

Bird Song!

Why We Need It and Why It Rocks

Dr. Kaiya Provost

THE OHIO STATE UNIVERSITY



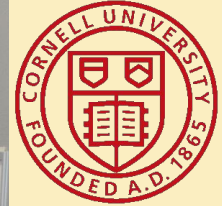
@KaiyaProvost
provost.27@osu.edu

First, Me

Bird Enthusiast



Studying AMNH
Specimens



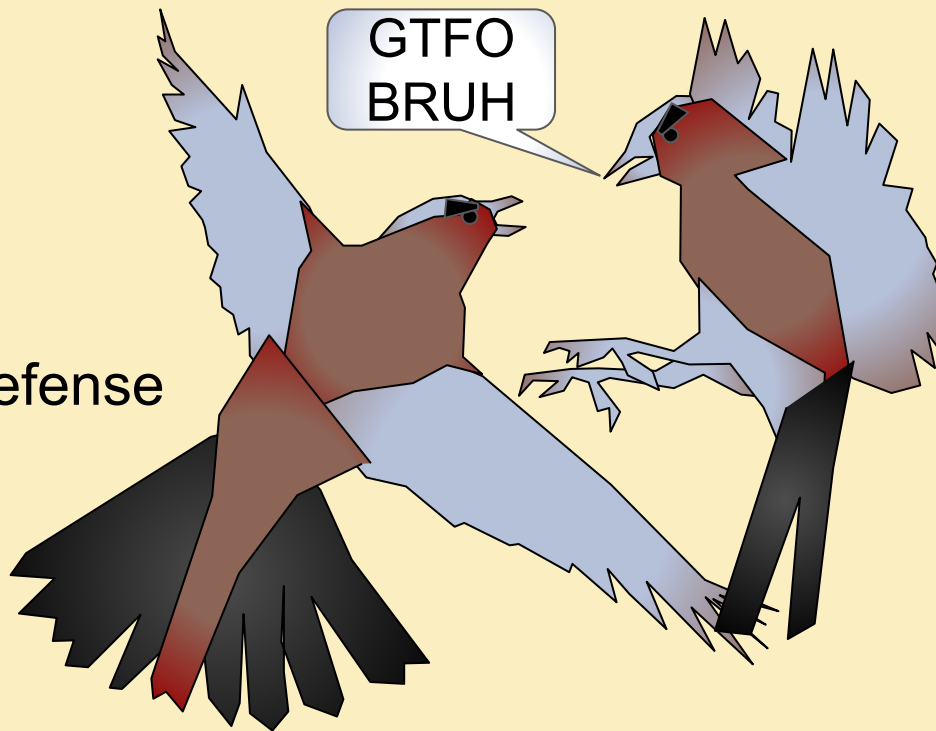
Why Songs?

Red-winged Blackbird

Agelaius phoeniceus



Territory Defense



Mate Attraction



Sounds are important
to bird reproduction

If you listened to every publicly available bird recording right now, when would you finish?

JUNE 8TH 2026

1467 days 18 hours 17 minutes



MUSEUM OF BIOLOGICAL DIVERSITY

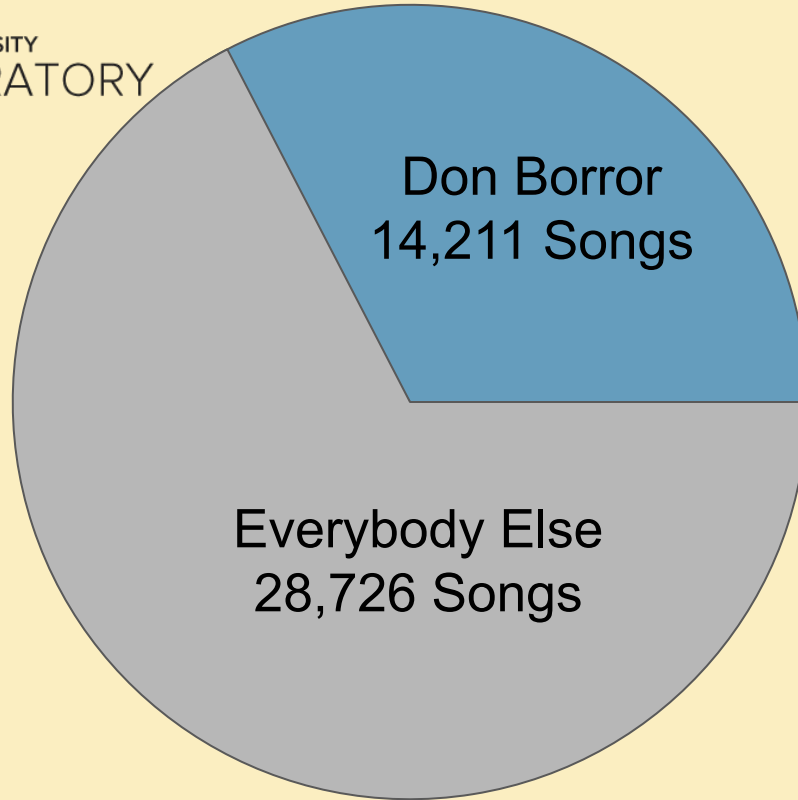
**BORROR LABORATORY
OF BIOACOUSTICS**

Donald J. Borror
1907-1988
(Photo taken 1970)





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BORROR LABORATORY
OF BIOACOUSTICS





Recorder: 30+ Pounds

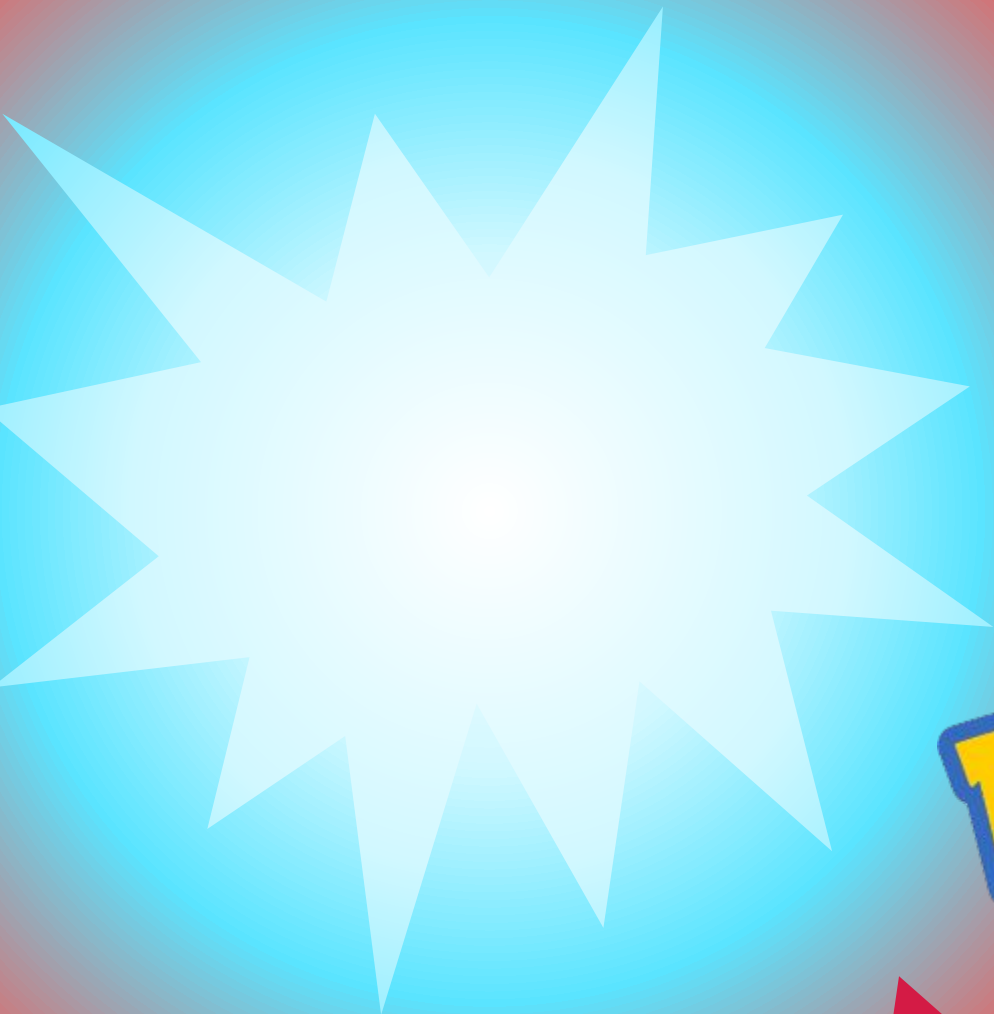


Amplifier: 20+ Pounds

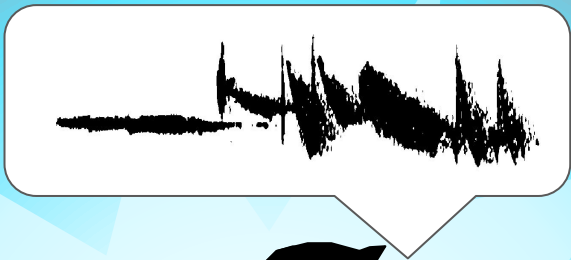


“Portable”

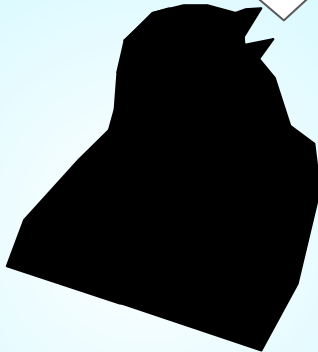
Why do we need all
of those recordings?



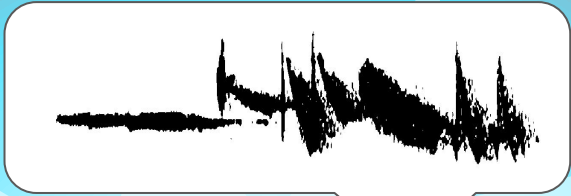
BIRD



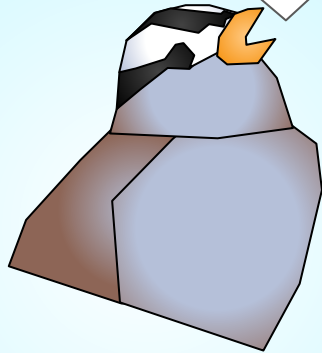
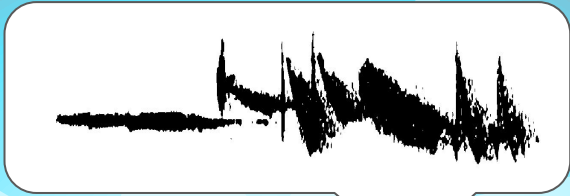
SPECTROGRAM



BI RD



BIRD

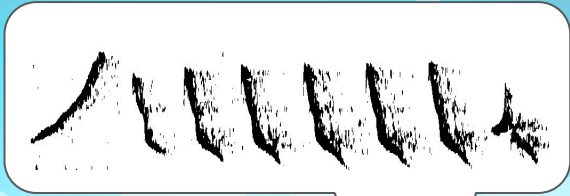


White-crowned Sparrow

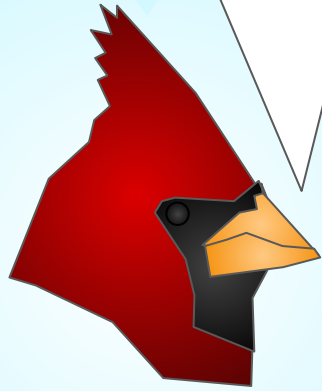
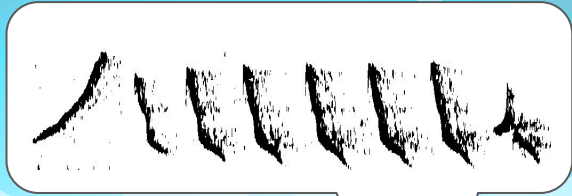
Zonotrichia leucophrys
subsp. *pugetensis*



