



DNA Barcoding for Field Zoology 3

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What do pipistrelle bats eat?

Do the common pipistrelle and the soprano pipistrelle differ in diet?

Rather obviously, it is difficult to directly observe bats feeding, and experimental methods involving, e.g. light-trap attracted insects, may bias natural feeding preferences.

How could DNA barcoding be used to identify insect prey species of night-flying pipistrelles and test the hypothesis that the two pipistrelle species can coexist in the same habitats because they differ in prey preference (and thus occupy different trophic niches)?

Things to consider:

Where could you get DNA evidence of prey items from?

What issues (disturbance, contamination, extraction methods) might there be in getting prey DNA out intact?

What DNA barcode marker(s) would you use to identify prey species?

How large a sample size would you need? How would you distribute sampling effort (by species, by locality, by time of day, by season, by individual, by sample)?

How would you analyse your data?

How could you identify what prey species your DNA barcodes came from?



Reading: *** good background; ** interesting; * for interested parties; # a good read...

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