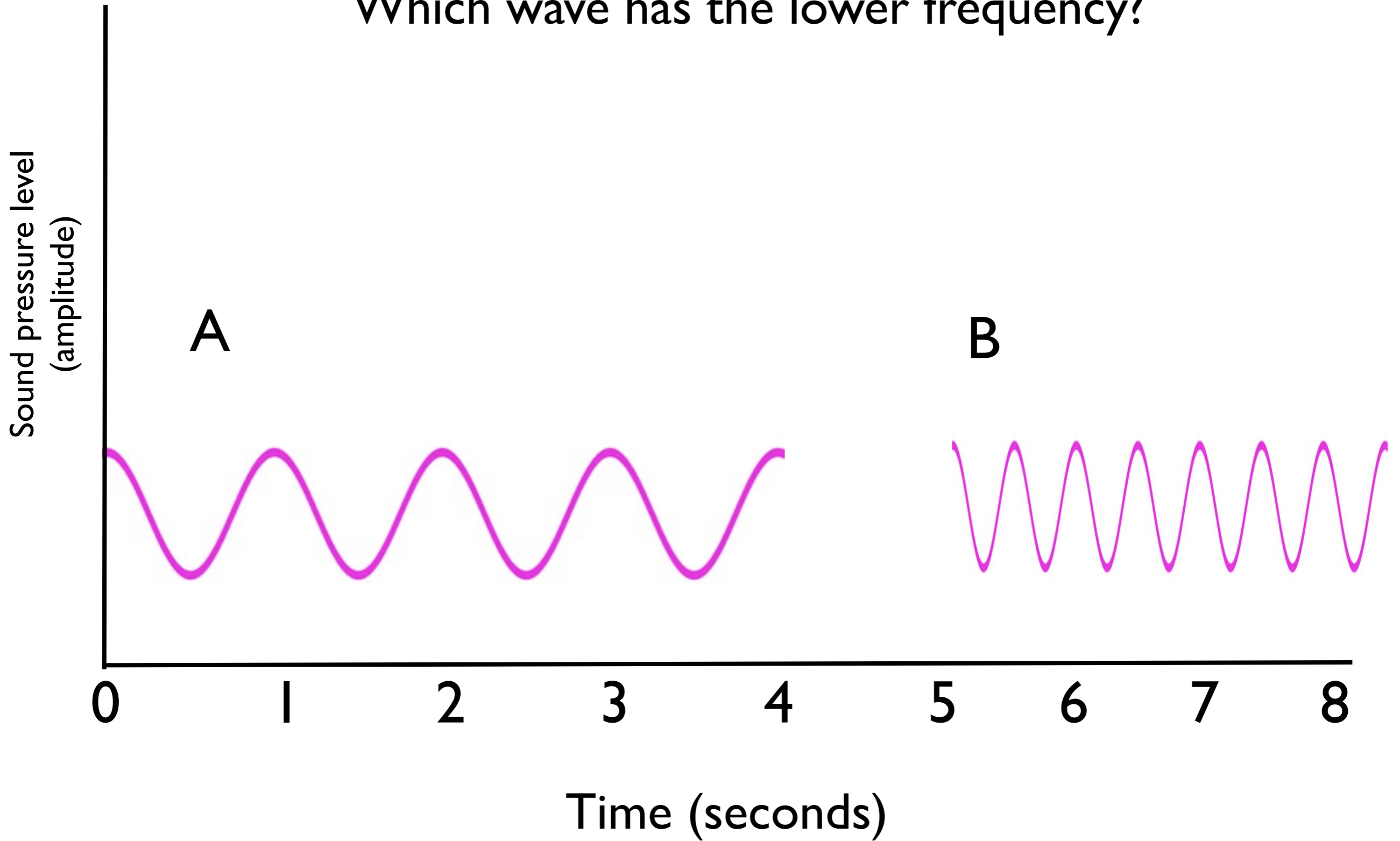


Which wave has the lower frequency?



Which wave has the lower frequency?

Sound pressure level
(amplitude)

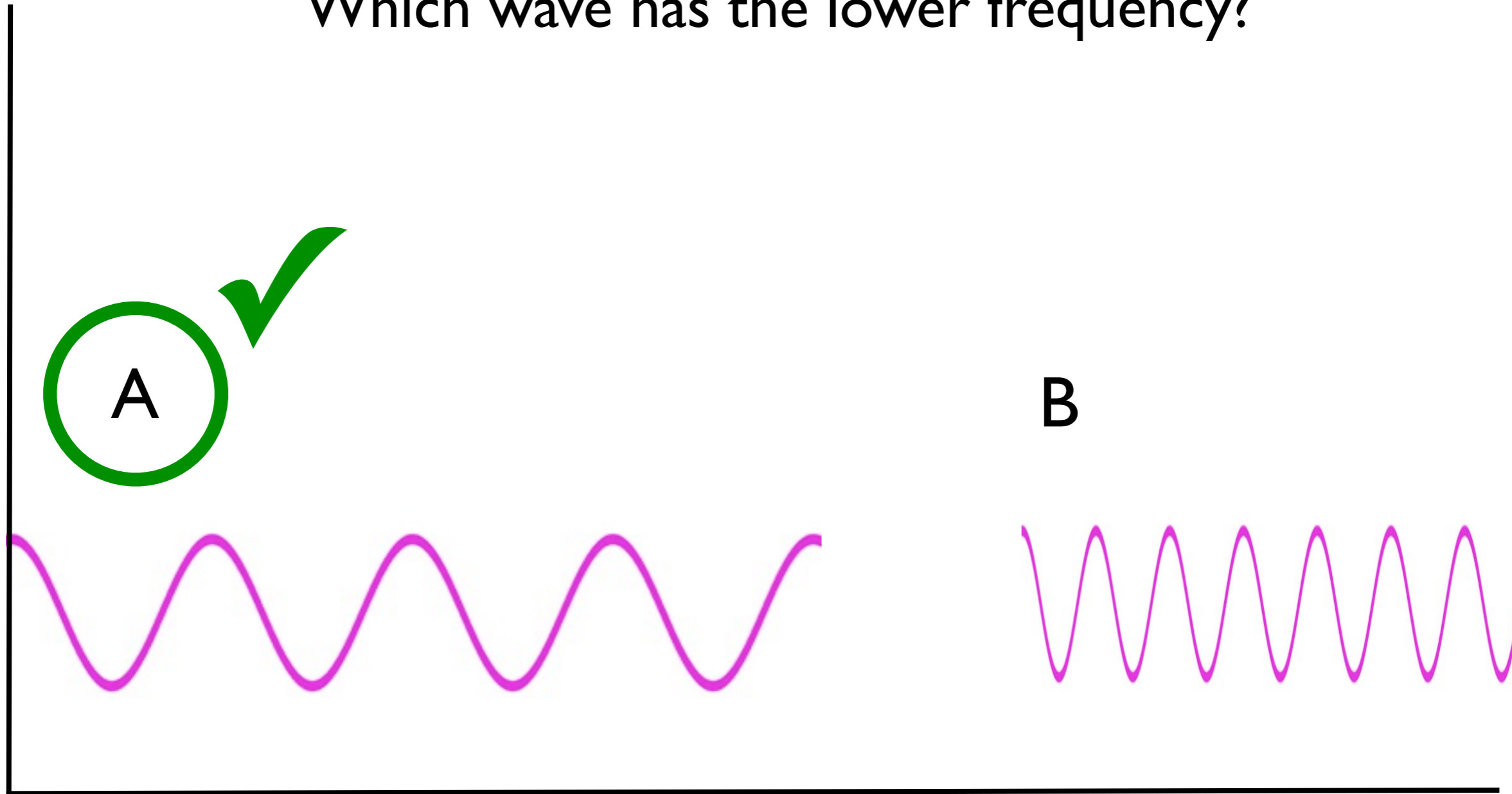
A



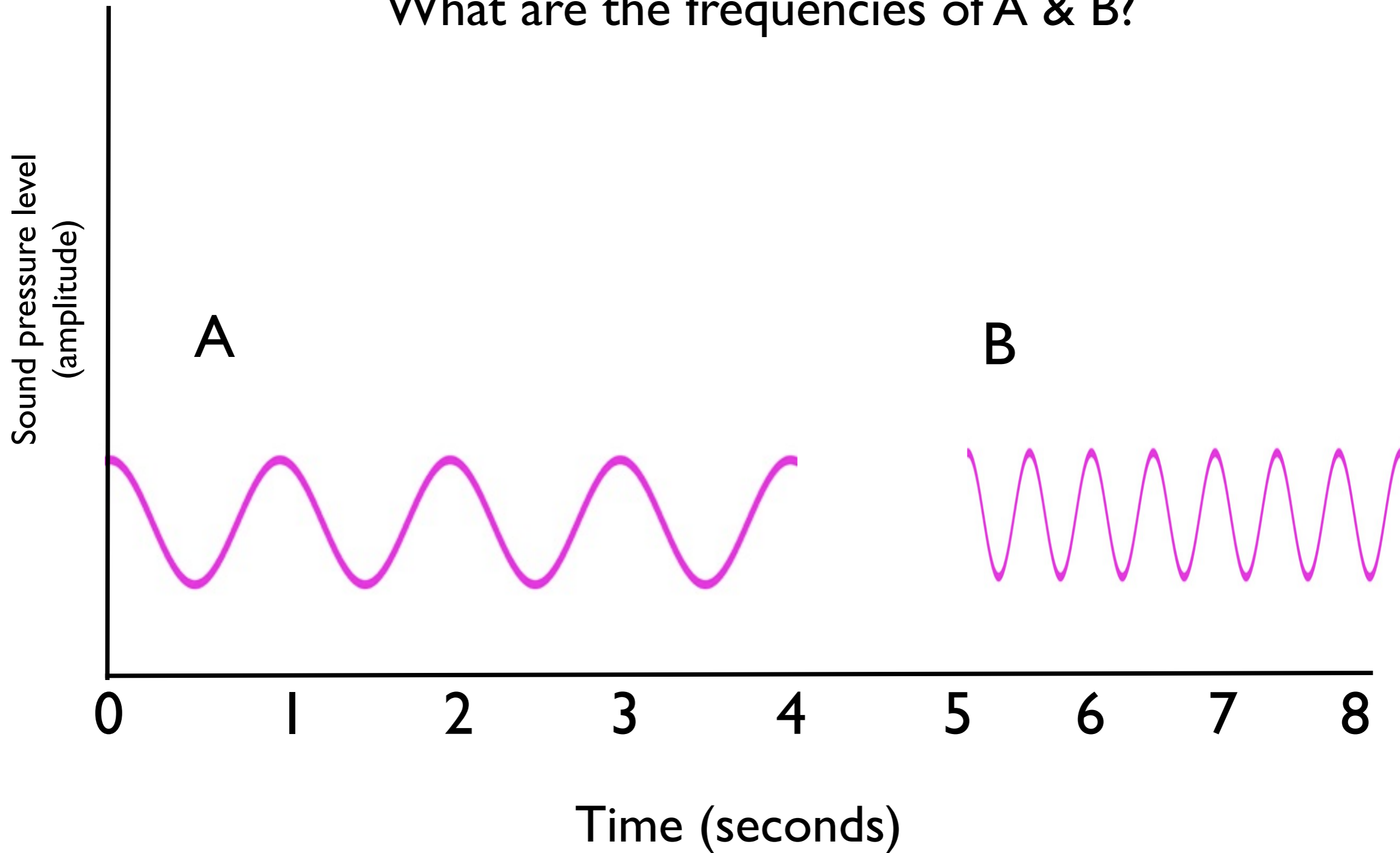
B

0 1 2 3 4 5 6 7 8

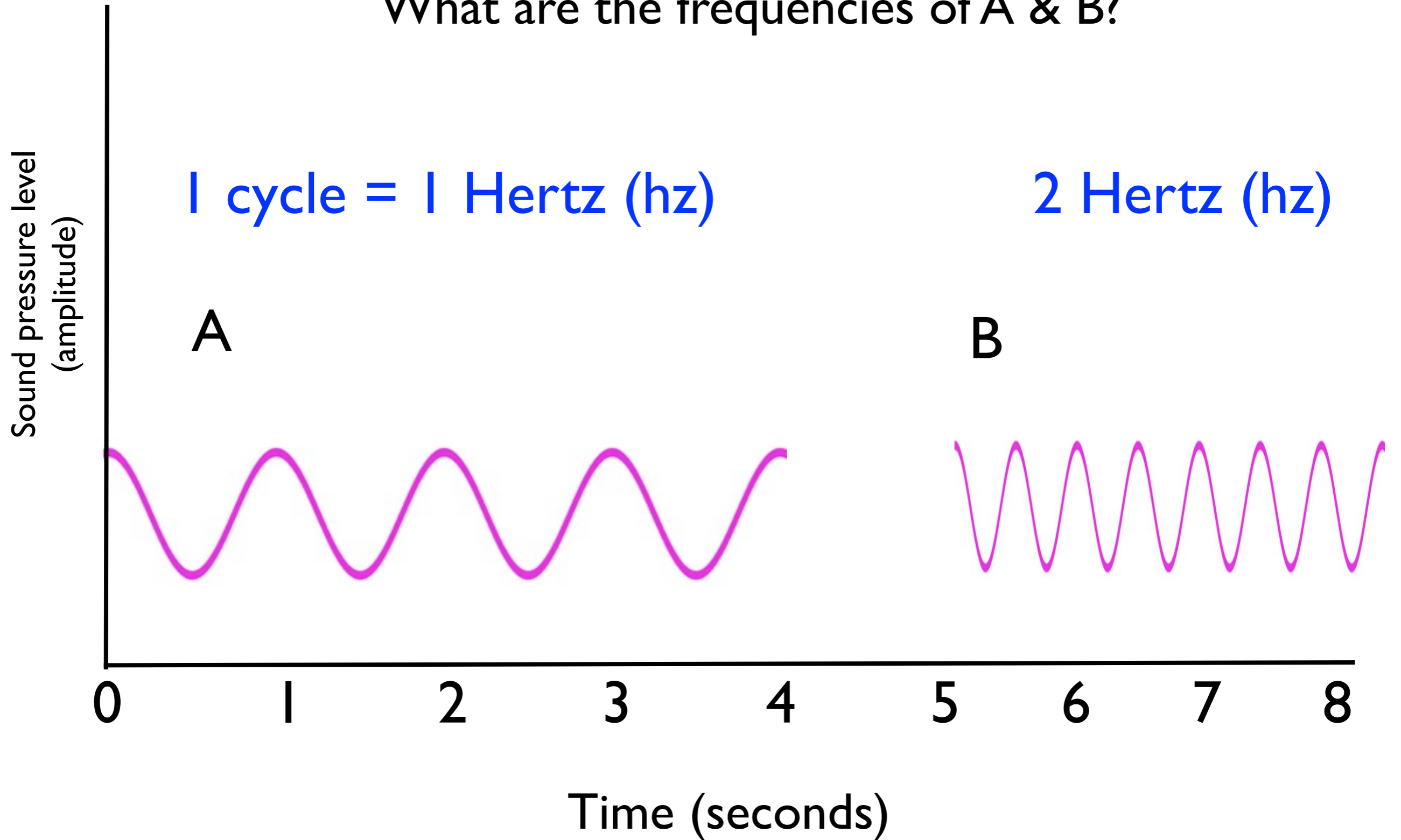
Time (seconds)



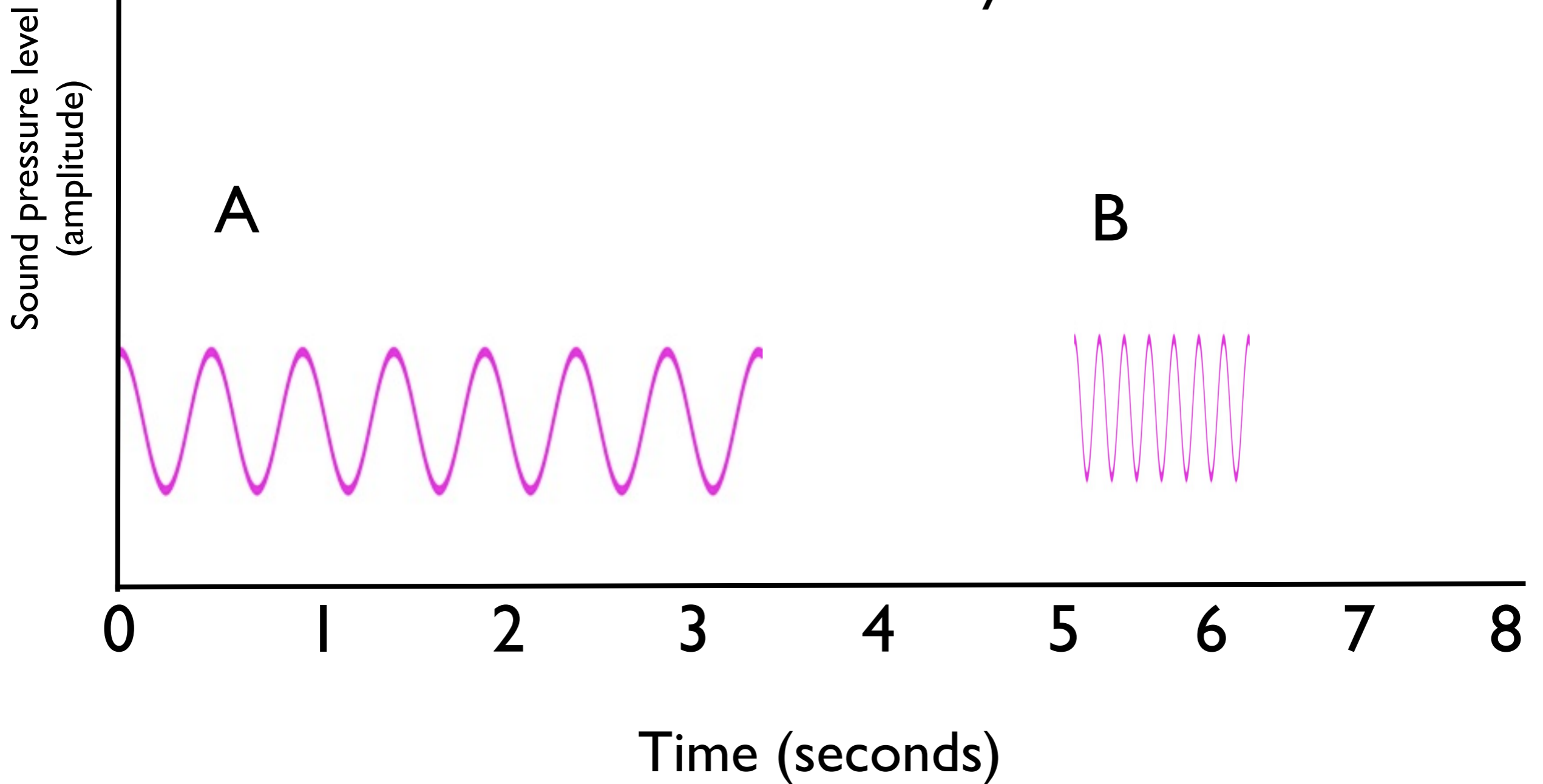
What are the frequencies of A & B?



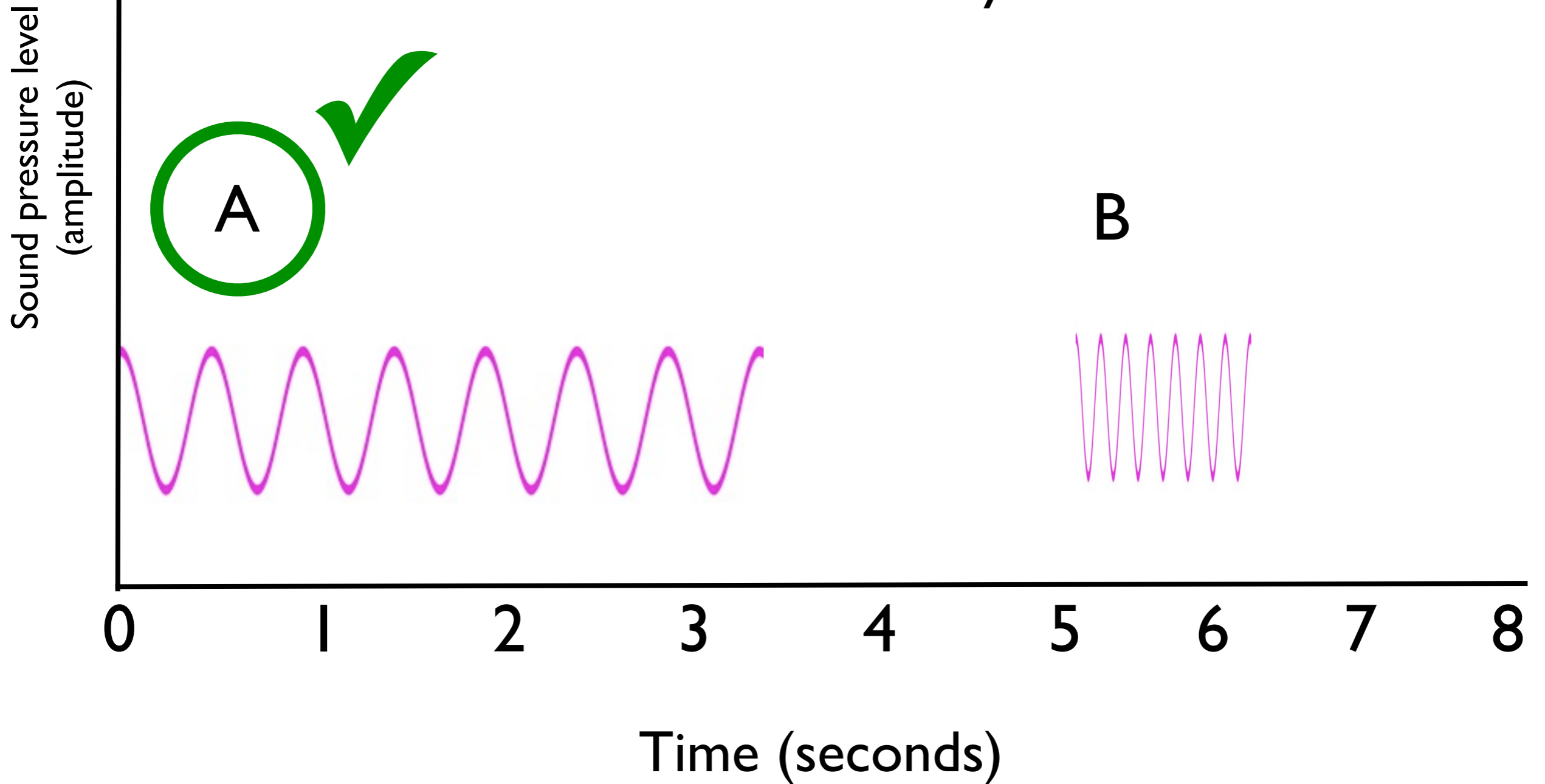
What are the frequencies of A & B?



If I'm standing at the bottom of the driveway and both signals are given from the verandah, which am I more likely to hear?

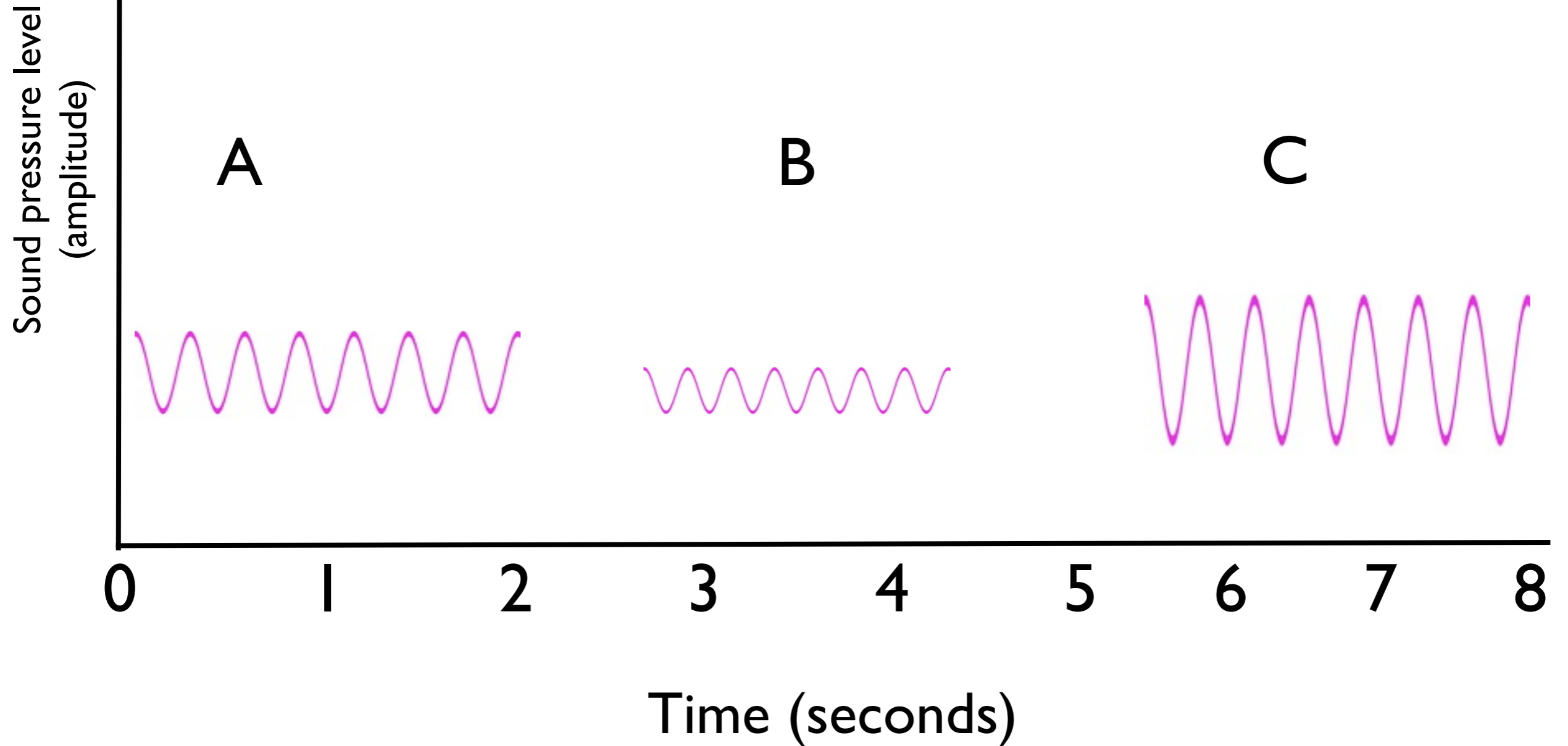


If I'm standing at the bottom of the driveway and both signals are given from the verandah, which am I more likely to hear?



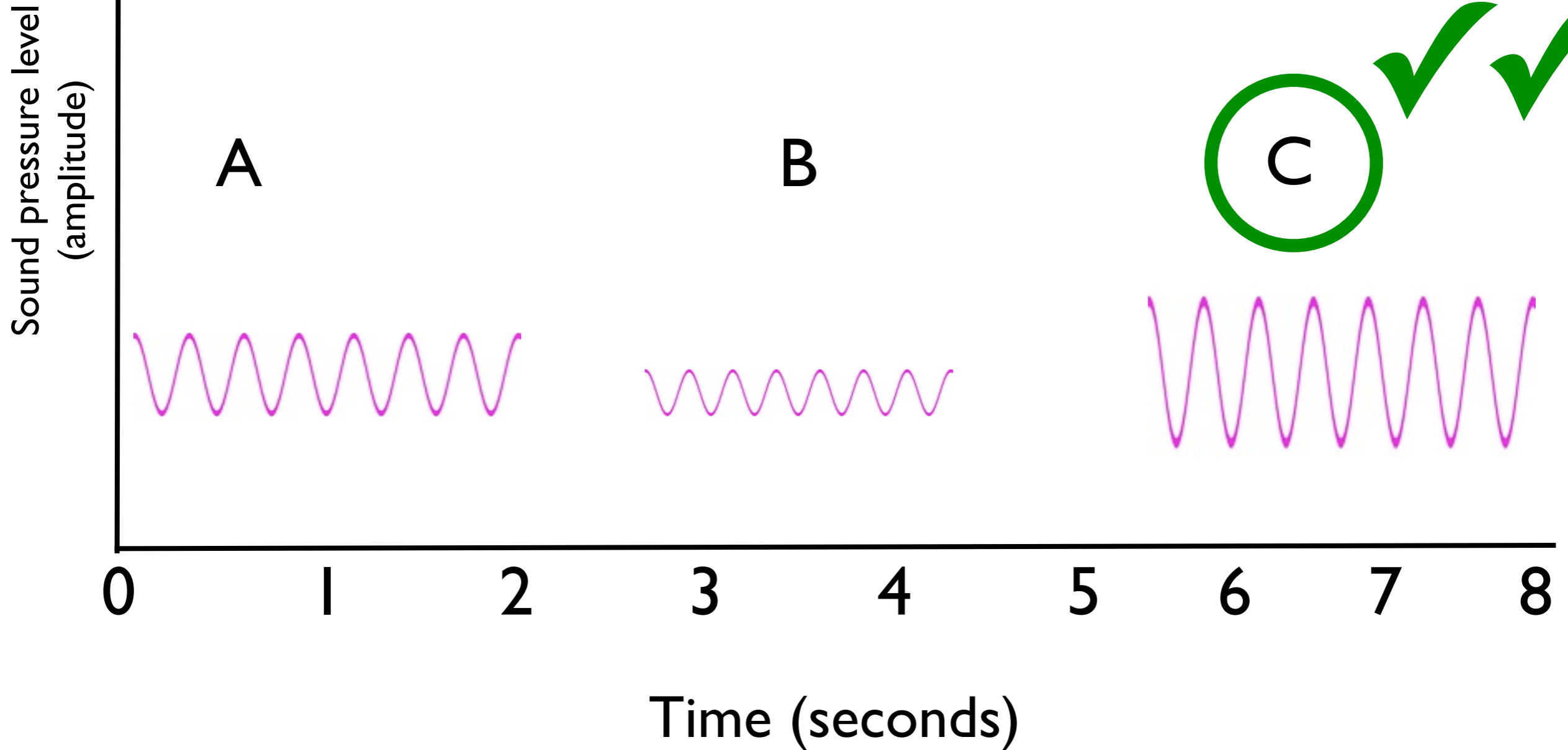
Which wave has the highest intensity?

Which wave will be the loudest?

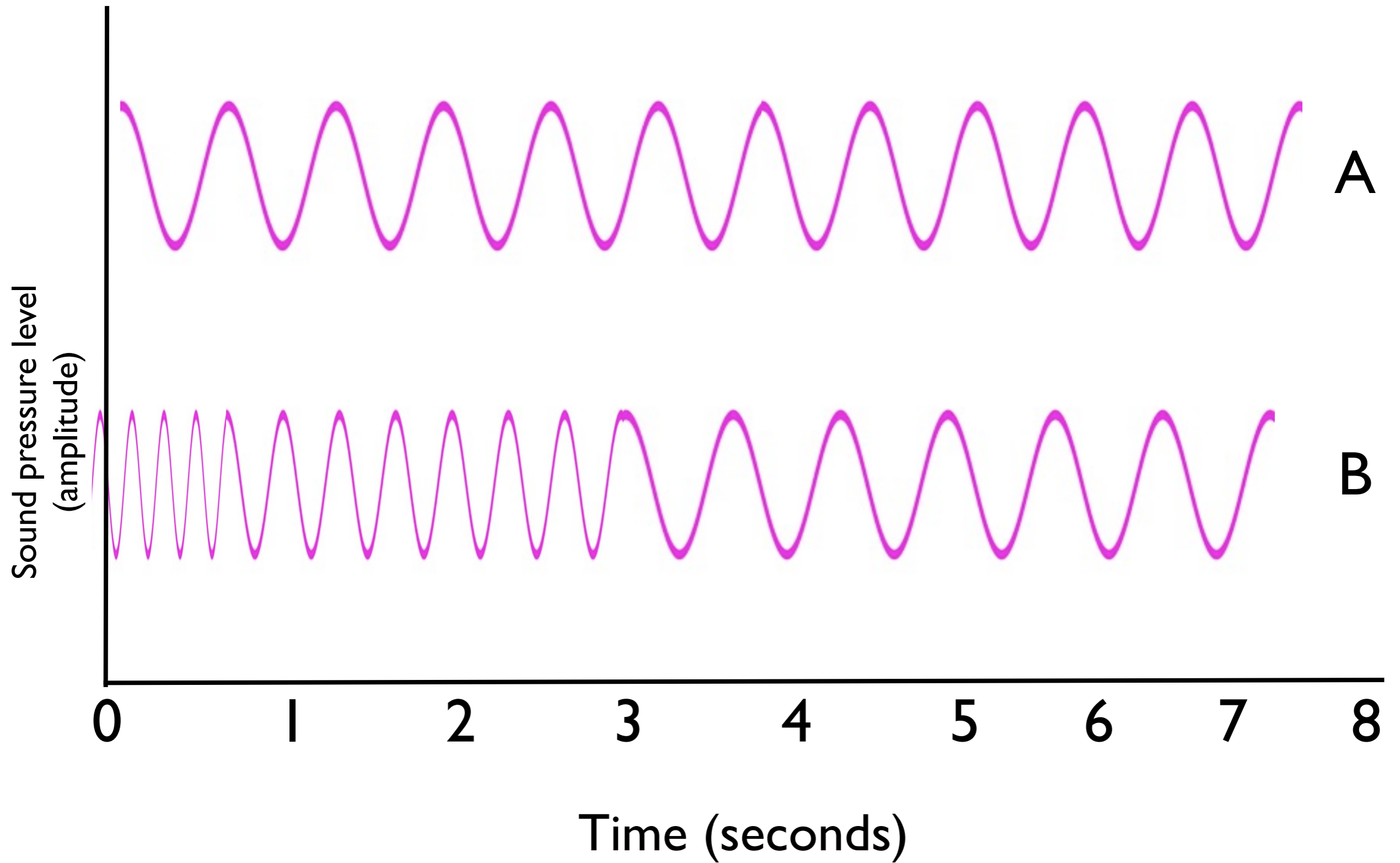


Which wave has the highest intensity?

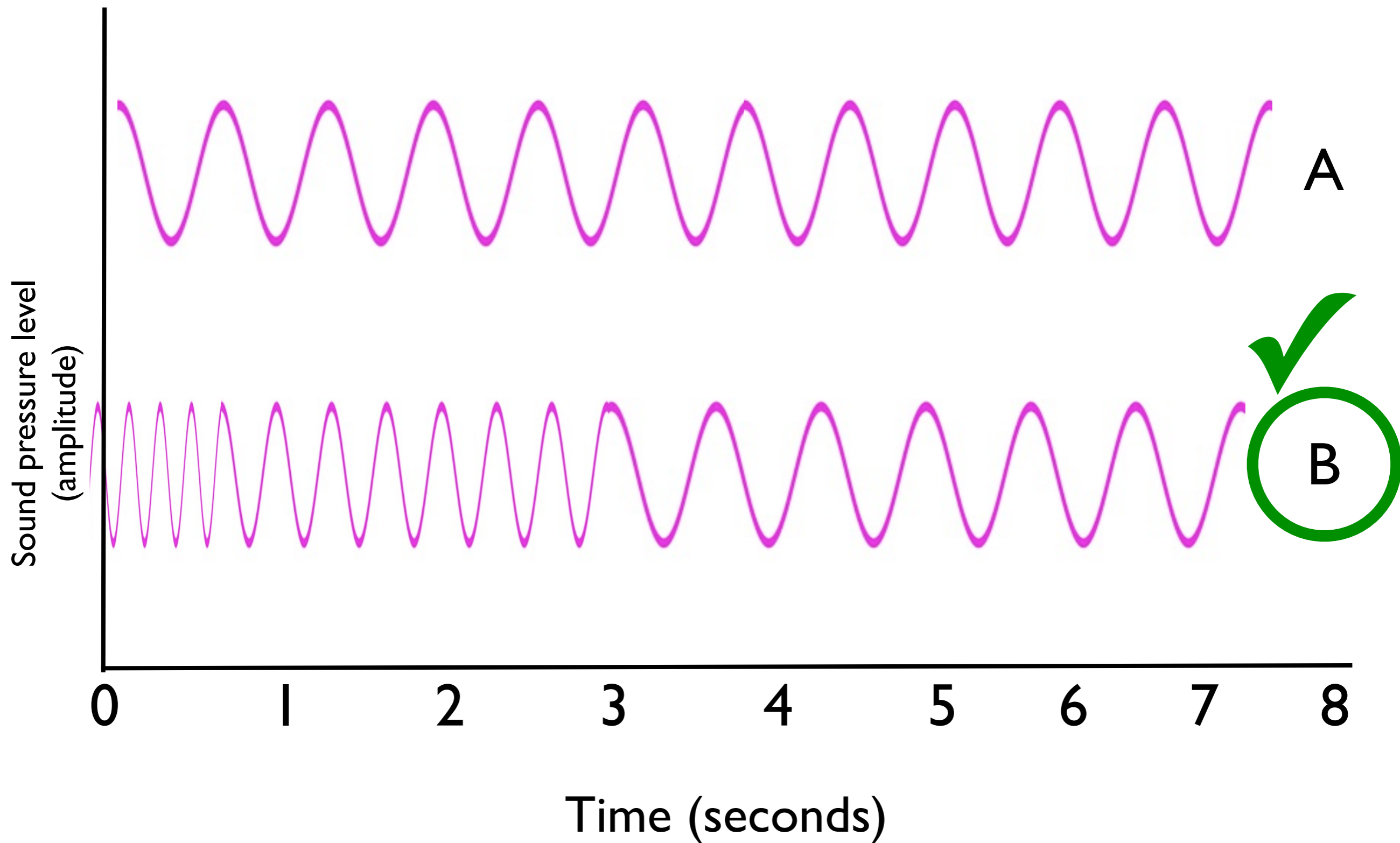
Which wave will be the loudest?



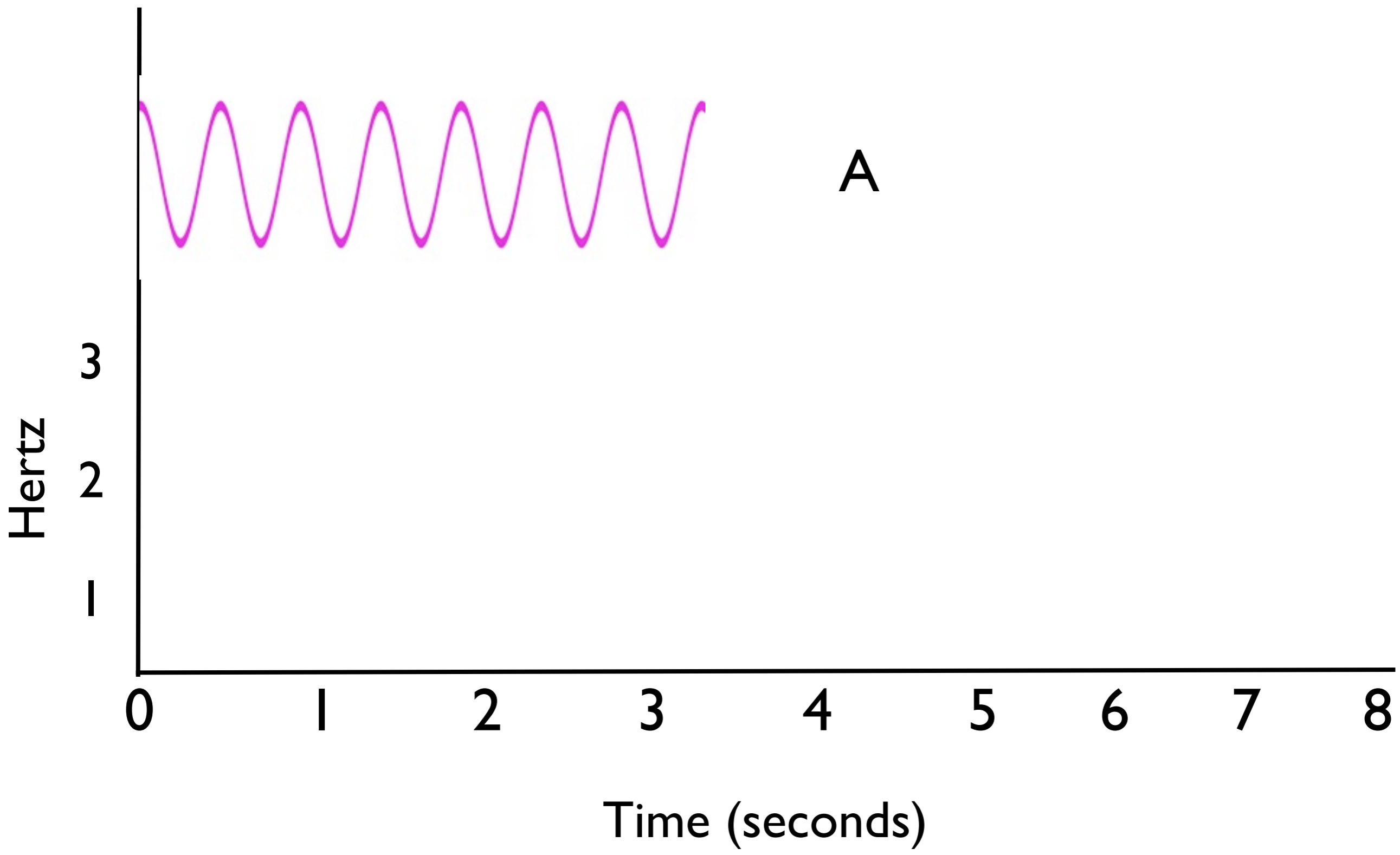
Which one is Frequency Modulated?



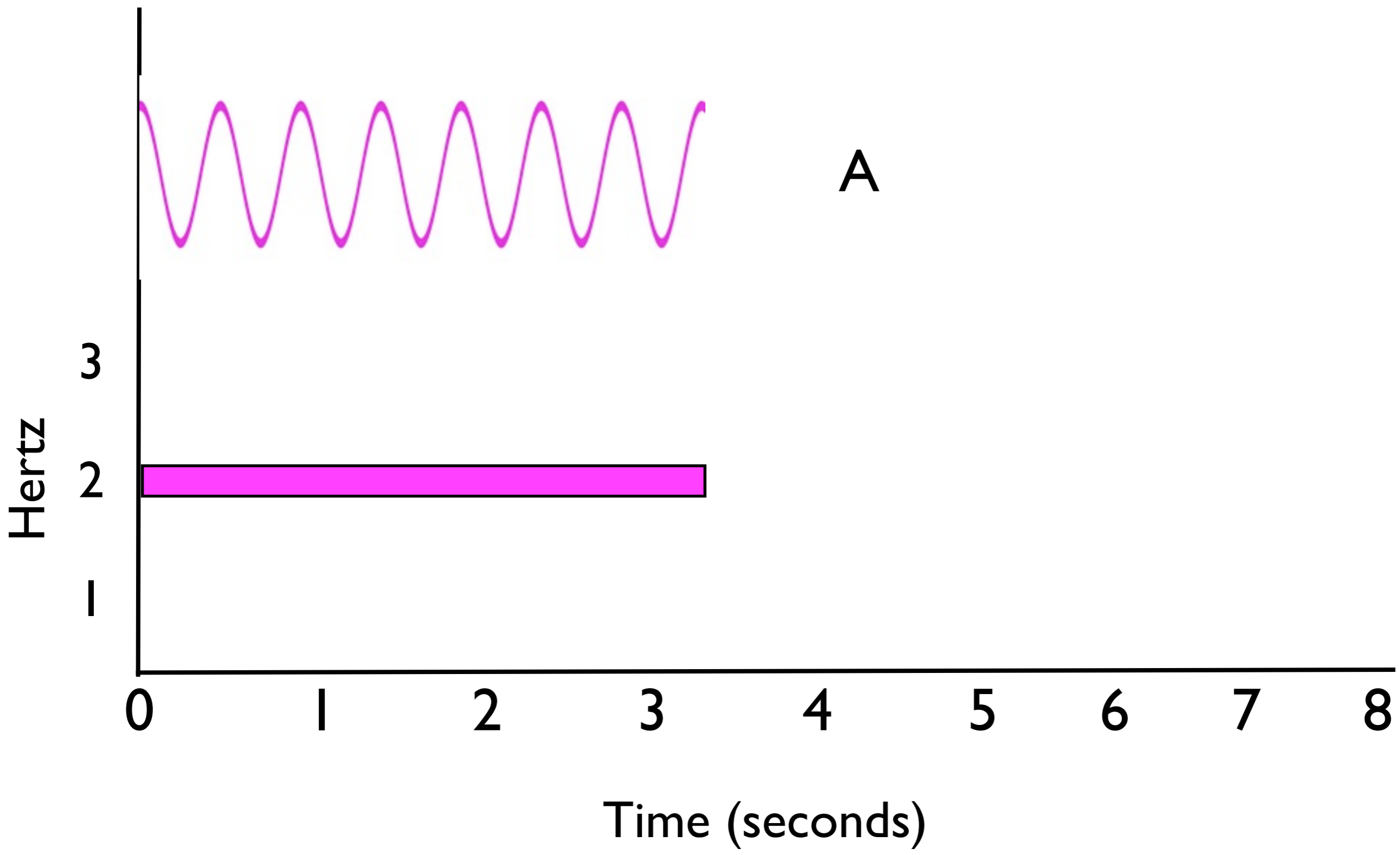
Which one is Frequency Modulated?



Draw (A) on a sonogram



Draw (A) on a sonogram



If a bat detector has a
SAMPLE RATE = 220 kHz
what is the
RECORDING BANDWIDTH?

Would you buy this detector for colleagues
in Cuba or Anguilla?

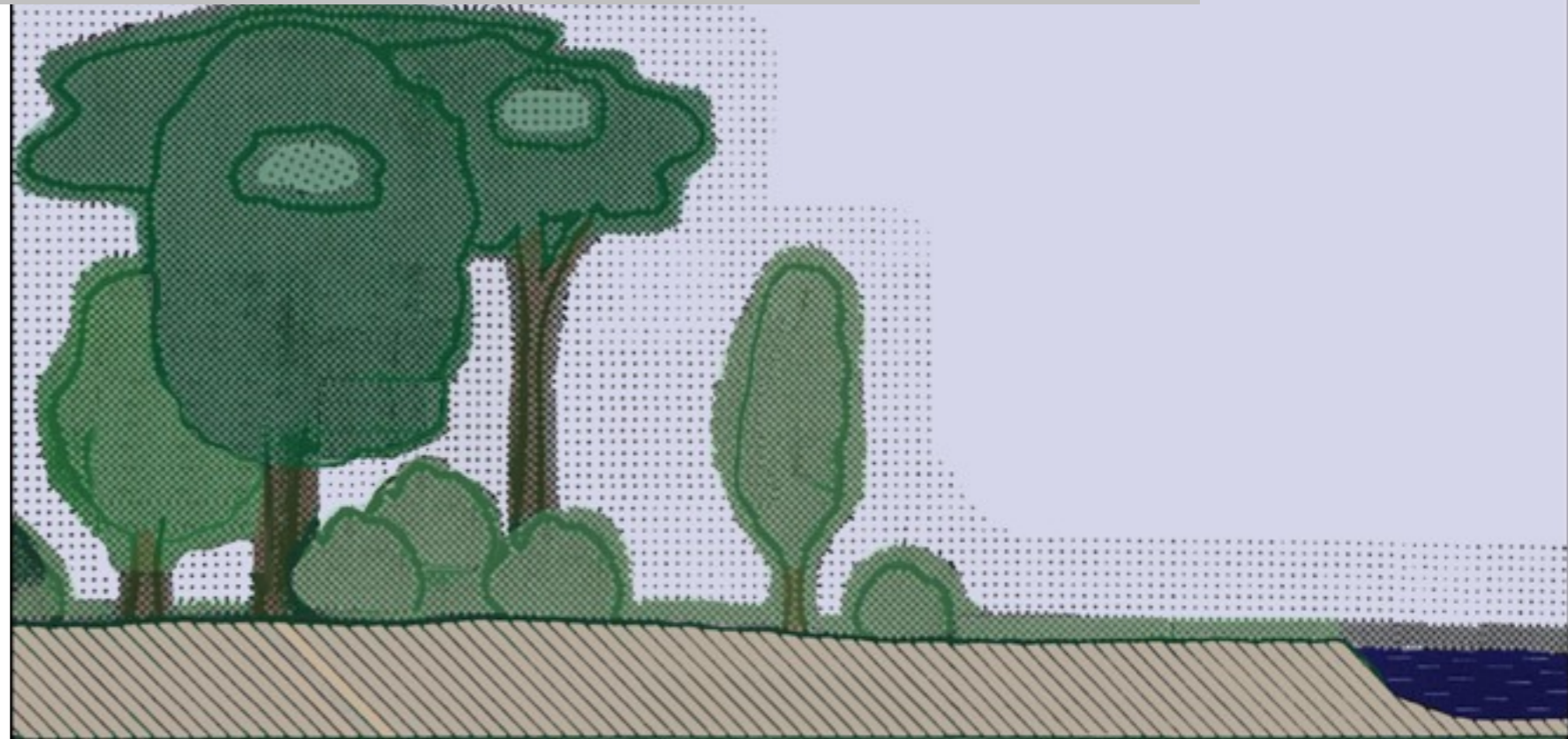
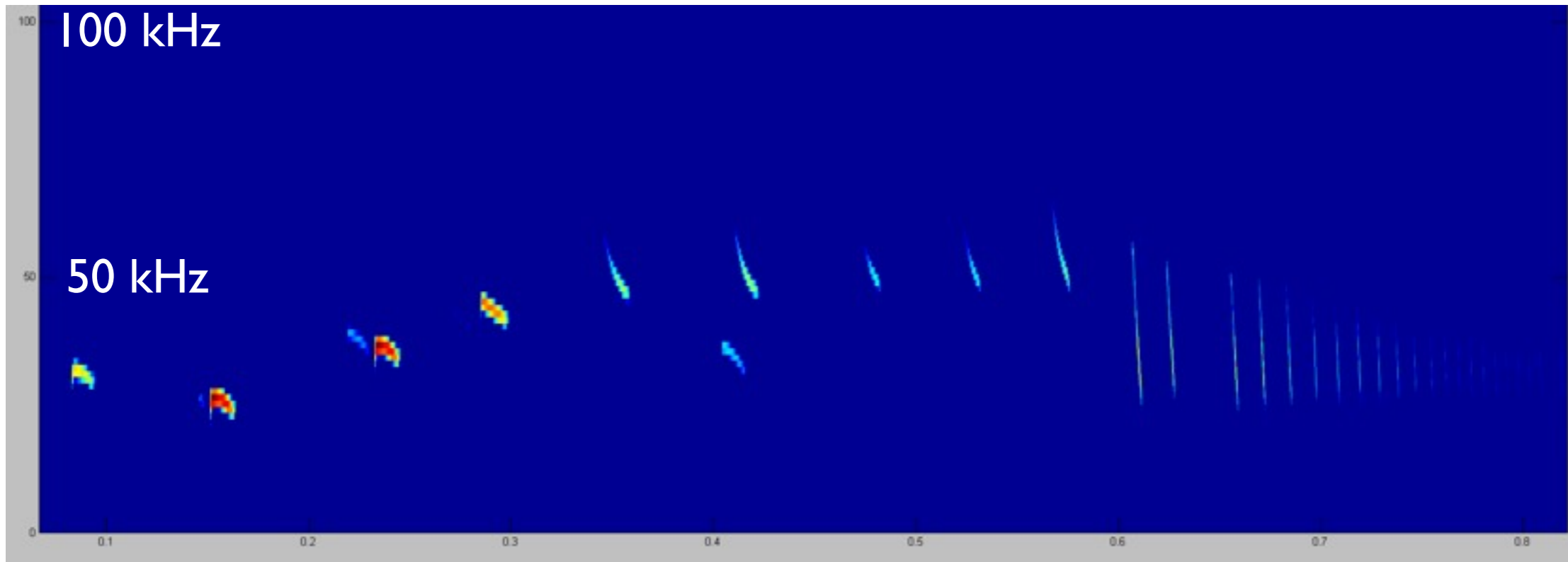
If a bat detector has a
SAMPLE RATE = 220 kHz
what is the
RECORDING BANDWIDTH?

