report\_C2

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Q1: Construct a graph with minimum number of gut content data with respect to the number of species.

Q2: Plot number of false positives in ADBM's prediction with respect to the gut content data

Q3: Make a list of journals for submission of ms

Q4: Plot the graphs for a case when the ADBM's best prediction is the true one

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Q1: Construct a graph with minimum number of gut content data wrt number of species.

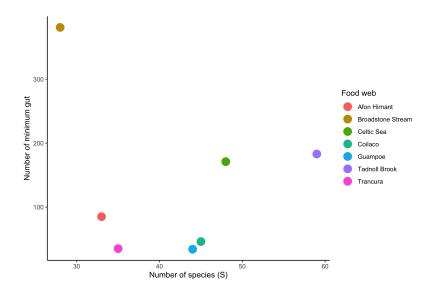


Figure 1:

#### Preliminary results:

• There seems to be a positive relation between the number of minimum gut and the predictors (S, L, C and number of predator nodes) in Fig. 1-4 (Broadstone Stream is an outlier in Fig. 1,2 and 4).

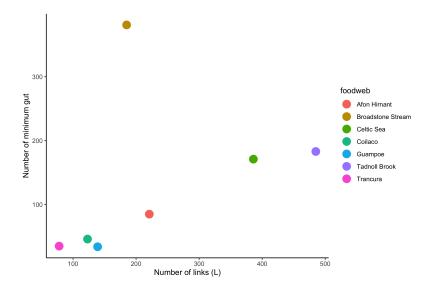


Figure 2:

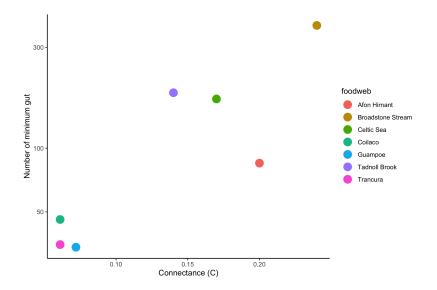


Figure 3:

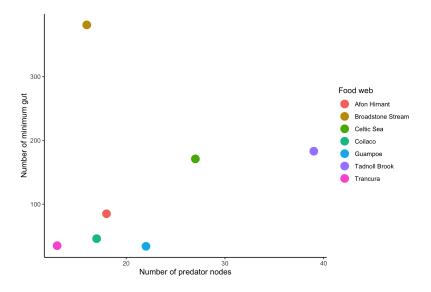


Figure 4:

# Q2: Plot number of false positives in ADBM's prediction with respect to the gut content data

### Preliminary results:

• The food web with a high false positive rate in Fig. 5 has low true skill statistics.

#### Q3: Make a list of journals for submission of ms

- Methods in Ecology and Evolution (IF = 6.4)
- Journal of Animal Ecology (IF = 5)
- Food webs (IF = 2.3)

## Q4: Plot the graphs for a case when the ADBM's best prediction is the true one

Here, we consider a case where the observed (true) food web is assumed to be the best food web simulated using the ADBM. The minimum number of gut content data to achieve 95% of the maximum TSS for the ADBM's best prediction case is higher than that for the empirical case (Fig. 6).

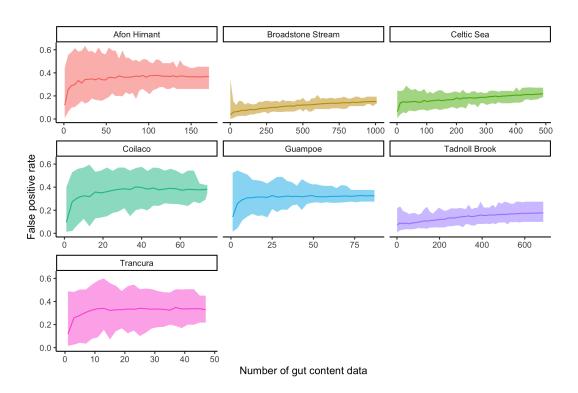


Figure 5:

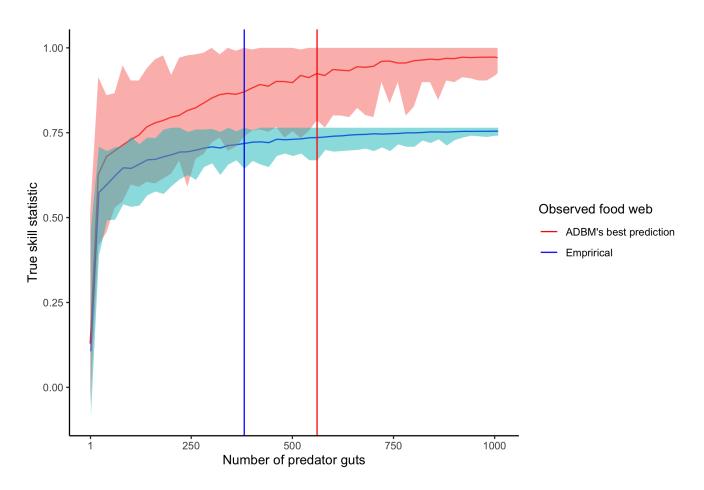


Figure 6: