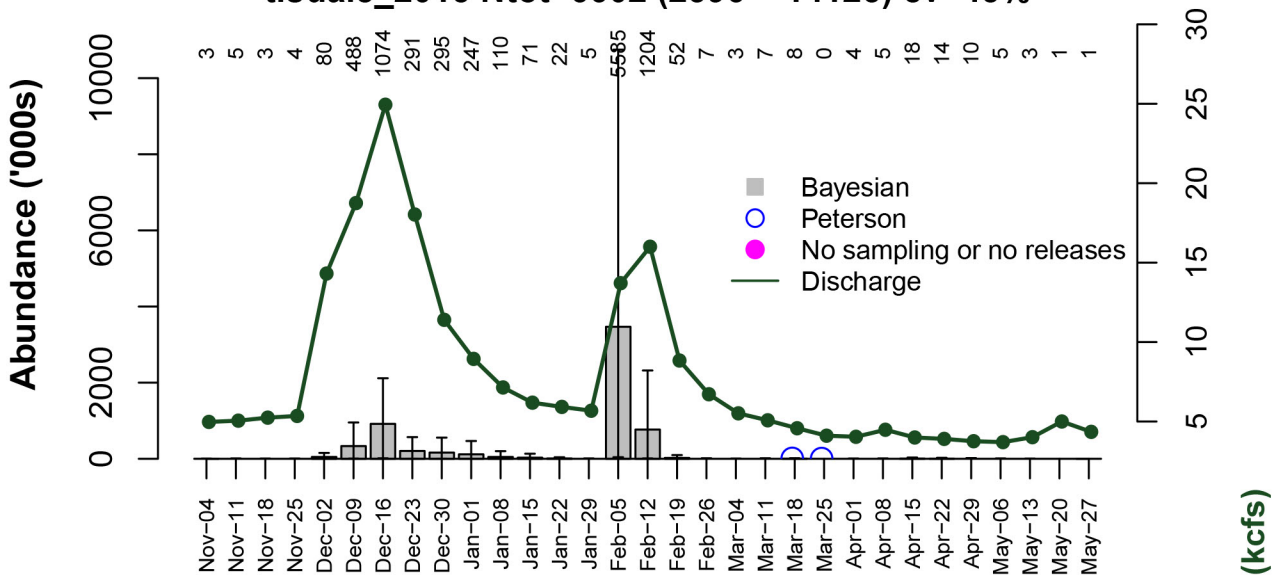
Discharge (kcfs)

