A Manuscript Microscope 'Sentence Audit' of:

Longer study length, standardized sampling techniques, and broader geographic scope leads to higher likelihood of detecting stable abundance patterns in long term deer tick (Ixodes scapularis) studies

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/10.1101/2021.03.06.434217v1

Manuscript Authors: Rowan Christie, Kaitlin Stack Whitney, Julia Perrone & Christine A. Bahlai

Audit Date: 29/03/21 **Audit Identifier:** TZ4ZRBTUU7MU4T0 **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	10
Section: 2	Introduction	17
N/A	--- --- --- --- --- --- ---	0
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The Sentence Audit Of The Research Paper

Title **Longer study length, standardized sampling techniques, and broader geographic scope leads to higher likelihood of detecting stable abundance patterns in long term deer tick (Ixodes scapularis) studies**

S1 [001] **Abstract**

S1 [002] Ixodes scapularis (deer ticks) are a taxon of ecological and human health concern due to their status as primary vectors of Borrelia burgdorferi, the bacteria that transmits Lyme disease.

Ixodes scapularis ...
... (deer ticks) ...
... are a taxon ...
... of ecological ...
... and human health concern ...
... due to their status ...
... as primary vectors ...
... of Borrelia burgdorferi, ...
... the bacteria ...
... that transmits Lyme disease.

S1 [003] Deer ticks are thought to be expanding in geographic range and population size across the eastern US, leading to concern that tick-vectored illness will correspondingly rise.

Deer ticks are thought ...
... to be expanding ...
... in geographic range ...
... and population size ...
... across the eastern US, ...
... leading ...
... to concern ...
... that tick-vectored illness will correspondingly rise.

S1 [004] However, because of wide variability in deer tick monitoring strategies, synthesis efforts may be limited by the sensitivity and reliability of data produced by existing long term studies, especially to inform forecasting and proactive deer tick management.

However, ...
... because of wide variability ...
... in deer tick monitoring strategies, ...
... synthesis efforts may be limited ...
... by the sensitivity ...
... and reliability ...
... of data produced ...
... by existing long term studies, ...
... especially ...
... to inform forecasting ...

... and proactive deer tick management.

S1 [005] To address this, we explicitly examined the role of how study design parameters affect the likelihood of observing temporal trends in deer tick studies.

To address this, ...
... we explicitly examined the role ...
... of how study design parameters affect the likelihood ...
... of observing temporal trends ...
... in deer tick studies.

S1 [006] We used a moving window approach to investigate the temporal stability of deer tick population trajectories across the US.

We used a moving window approach ...
... to investigate the temporal stability ...
... of deer tick population trajectories ...
... across the US.

S1 [007] We found several study factors can have an impact on the likelihood of a study reaching stability and the likelihood of tick abundance data leading to misleading results if the study does not reach stability.

We found several study factors can have an impact ...
... on the likelihood ...
... of a study reaching stability ...
... and the likelihood ...
... of tick abundance data leading ...
... to misleading results ...
... if the study does not reach stability.

S1 [008] Our results underscore the need for longer studies of deer ticks when trying to assess long term or broad spatial patterns.

Our results underscore the need ...
... for longer studies ...
... of deer ticks ...
... when trying ...
... to assess long term ...
... or broad spatial patterns.

S1 [009] Moreover, our results showcase the importance of study length, sampling technique, life stage, and geographic scope in shaping the inferences from deer tick studies.

Moreover, ...
... our results showcase the importance ...
... of study length, ...
... sampling technique, ...
... life stage, ...
... and geographic scope ...
... in shaping the inferences ...
... from deer tick studies.

S1 [010] This is especially important for synthesizing across the variety of existing surveys and for potential ecological forecasting.

This is especially important ...
... for synthesizing ...
... across the variety ...
... of existing surveys ...
... and for potential ecological forecasting.

S2 [011] Introduction

S2 [012] Ixodes scapularis (deer ticks) are primary vectors of Borrelia burgdorferi, bacteria that transmits Lyme disease (Des Vignes 1997).

Ixodes scapularis ...
... (deer ticks) ...
... are primary vectors ...
... of Borrelia burgdorferi, ...
... bacteria ...
... that transmits Lyme disease ...
... (Des Vignes 1997).

S2 [013] Perceived risk about deer ticks and Lyme disease is increasing across the United States with expanding distributions of this tick species now ranging from the southeast and northwest states in the US (Keirans 1996).

Perceived risk ...
... about deer ticks ...
... and Lyme disease is increasing ...
... across the United States ...
... with expanding distributions ...
... of this tick species now ranging ...
... from the southeast ...
... and northwest states ...
... in the US ...
... (Keirans 1996).

S2 [014] Established deer tick populations are more concentrated in upper north-central, northeastern, and west-coast states (Dennis 1998).

Established deer tick populations are more concentrated ...
... in upper north-central, ...
... northeastern, ...
... and west-coast states ...
... (Dennis 1998).

S2 [015] In addition, deer ticks (also known as blacklegged ticks) are spreading rapidly, found in more than twice the number of counties in the United States compared to twenty years ago (Eisen 2019).

In addition, ...

... deer ticks ...
... (also known ...
... as blacklegged ticks) ...
... are spreading rapidly, ...
... found ...
... in more than twice the number ...
... of counties ...
... in the United States compared ...
... to twenty years ago ...
... (Eisen 2019).

S2 [016] Corresponding to the increasing range of this species is the concern that that increased deer tick populations will lead to corresponding increases in tick vectored illness in humans and domestic animals (citation).

Corresponding ...
... to the increasing range ...
... of this species is the concern ...
... that that increased deer tick populations will lead ...
... to corresponding increases ...
... in tick vectored illness ...
... in humans ...
... and domestic animals ...
... (citation).

S2 [017] Thus, it is critical to design effective monitoring strategies that can be synthesized into regional-level understanding of deer tick dynamics and population trajectories to better understand risks to public health.

Thus, ...
... it is critical ...
... to design effective monitoring strategies ...
... that can be synthesized ...
... into regional-level understanding ...
... of deer tick dynamics ...
... and population trajectories ...
... to better understand risks ...
... to public health.

S2 [018] Like for many environmental problems, understanding of how study design and monitoring strategies play out over time is critical to underpin environmental management of ticks and public policy about Lyme disease (White and Bahlai 2021).

Like ...
... for many environmental problems, ...
... understanding ...
... of how study design ...
... and monitoring strategies play out ...
... over time is critical ...
... to underpin environmental management ...
... of ticks ...
... and public policy ...
... about Lyme disease ...
... (White ...

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),
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John.James@OxfordResearchServices.com
