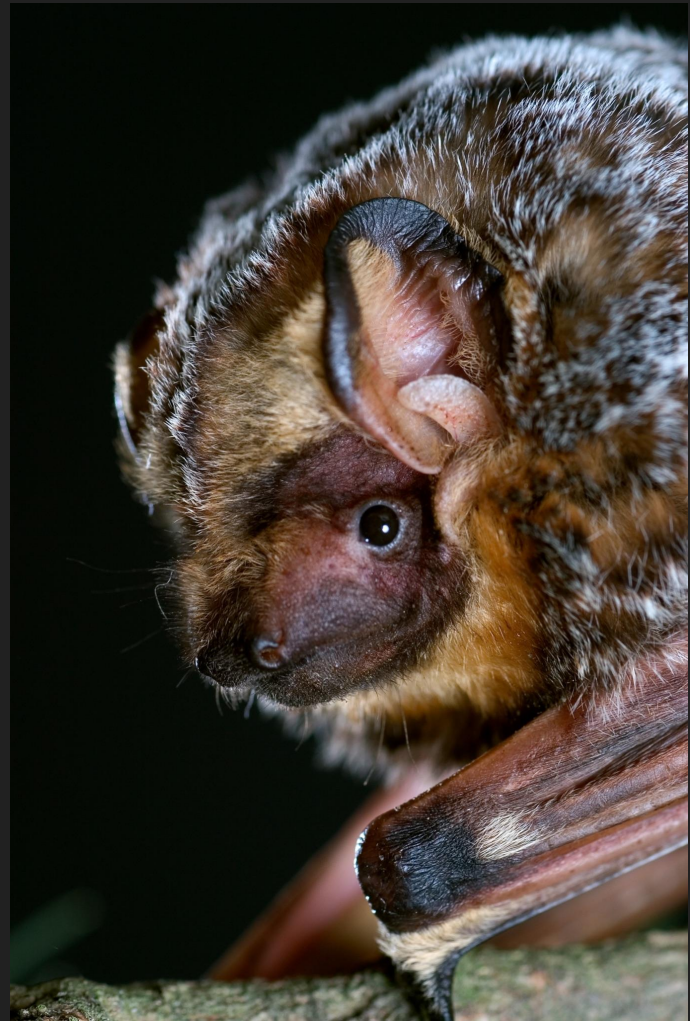


Metis NLP Project

Did the COVID-19 pandemic shift the public perception of bats?

INTRODUCTION

- [Bat Conservation International](#) is a non-profit organization dedicated to ending bat extinctions worldwide
- Interested in how COVID-19 pandemic affected public perception of bats
- Use findings to inform outreach efforts and build support for bats and for their work



DATA & DESIGN

- Used Twint to scrape over 19,000 tweets from 2019-2022
- Document-term matrix created from cleaned and lemmatized terms using scikit-learn's CountVectorizer
- Non-negative matrix factorization to determine topics
- Vader sentiment analysis



MICHAEL DURHAM / MINDEN PICTURES

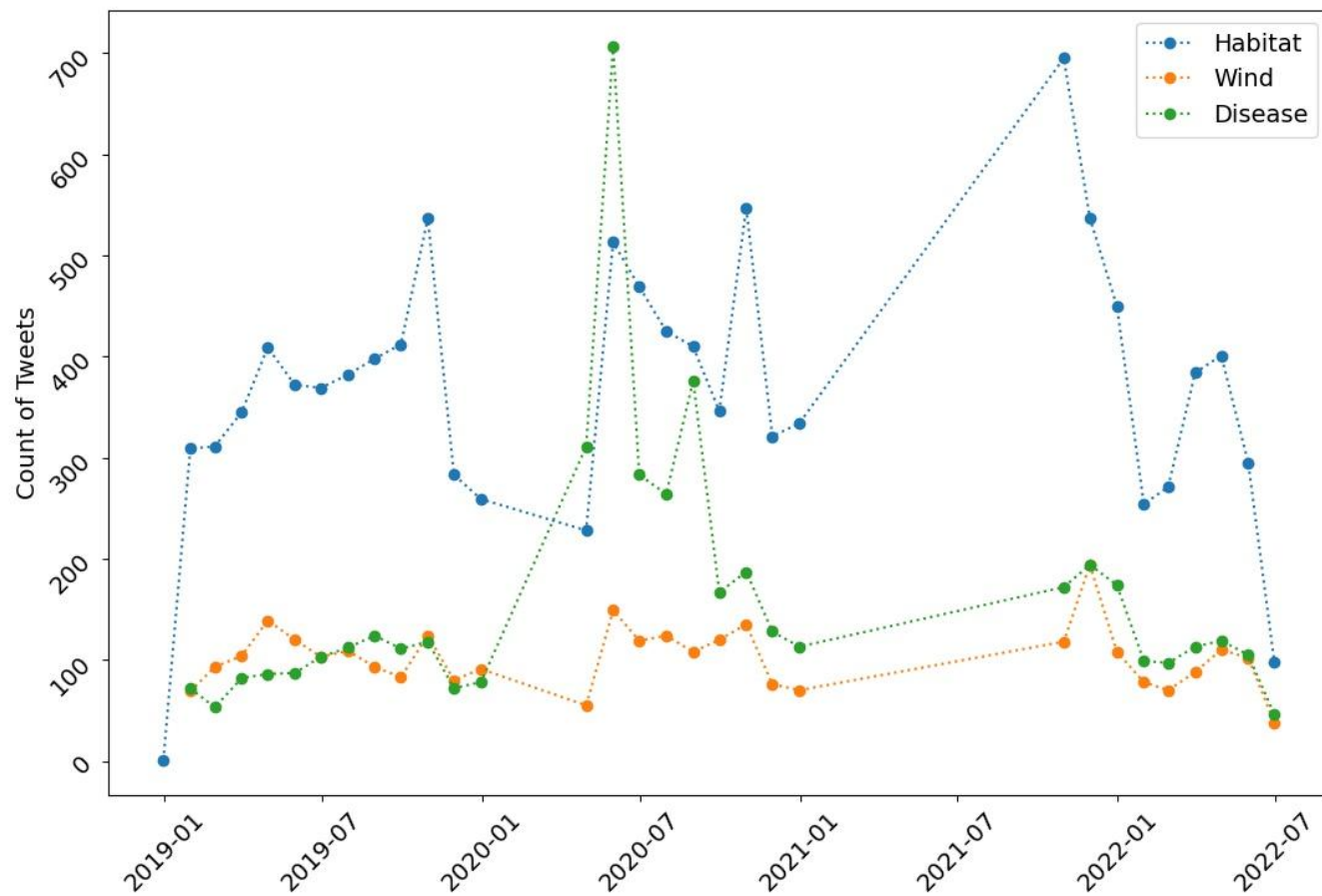
TOPICS

Wind	Disease	Habitat
include	wet	people
bee	eat	include
turbine	trade	woodland
insect	live	need
kill	china	home
garden	wild	habitat
habitat	market	protect
box	virus	tree
wind	human	help
bird	animal	specie



A DEAD EASTERN RED BAT FOUND AT A WIND TURBINE FACILITY IN PENNSYLVANIA
MICHAEL SCHIRMACHER

Topics Over Time



SENTIMENT ANALYSIS

- Percentage of negative tweets about bats pre-Covid: 21.35%
- Percentage of negative tweets about bats post-Covid: 26.05%
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