Capture Probability

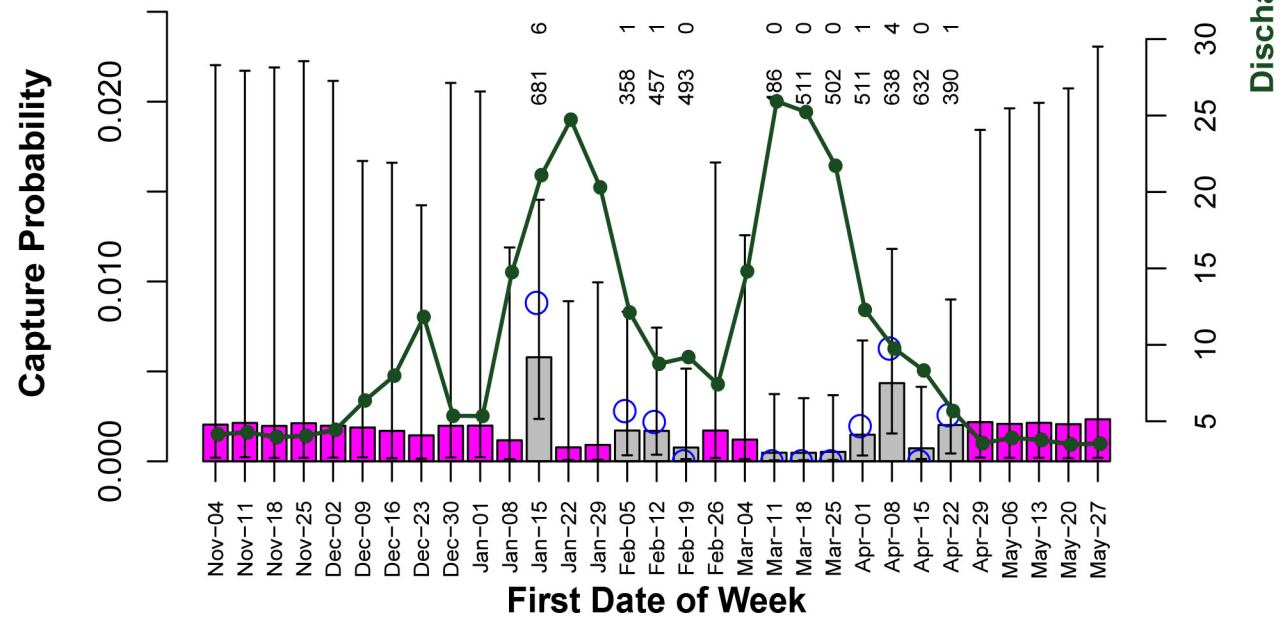
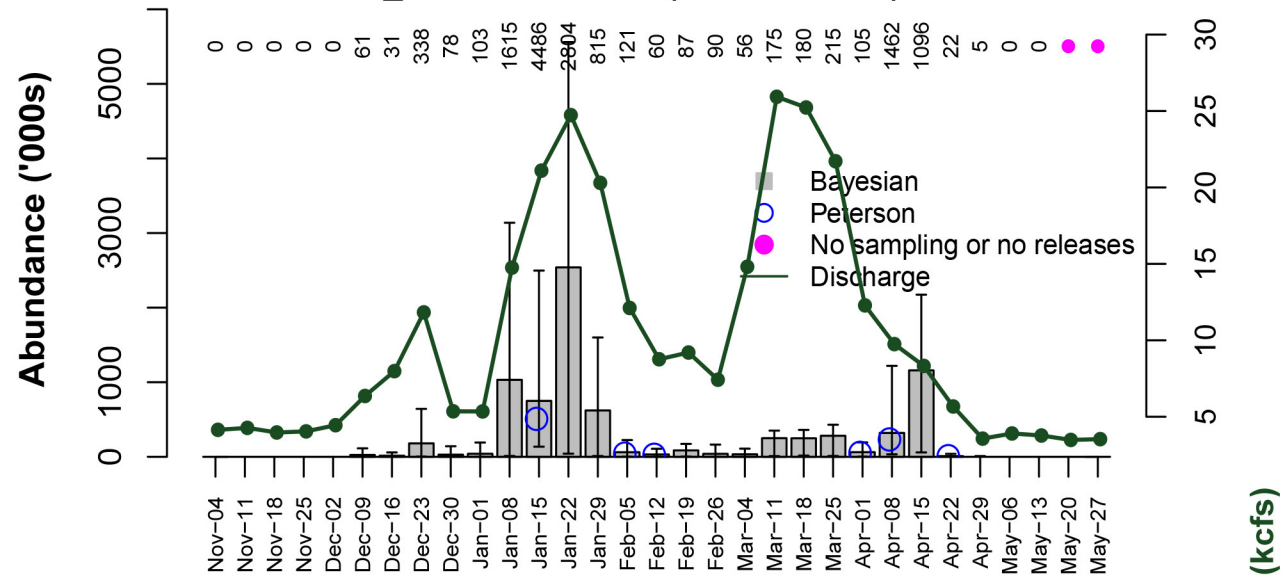