BI RD



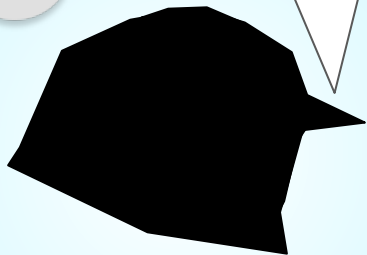
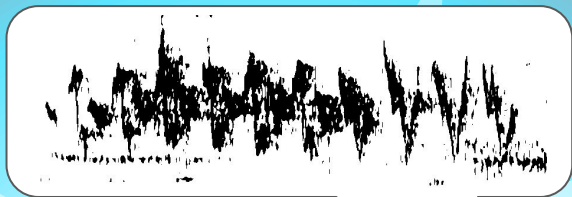
BIRD



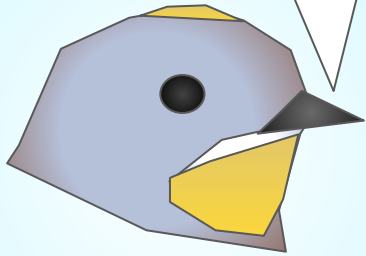
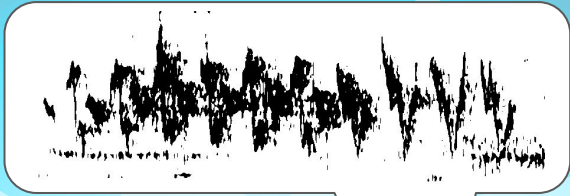
Northern Cardinal
Cardinalis cardinalis
subsp. *cardinalis*



BIRD



BIRD



Yellow-rumped Warbler

Setophaga coronata
subsp. *auduboni*

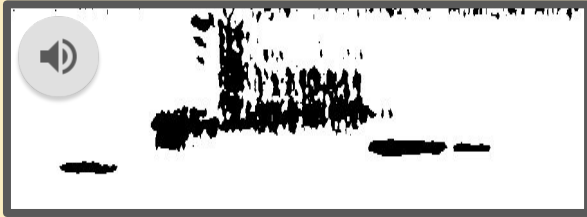


BIRD

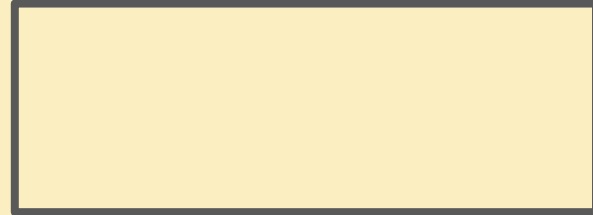
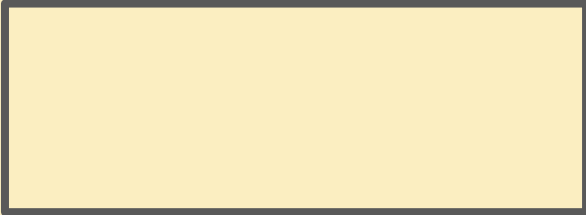
Sounds let us identify species

How many species?

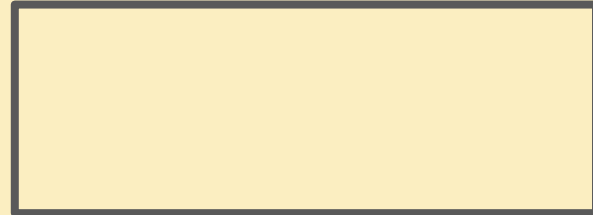
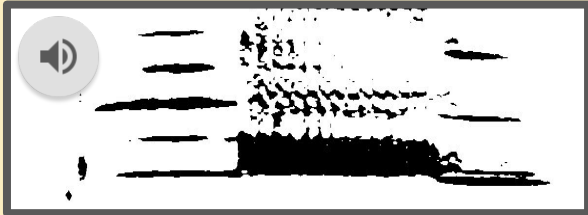
How many species?