110 kHz

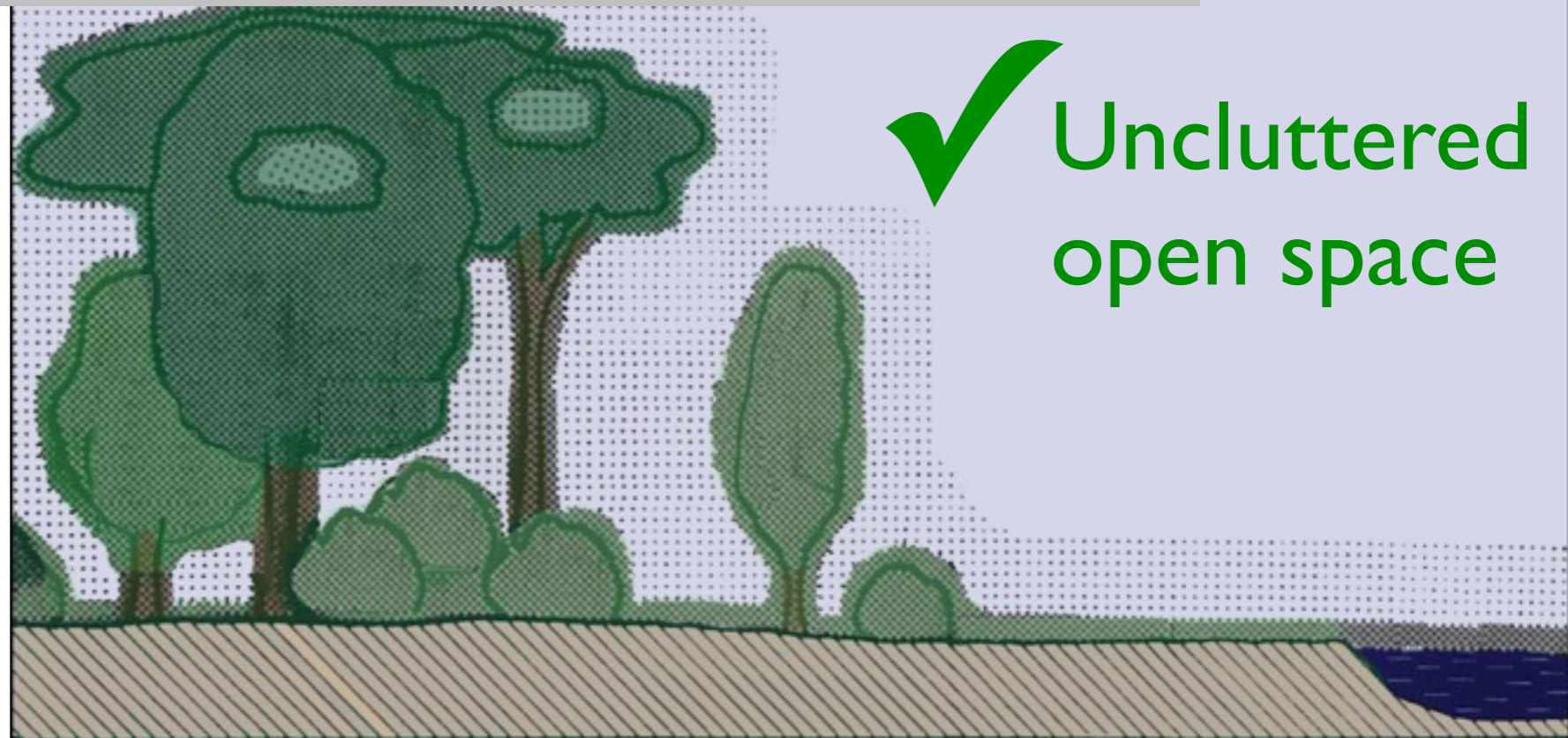
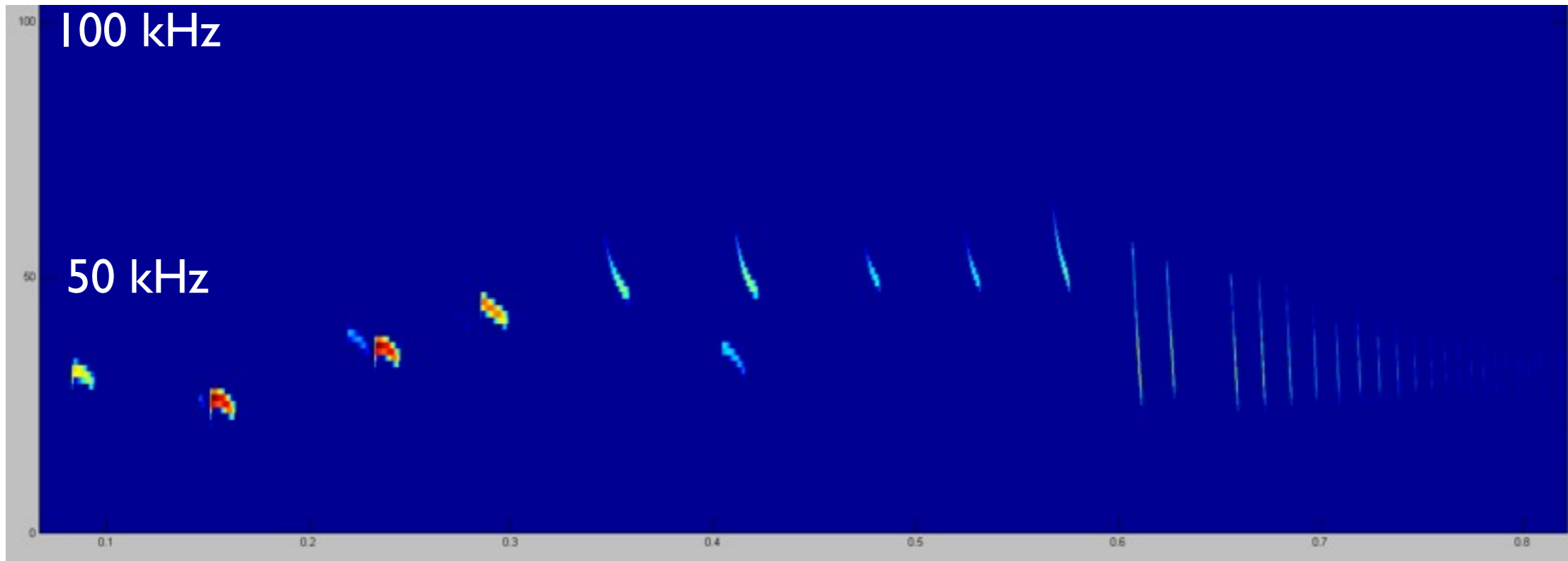
Would you buy this detector for colleagues
in Cuba or Anguilla?

NO - frequency is too low

In what “sound-scape” would you expect to see a bat with this acoustic signal?

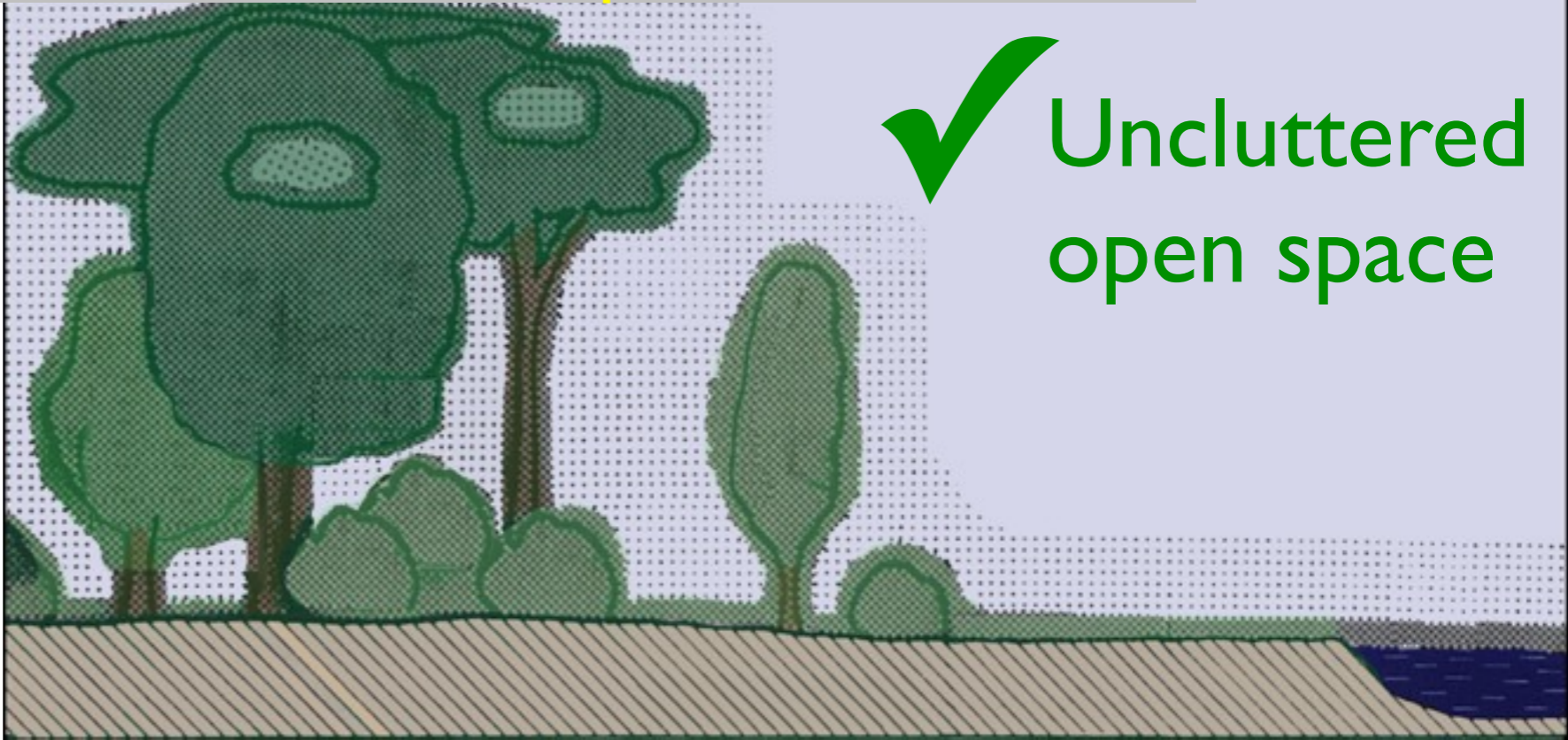
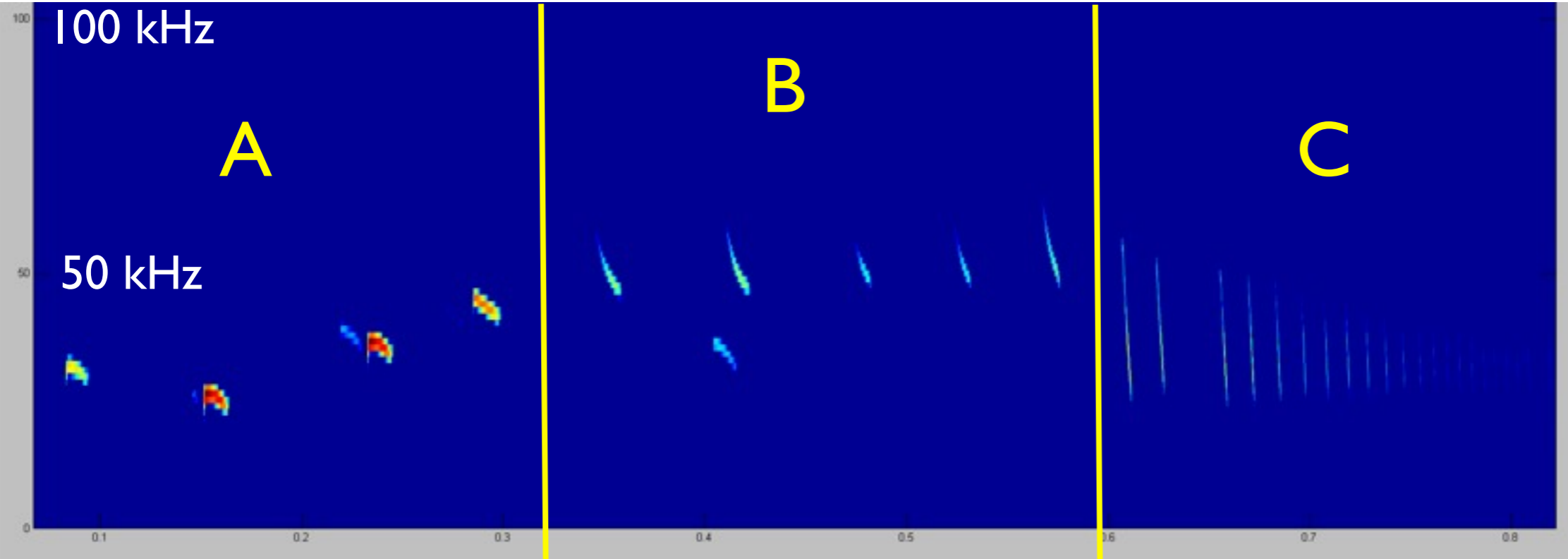