First Date of Week

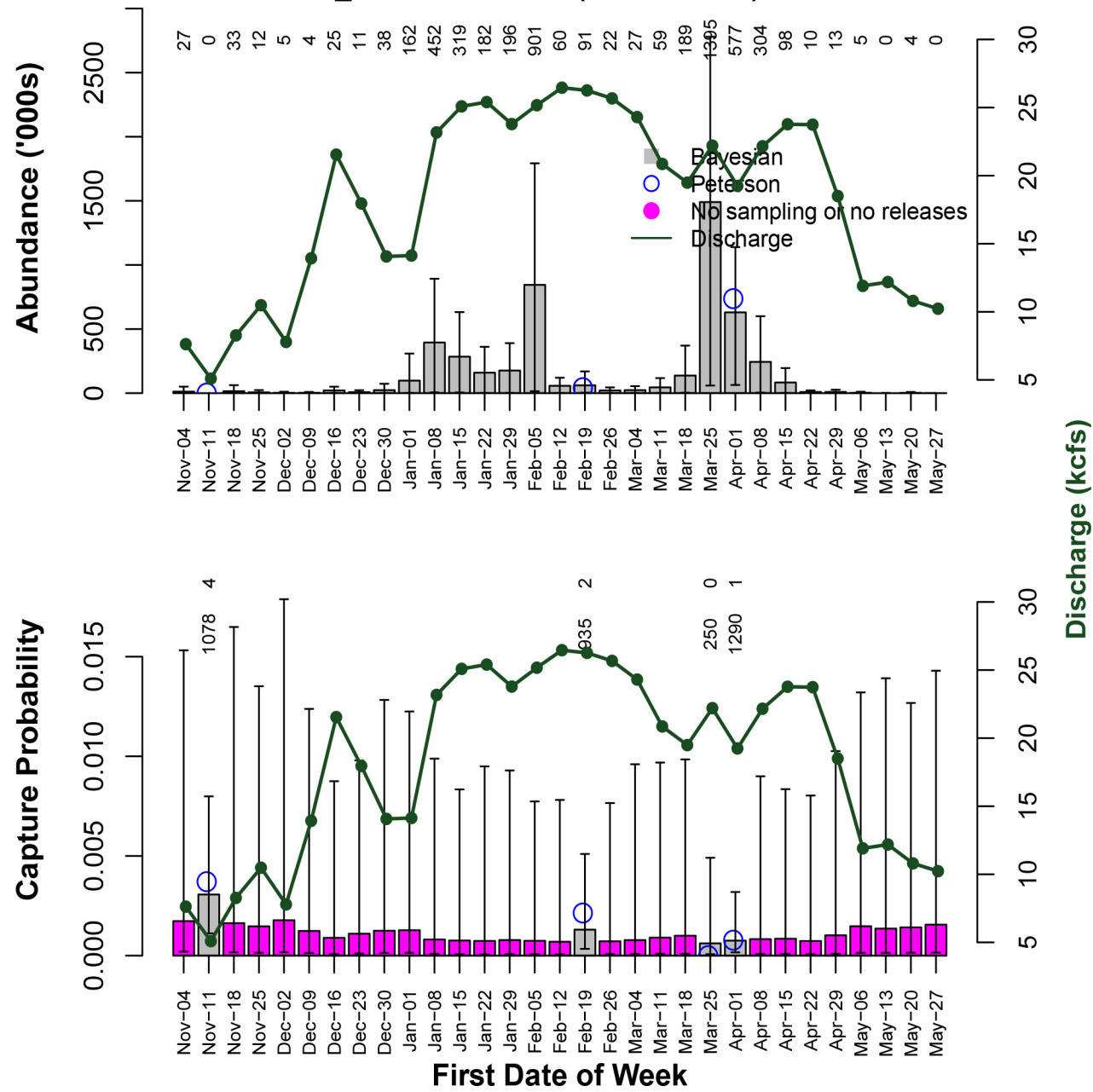
tisdale_2015 Ntot=6602 (2396 - 14123) cv=45%