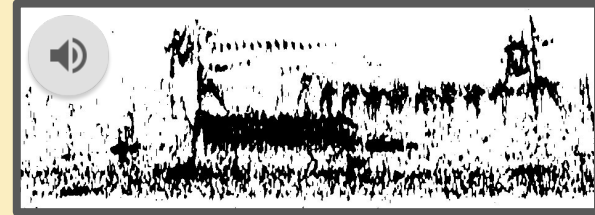
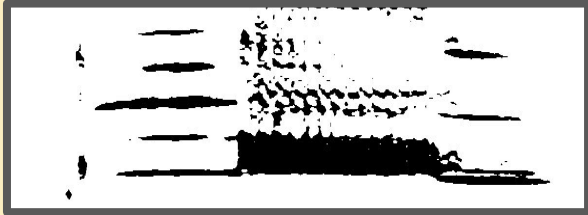
How many species?



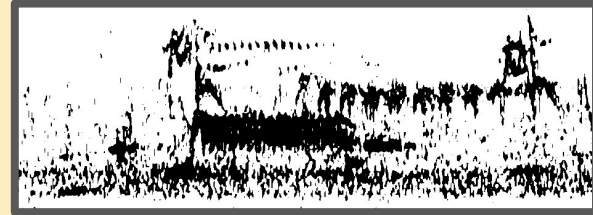
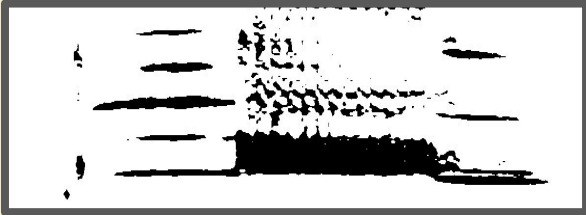
How many species?



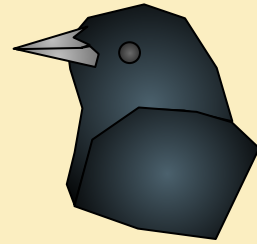
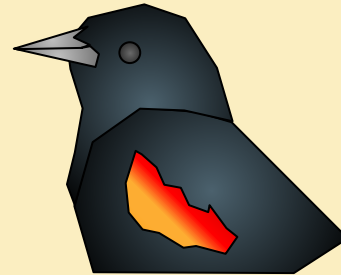
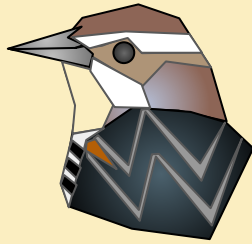
How many species?



Two species!



Two species!



Red-winged Blackbird

Agelaius phoeniceus

North America

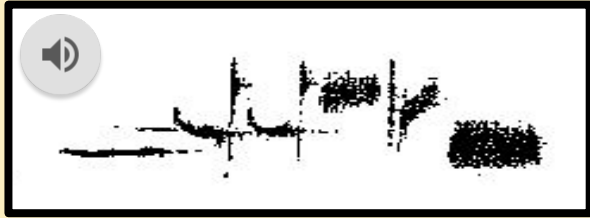
Red-shouldered Blackbird

Agelaius assimilis

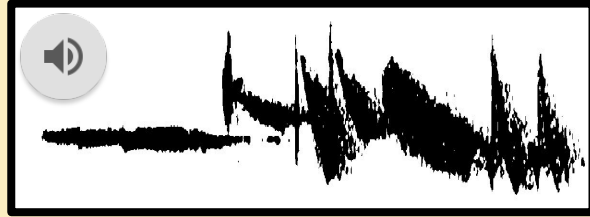
Cuba

How many species?