In what “sound-scape” would you expect to see a bat with this acoustic signal?

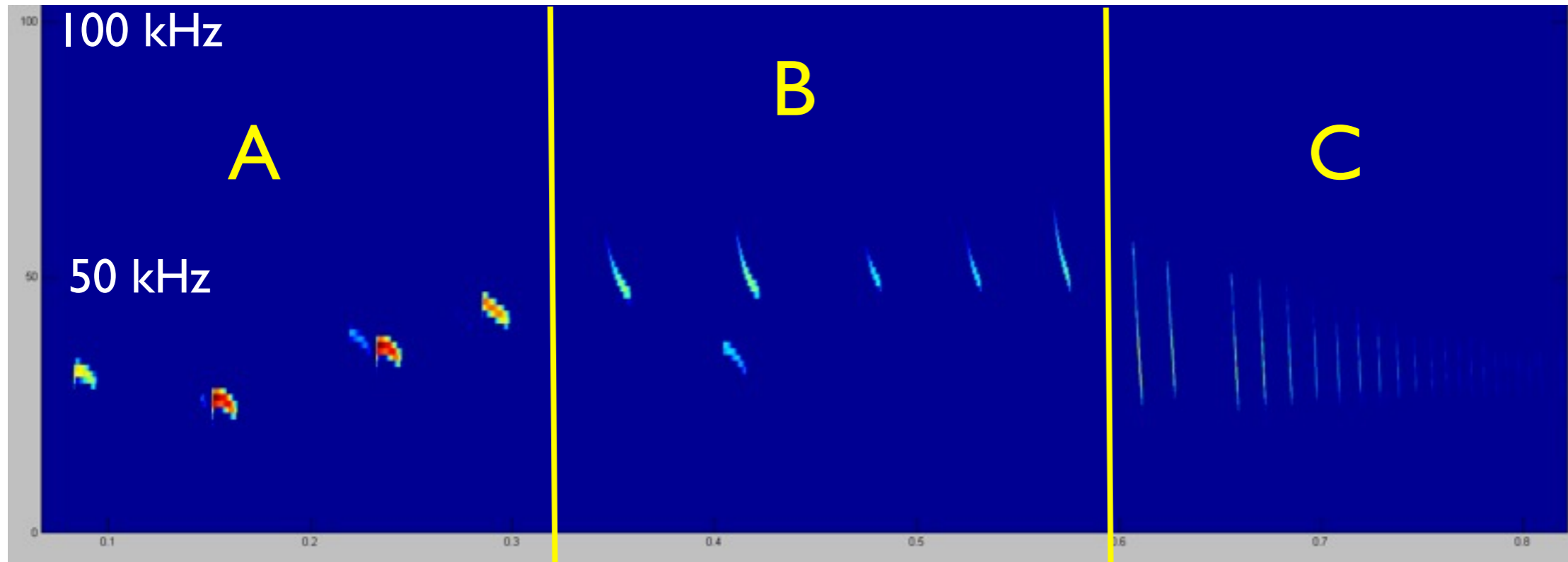


✓ Uncluttered open space

What is happening in Phase (A); Phase (B) & Phase (C)



What is happening in Phase (A); Phase (B) & Phase (C)



A = General flight / search phase

B = Object detected

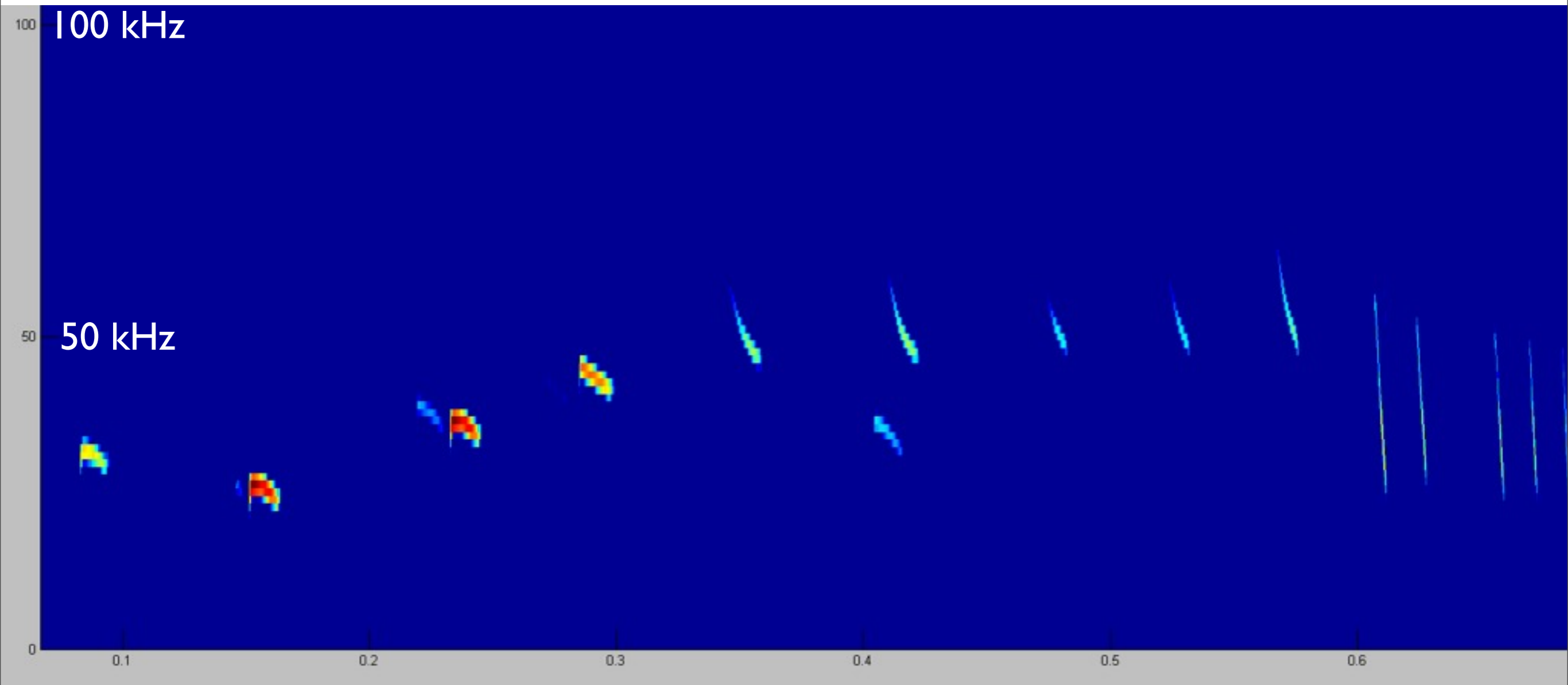
C = Object confirmed as suitable prey
& attempt to capture (hunting buzz)

Which bat species is this?

Search Phase (2nd Harmonic):