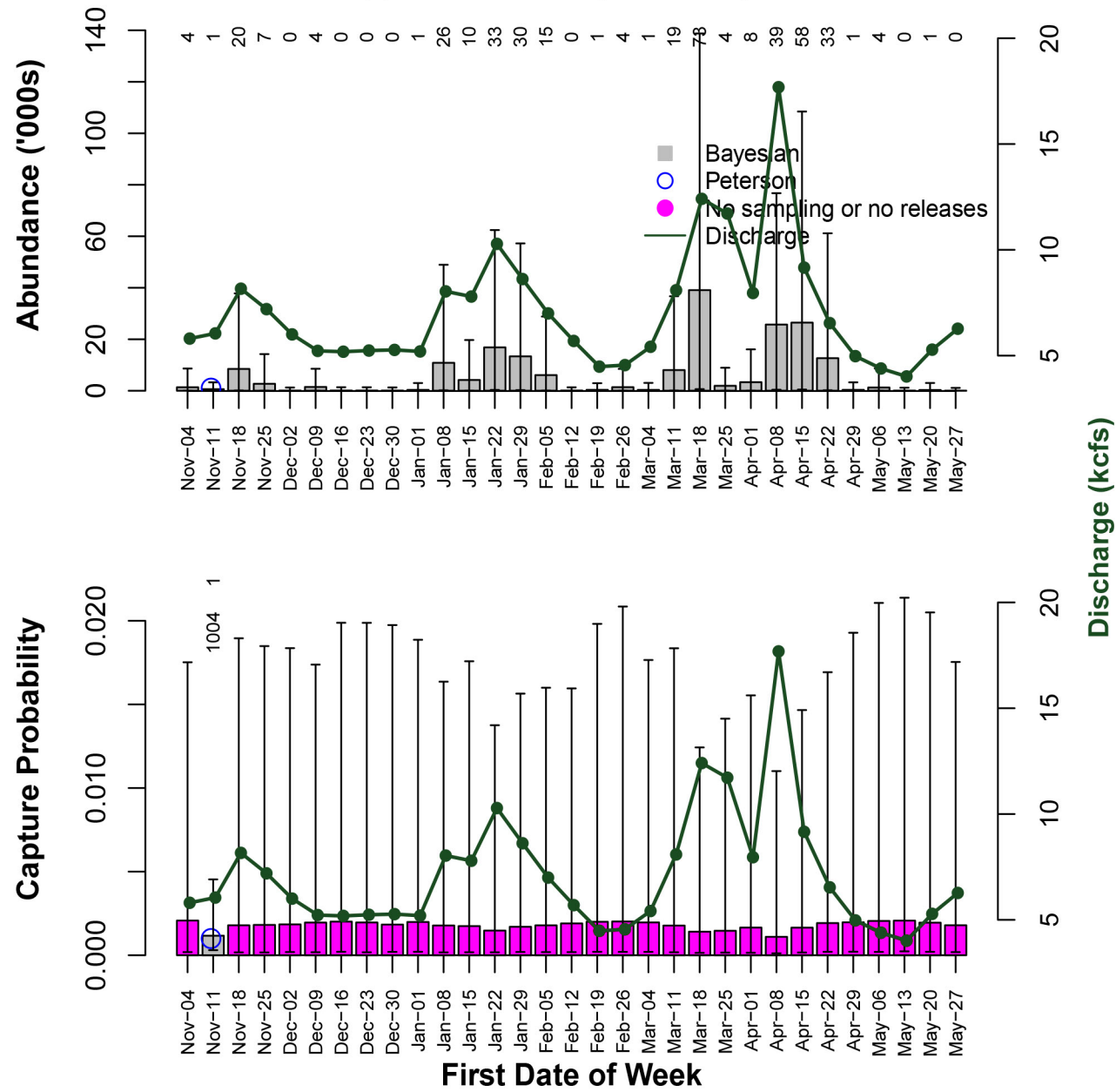
tisdale_2016 Ntot=8414 (4456 - 13058) cv=27%