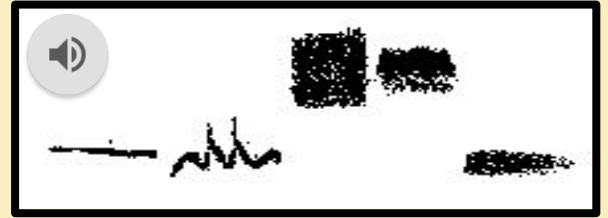
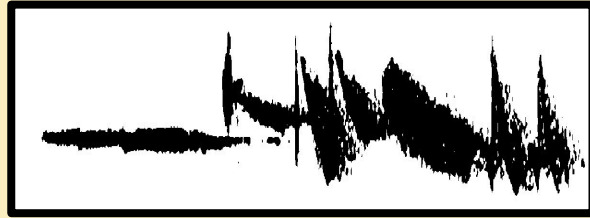
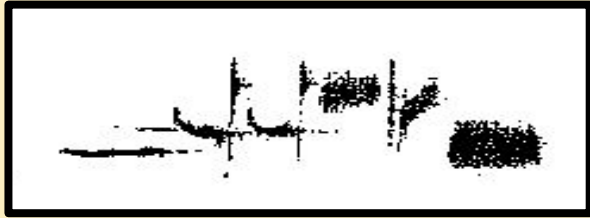
How many species?



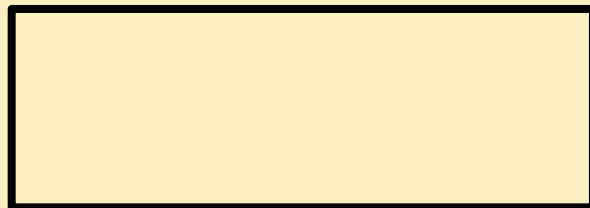
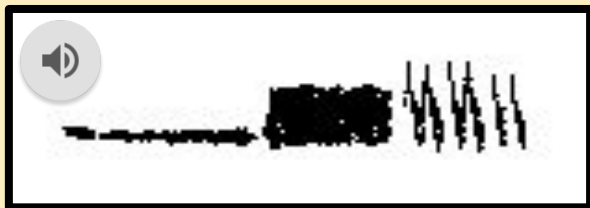
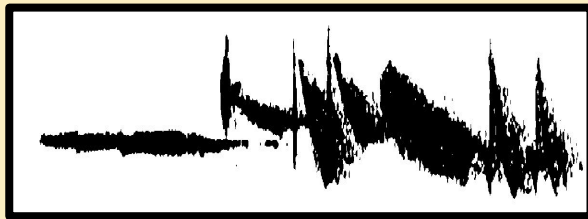
How many species?



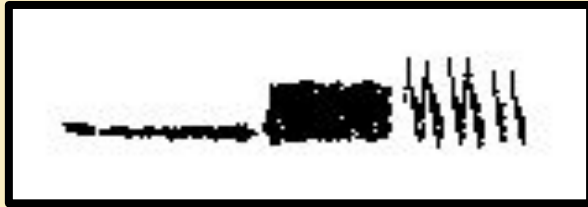
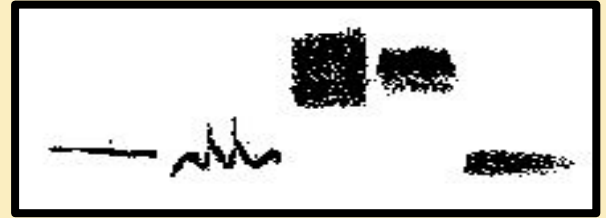
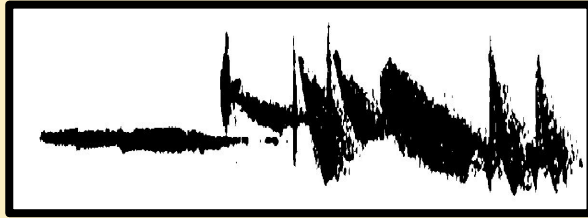
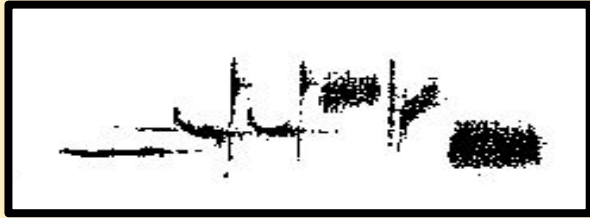
How many species?



