A Manuscript Microscope 'Sentence Audit' of:

The effects of experimental floral resource removal on plant-pollinator interactions

What is the Manuscript Microscope Sentence Audit?

The Manuscript Microscope Sentence Audit is a research paper introspection system that parses the text of your manuscript into minimal sentence components for faster, more accurate, enhanced proofreading.

Why use a Sentence Audit to proofread your manuscript?

- Accelerated Proofreading: Examine long technical texts in a fraction of the usual time.
- Superior Proofreading: Detect subtle errors that are invisible to traditional methods.
- Focused Proofreading: Inspect each individual sentence component in isolation.
- Reliable Proofreading: Ensure every single word of your manuscript is correct.
- Easier Proofreading: Take the hardship out of crafting academic papers.

Bonus 1: Improved Productivity: Rapidly refine rough drafts to polished papers.
Bonus 2: Improved Authorship: Cultivate a clear, concise, consistent, writing style.
Bonus 3: Improved Reputation: Become known for rigorously precise publications.

Manuscript Source: https://www.biorxiv.org/content/10.1101/2021.03.21.436328v1

Manuscript Authors: Justin A. Bain, Rachel G. Dickson, Andrea M. Gruver & Paul J. CaraDonna

Audit Date: 31/03/21 **Audit Identifier:** W7C1VCKE4PX1BKX **Code Version:** 3.6

Features of the Sentence Audit:

The Sentence Audit combines two complementary proofreading approaches:

1. Each sentence of your text is parsed and displayed in isolation for focused inspection.
2. Each individual sentence is further parsed into Minimal Sentence Components for a deeper review of the clarity, composition and consistency of the language you used.

The Minimal Sentence Components shown are the smallest coherent elements of each sentence of your text as derived from it's conjunctions, prepositions and selected punctuation symbols (i.e. commas, semicolons, round and square brackets).

The combined approaches ensure easier, faster, more effective proofreading.

Comments and Caveats:

• The sentence parsing is achieved using a prototype natural language processing pipeline written in Python and may include occasional errors in sentence segmentation.

• Depending on the source of the input text, the Sentence Audit may contain occasional html artefacts that are parsed as sentences (E.g. "Download figure. Open in new tab").

• Always consult the original research paper as the true reference source for the text.

Contact Information:

To get a Manuscript Microscope Sentence Audit of any other research paper, simply forward any copy of the text to John.James@OxfordResearchServices.com.

All queries, feedback or suggestions are also very welcome.

Research Paper Sections:

The sections of the research paper input text parsed in this audit.

Section No.	Headings	Sentences
Section: 1	Abstract	11
Section: 2	Introduction	16
N/A	--- --- --- --- --- --- ---	0
N/A	--- --- --- --- --- --- ---	0
N/A	--- --- --- --- --- --- ---	0
N/A	--- --- --- --- --- --- ---	0
N/A	--- --- --- --- --- --- ---	0
N/A	--- --- --- --- --- --- ---	0
N/A	--- --- --- --- --- --- ---	0
N/A	--- --- --- --- --- --- ---	0
N/A	--- --- --- --- --- --- ---	0

The Sentence Audit Of The Research Paper

Title # The effects of experimental floral resource removal on plant-pollinator interactions

S1 [001] Abstract

S1 [002] Pollination is essential for ecosystem functioning, yet our understanding of the empirical consequences of species loss for plant-pollinator interactions remains limited.

Pollination is essential ...
... for ecosystem functioning, ...
... yet our understanding ...
... of the empirical consequences ...
... of species loss ...
... for plant-pollinator interactions remains limited.

S1 [003] It is hypothesized that the loss of abundant and generalized (well-connected) species from a pollination network will have a large effect on the remaining species and their interactions.

It is hypothesized ...
... that the loss ...
... of abundant ...
... and generalized ...
... (well-connected) ...
... species ...
... from a pollination network will have a large effect ...
... on the remaining species ...
... and their interactions.

S1 [004] However, to date, relatively few studies have experimentally removed species from their natural setting to address this hypothesis.

However, ...
... to date, ...
... relatively few studies have experimentally removed species ...
... from their natural setting ...
... to address this hypothesis.

S1 [005] We investigated the consequences of losing an abundant, well-linked species from a series of plant-pollinator networks by experimentally removing the flowers of Helianthella quinquenervis (Asteraceae) from half of a series of 10 paired plots (15 m diameter) within a subalpine ecosystem.

We investigated the consequences ...
... of losing an abundant, ...
... well-linked species ...
... from a series ...
... of plant-pollinator networks ...
... by experimentally removing the flowers ...
... of Helianthella quinquenervis ...

... (Asteraceae) ...
... from half ...
... of a series ...
... of 10 paired plots ...
... (15 m diameter) ...
... within a subalpine ecosystem.

S1 [006] We then asked how the localized loss of this species influenced pollinator visitation patterns, floral visitor composition, and interaction network structure.