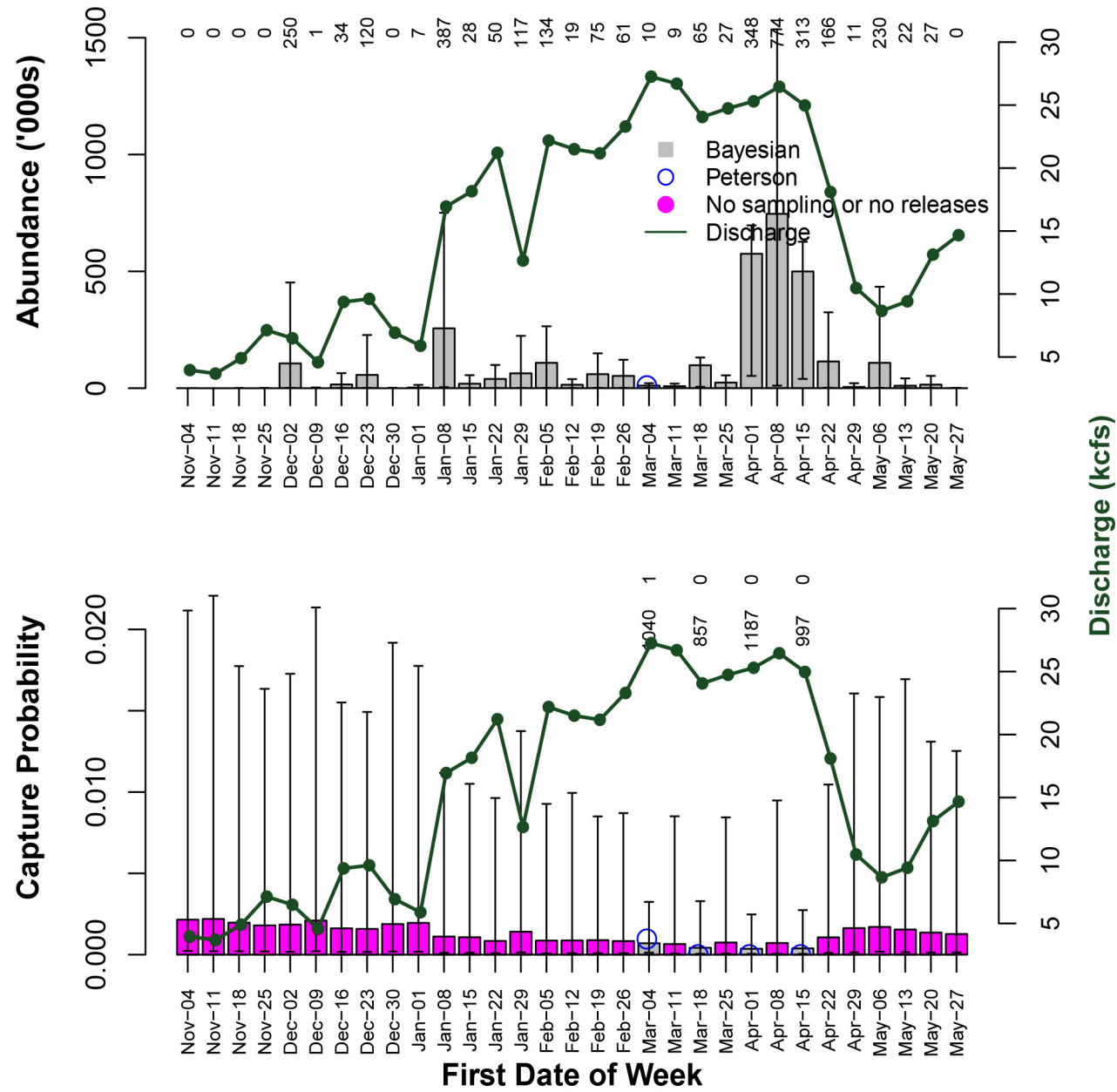
tisdale_2017 Ntot=5092 (2827 - 7302) cv=23%