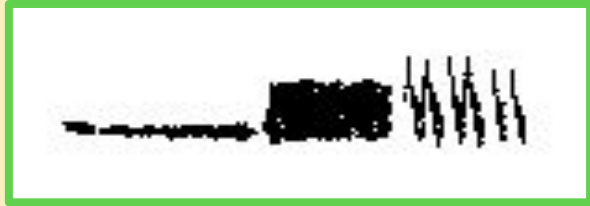
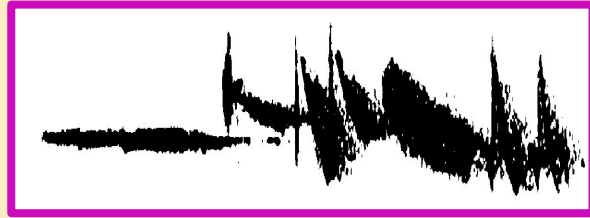
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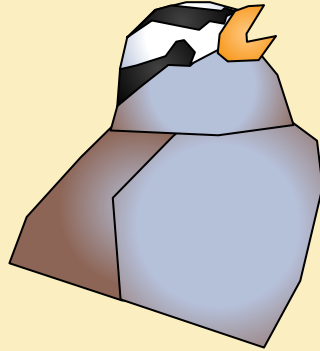
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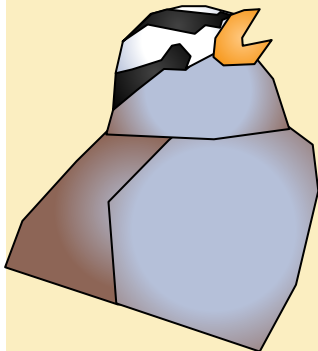
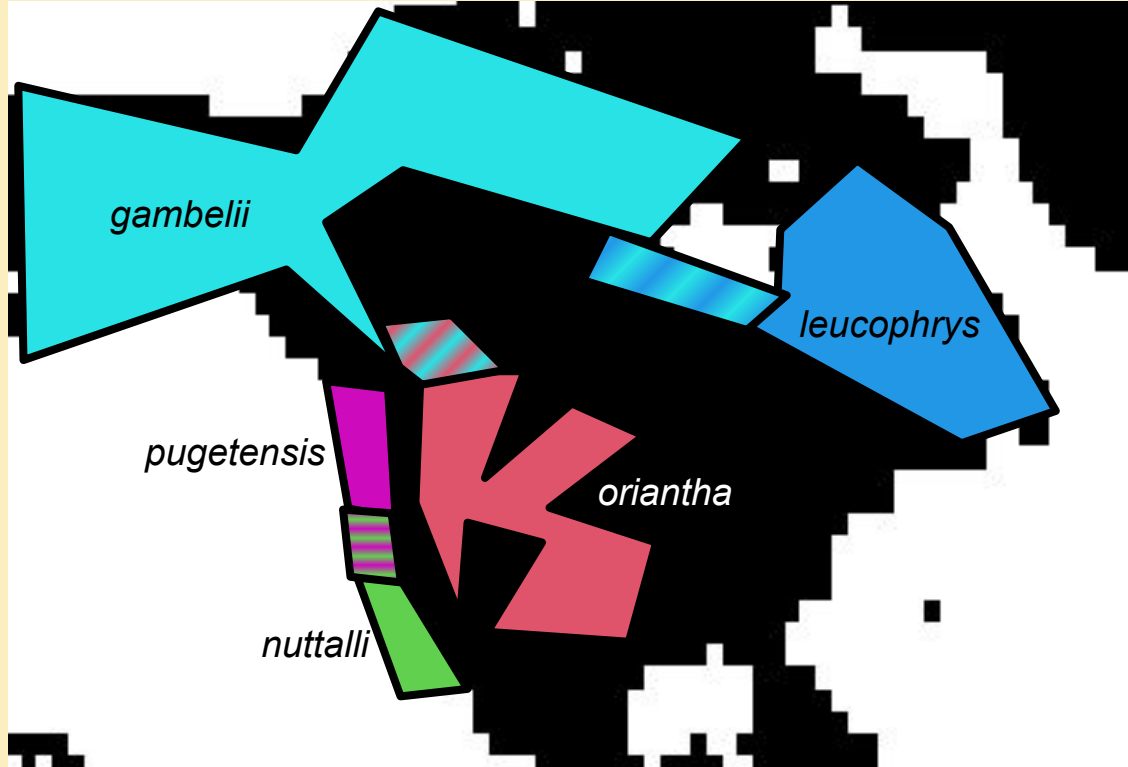
Just one! But 5 subspecies