FMax range = 35-47 kHz

FMin range = 21-30 kHz

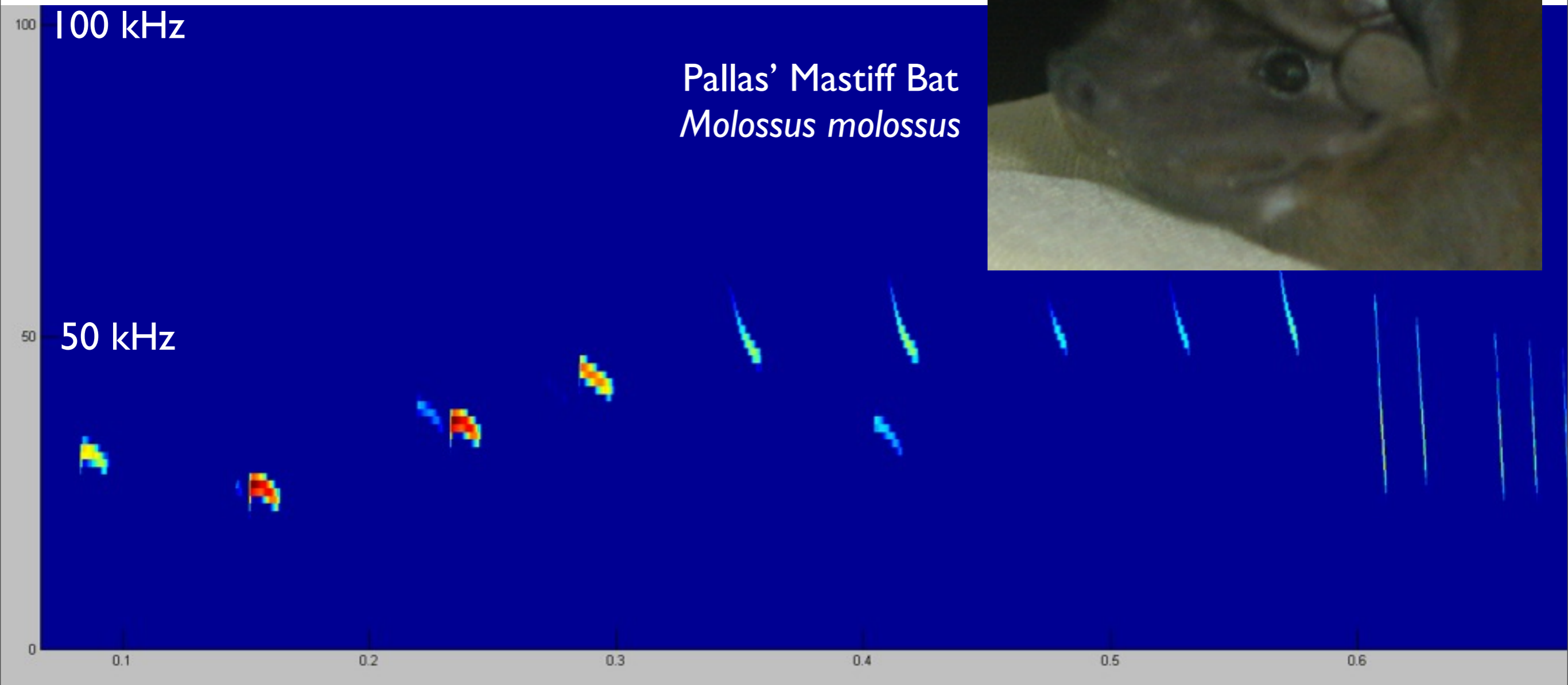


Which bat species is this?

Search Phase (2nd Harmonic):

FMax range = 35-47 kHz

FMin range = 21-30 kHz



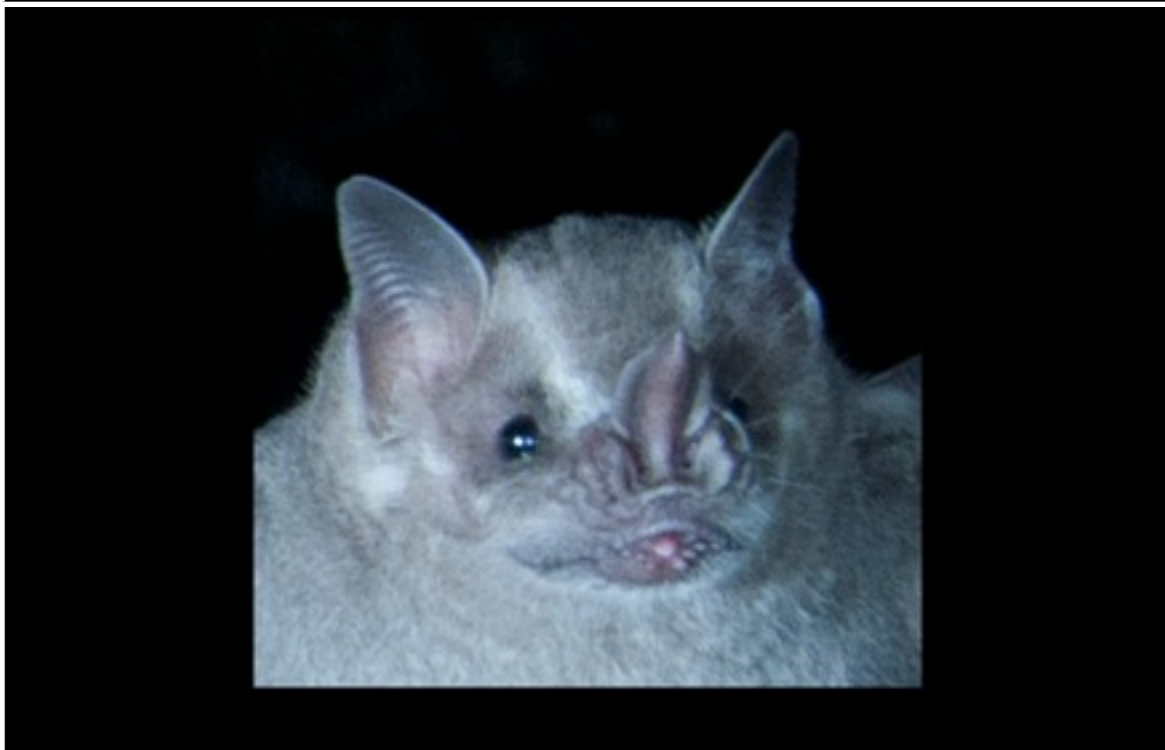
BONUS: Predict the foraging niche from the face

Nectarivore

Frugivore

Insectivore

Piscivore

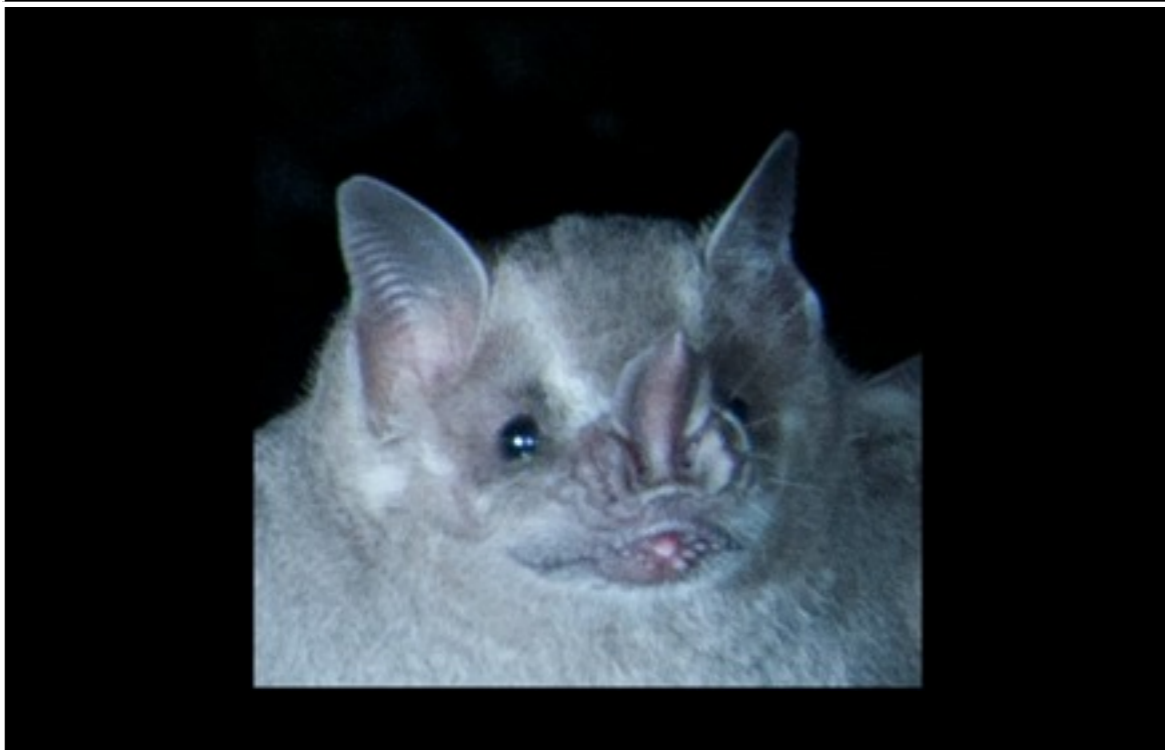


BONUS: Predict the foraging niche from the face

Frugivore

Insectivore

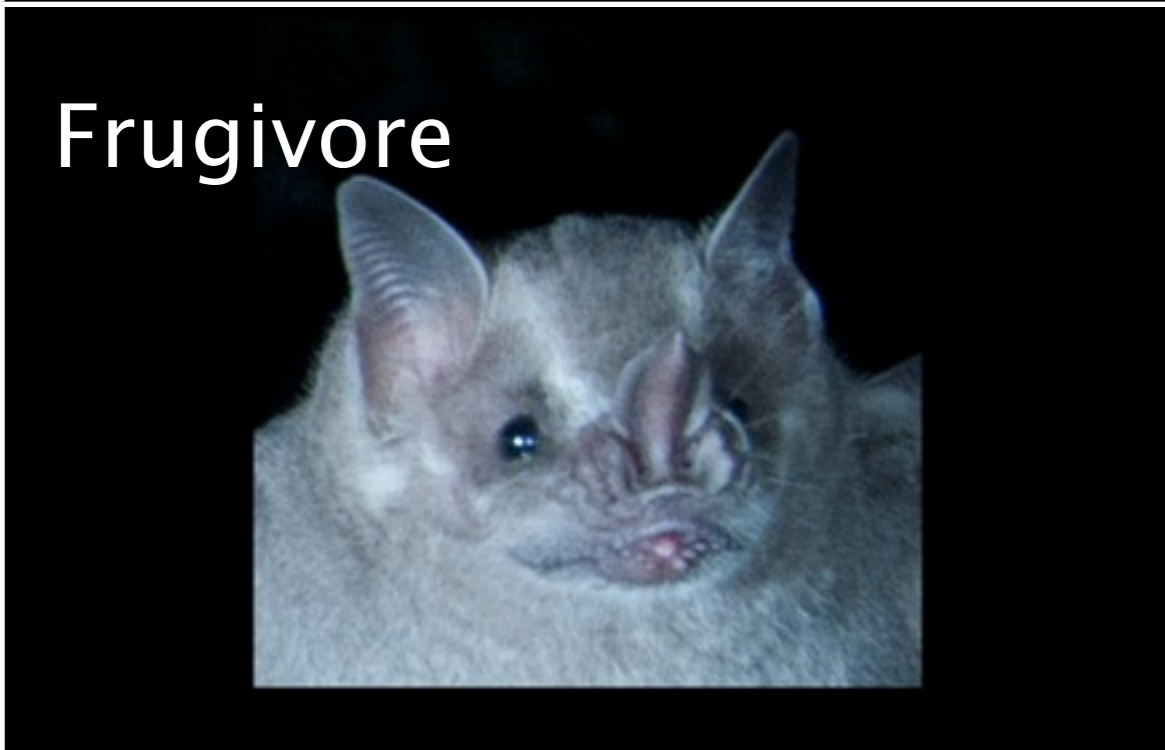
Piscivore



BONUS: Predict the foraging niche from the face

Insectivore

Piscivore



BONUS: Predict the foraging niche from the face

Piscivore



Nectarivore

Frugivore



Insectivore

BONUS: Predict the foraging niche from the face

CONGRATULATIONS!



Piscivore



Nectarivore

Frugivore



Insectivore