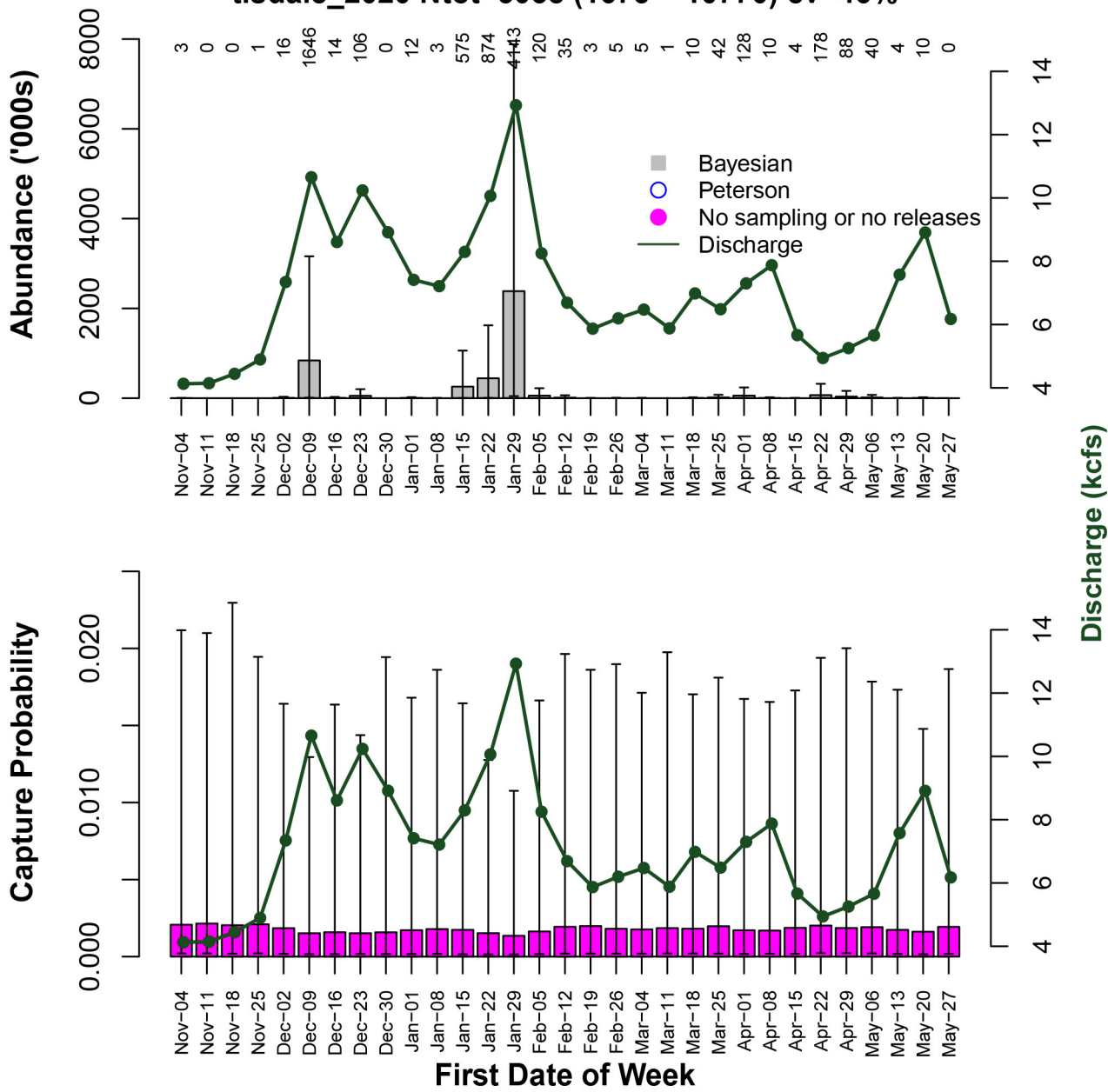
tisdale_2018 Ntot=249 (134 - 393) cv=27%



