Don’t reread your introduction before doing this. I think the different perspective of seeing sentences from the discussion out of context will be useful.

Background: Jim once told me that the discussion is like writing your introduction in reverse. The introduction should set the reader up for the big concepts your results are going to address. The introduction goes from broad to specific and the discussion starts by addressed the specific goal and then weaving your results into the bigger and bigger narratives of the introduction.

Exercise: Below are the topic sentences from the discussion. They form the roadmap for the reader. 1) Do these topic sentences address the big issues/goals outlined in the introduction? Do they feel like they mirror the introduction? 2) Bullet point what take home messages (and supporting evidence from your results) should follow each topic sentence. Compare to the actual paragraph.

* Empirically observed SADs often deviate pronouncedly from their statistical constraints, but this is by no means a rule even for the largest communities.
  + This is an attempt to summarize the overall result as cleanly as possible
  + Initial question: Can we detect consistent deviations between empirical/constraint? Answer: Often but not ubiquitous.
  + Take home: There is sufficient deviation for us to suspect there is a detectable biological signal to work with.
* We can be confident that, for large communities, more SADs are more skewed and less even than would be expected if they simply tracked their statistical constraints – but note that it is hardly uncommon for the observed SAD to fall well within our random expectation.
  + The deviation is in the direction of being uneven
  + But it’s not a “rule” in the way that the hollow curve is
  + This paragraph is kind of a repeat of some of the previous – I think the thought was that the first is more of an introduction-to-the-discussion than getting too in the weeds
* The picture is less straightforward for relatively small communities, including the Forest Inventory and Analysis dataset
  + Take home: Small communities seem to behave differently, maybe because of the vague constraint.
* The SAD is a case study that illustrates how important it is to consider statistical baselines when we interpret “patterns” in ecology and especially macroecology.
  + Take home: Comparisons to baselines can give us signals we would not otherwise be focused on.
* It is relatively intuitive to demonstratethis phenomenon for the SAD, but the general principle may be equally important for other, less tractable, distributions.
  + We should be thinking about constraints in macroecology more generally.

Exercise: Go reread your introduction now. How do you feel about how well these topic sentences tie in with your introduction?

I think they actually correspond reasonably well to the stated questions – do we detect consistent deviations, and does S\*N seem to influence that? It is seriously difficult to write distinct results/discussion sections.

Missing paragraphs:

* What next. I think next steps
  + Attempting to *use* the deviations
    - Comparing theories to empirical in terms of *deviation*
    - Tracing deviations through time
* Limitations & other versions of this approach
  + We may not be able to distinguish between signal and randomness for a substantial portion of ecological communities
  + There are other, potentially equally valid, approaches to characterizing the baseline. They may give different outcomes.

The final paragraphs might be the wrong broadness? *I* think it’s important to think about constraints more generally, but perhaps keeping the scope to “here’s a new way to get traction on SADs” would be more appropriate.