Teaching Issues and Experiments in Ecology - Volume 19, December 2023

## Flying Foxes and Uncertainty

## Essay Assignment

In a short essay (300 words), please describe why it is important to include uncertainty in forecasts of flying fox mortality events. In your answer, please include (1) a discussion of what sources of uncertainty exist, (2) a description of possible consequences of uncertainty omission or misrepresentation, and (3) a discussion of how uncertainty representations may need to differ depending on interested parties' needs.

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Rubric for evaluation of writing assignment

	0: No evidence	1: Below proficient	2: Emerging proficient	3: Proficient	4: Advanced
Forecast uncertainty sources	No mention of forecast uncertainty sources	Only one source of uncertainty mentioned or description of uncertainty sources is mostly incorrect	Multiple sources of uncertainty mentioned. Description lacks specificity or contains substantial errors	Multiple sources of uncertainty mentioned, with correct description	Multiple specific sources of uncertainty are thoroughly described and correctly explained
Possible consequences of uncertainty omission and misrepresentation	No mention of the consequences of uncertainty omission or misrepresentation	Consequences of uncertainty omission or misrepresentation are mostly missing or incorrect	Vague description of two or more consequences of uncertainty omission or misrepresentation	Mostly correct description of two or more consequences of uncertainty omission or misrepresentation	Convincing description of two or more consequences of uncertainty omission or misrepresentation
Variable user needs	No mention of user needs	Only one user's needs discussed, or discussion of user needs lacks connection to forecast uncertainty	Multiple user needs discussed, with connections to forecast uncertainty. Discussion lacks specificity or contains errors	Multiple user needs discussed, with connections to forecast uncertainty. Discussion is mostly correct	Well-reasoned discussion of how uncertainty representations may need to vary between two or more forecast users
Writing quality	Major grammatical issues make text impossible for a general audience to understand	Major grammatical issues make text difficult to understand	Issues with grammar or organization hinder understanding	Minor issues with grammar or organization	Ideas are fully explained with clear logic, following assignment specifications