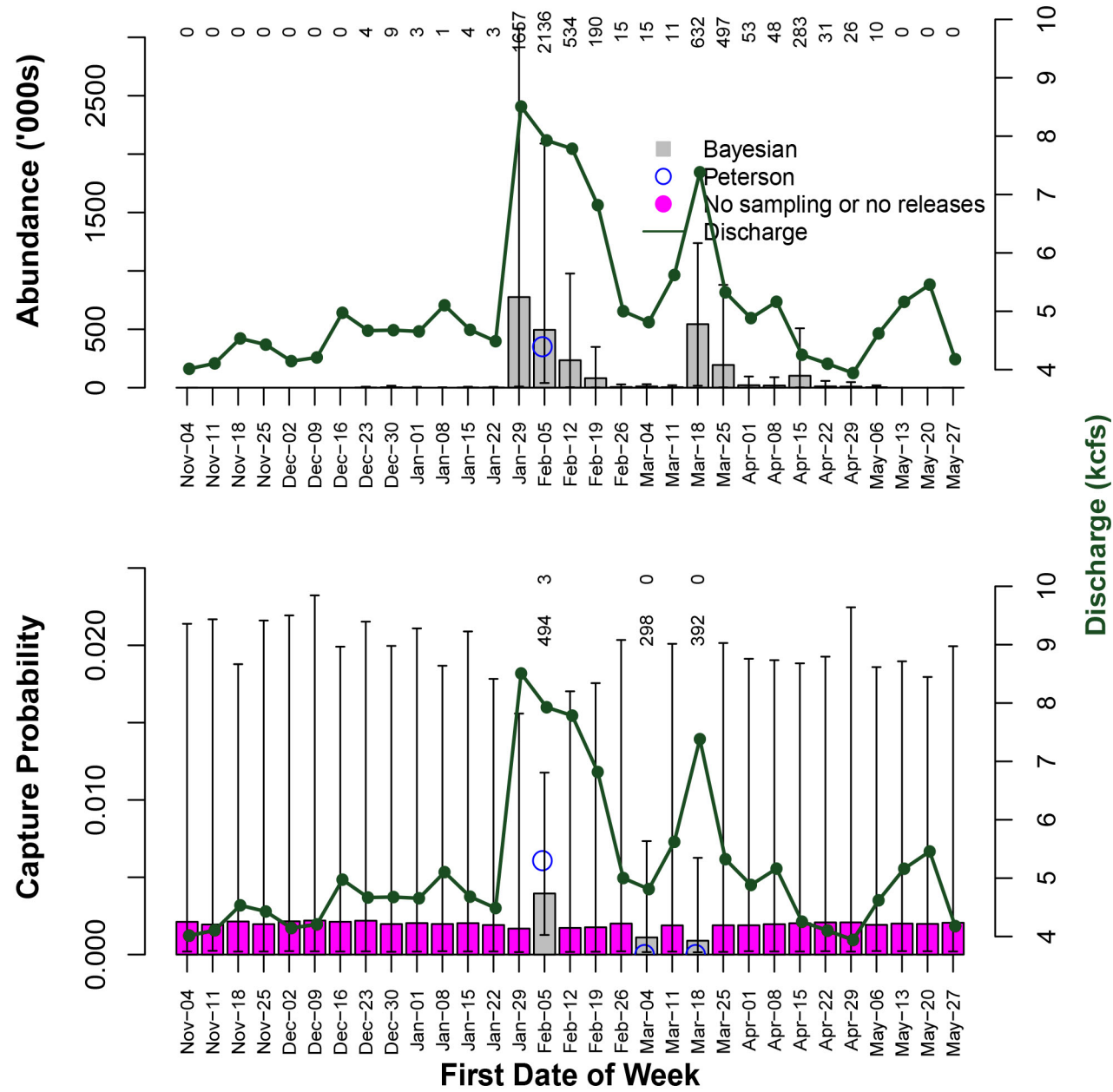
tisdale_2019 Ntot=3108 (1880 - 4306) cv=21%