We then asked how the localized loss ...
... of this species influenced pollinator visitation patterns, ...
... floral visitor composition, ...
... and interaction network structure.

S1 [007] The experimental removal of Helianthella flowers led to an overall decline in plot-level pollinator visitation rates and shifts in pollinator composition.

The experimental removal ...
... of Helianthella flowers led ...
... to an overall decline ...
... in plot-level pollinator visitation rates ...
... and shifts ...
... in pollinator composition.

S1 [008] Species-level responses to floral removal differed between the two other abundant, co-flowering plants in our experiment: Potentilla pulcherrima received higher visitation rates, whereas Erigeron speciosus visitation rates did not change.

Species-level responses ...
... to floral removal differed ...
... between the two other abundant, ...
... co-flowering plants ...
... in our experiment: ...
... Potentilla pulcherrima received higher visitation rates, ...
... whereas Erigeron speciosus visitation rates did not change.

S1 [009] Experimental floral removal altered the structural properties of the localized plant-pollinator networks such that they were more specialized, less nested, and less robust to further species loss.

Experimental floral removal altered the structural properties ...
... of the localized plant-pollinator networks ...
... such that they were more specialized, ...
... less nested, ...
... and less robust ...
... to further species loss.

S1 [010] Such changes to interaction structure were consistently driven more by species turnover than by interaction rewiring.

Such changes ...
... to interaction structure were consistently driven more ...
... by species turnover ...

... than ...
... by interaction rewiring.

S1 [011] Our findings suggest that the local loss of an abundant, well-linked, generalist plant can bring about diverse responses within pollination networks, including potential competitive and facilitative effects for individual species, changes to network structure that may render them more sensitive to future change, but also numerous changes to interactions that may also suggest flexibility in response to species loss.

Our findings suggest ...
... that the local loss ...
... of an abundant, ...
... well-linked, ...
... generalist plant can bring ...
... about diverse responses ...
... within pollination networks, ...
... including potential competitive ...
... and facilitative effects ...
... for individual species, ...
... changes ...
... to network structure ...
... that ...
... may render them more sensitive ...
... to future change, ...
... but also numerous changes ...
... to interactions ...
... that ...
... may also suggest flexibility ...
... in response ...
... to species loss.

S2 [012] Introduction

S2 [013] Plant-pollinator interactions are essential for ecosystem functioning.

Plant-pollinator interactions are essential ...
... for ecosystem functioning.

S2 [014] It is estimated that nearly 90% of flowering plant species depend on animal visitors for some aspect of their own reproduction (Ollerton et al. 2011), and more than 200,000 animal species rely on floral resources for food (Inouye and Ogilvie 2017).

It is estimated ...
... that nearly 90% ...
... of flowering plant species depend ...
... on animal visitors ...
... for some aspect ...
... of their own reproduction ...
... (Ollerton et al. 2011), ...
... and more than 200,000 animal species rely ...

... on floral resources ...
... for food ...
... (Inouye ...
... and Ogilvie 2017).

S2 [015] Global environmental change—including climate change, habitat loss, and invasive species—is threatening nearly 40% of vascular plant species with extinction globally (Lughadha et al. 2020), and declines in pollinator populations are becoming increasingly documented (Burkle et al. 2013, Cameron and Sadd 2020).

Global environmental change—including climate change, ...
... habitat loss, ...
... and invasive species—is threatening nearly 40% ...
... of vascular plant species ...
... with extinction globally ...
... (Lughadha et al. 2020), ...
... and declines ...
... in pollinator populations are becoming increasingly documented ...
... (Burkle et al. 2013, ...
... Cameron ...
... and Sadd 2020).

S2 [016] Because of their mutualistic relations, the loss or reduction of plants or pollinators can have important consequences for the remaining species, their interactions, and the structure of plant-pollinator networks (e.g., Memmott et al. 2004; Burkle et al. 2013; Mathiasson and Rehan 2020).

Because ...
... of their mutualistic relations, ...
... the loss ...
... or reduction ...
... of plants ...
... or pollinators can have important consequences ...
... for the remaining species, ...
... their interactions, ...
... and the structure ...
... of plant-pollinator networks ...
... (e.g., Memmott et al. 2004; ...
... Burkle et al. 2013; ...
... Mathiasson ...
... and Rehan 2020).

S2 [017] Although rare and more specialized species are hypothesized to be the most susceptible to environmental disturbances (Burkle et al. 2013, Mathiasson and Rehan 2020), the loss of a more abundant generalist species from an interaction network may have disproportionately strong effects on the remaining species and their interactions (Memmott et al. 2004).

Although rare ...
... and more specialized species are hypothesized ...
... to be the most susceptible ...
... to environmental disturbances ...
... (Burkle et al. 2013, ...
... Mathiasson ...
... and Rehan 2020), ...

End of Sample Audit

This is a truncated Manuscript Microscope Sample Audit.

To get the full audit of this text (or any other research paper),
forward a copy of the research paper to John James at
John.James@OxfordResearchServices.com