tisdale_2020 Ntot=5038 (1675 - 10770) cv=46%

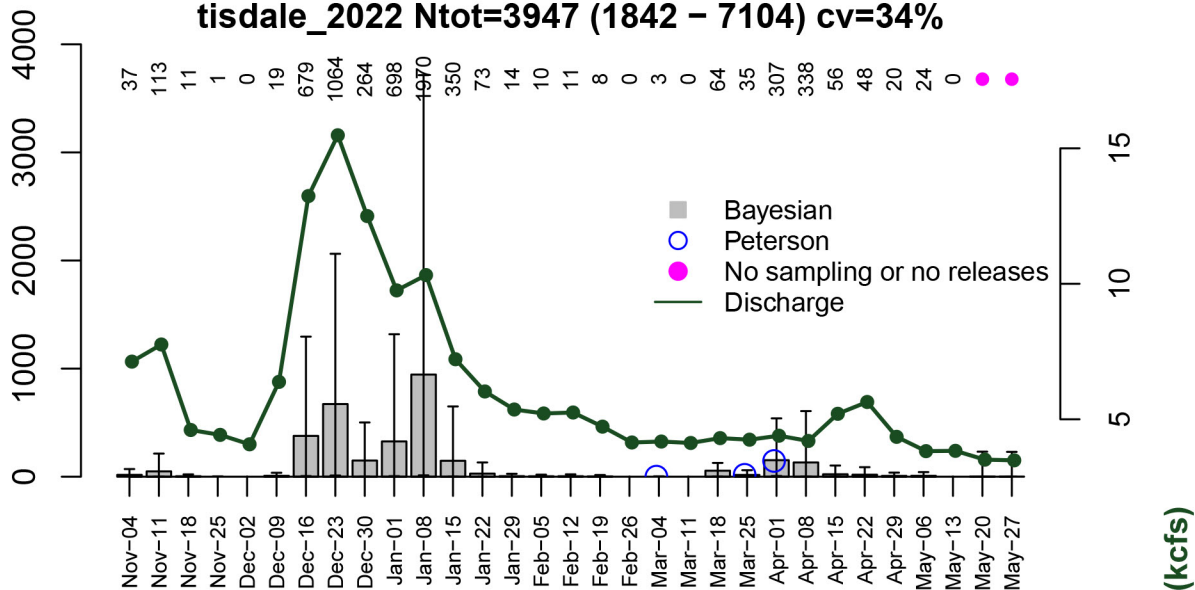


tisdale_2021 Ntot=3066 (1336 - 5746) cv=37%



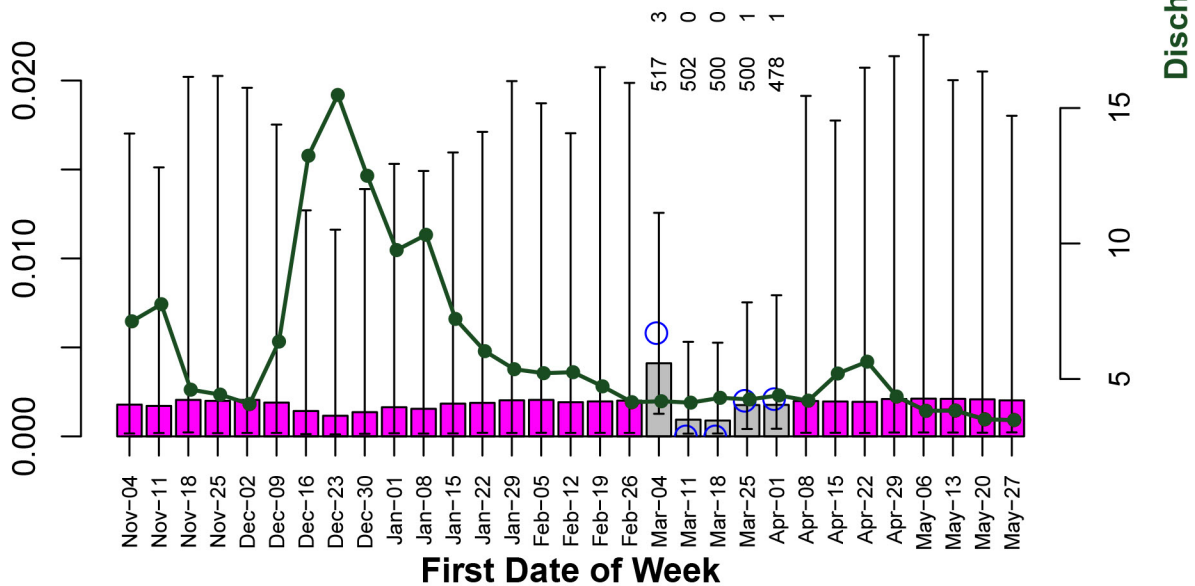
tisdale_2022 Ntot=3947 (1842 - 7104) cv=34%

Abundance ('000s)



Discharge (kcfs)

Capture Probability



First Date of Week

tisdale_2023 Ntot=7866 (3734 - 12066) cv=27%



First Date of Week

tisdale_2024 Ntot=5634 (3106 - 8710) cv=25%