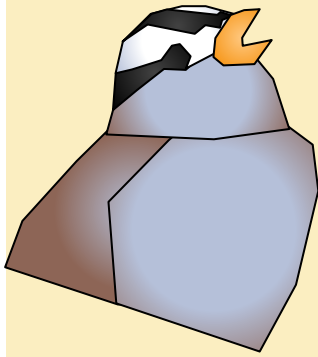
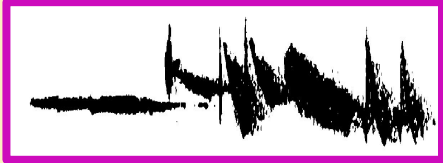
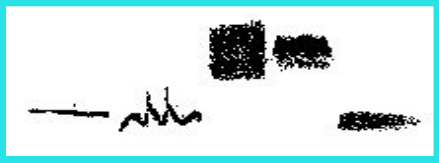
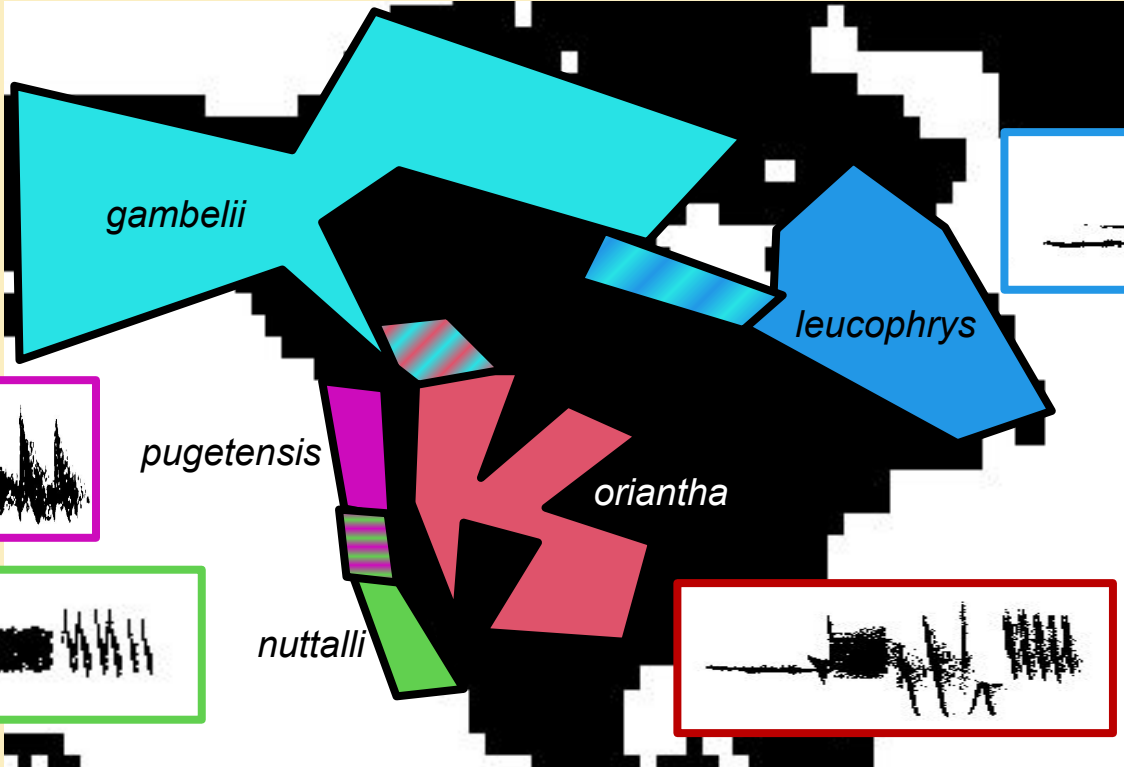


Just one! But 5 subspecies



White-crowned Sparrow
Zonotrichia leucophrys

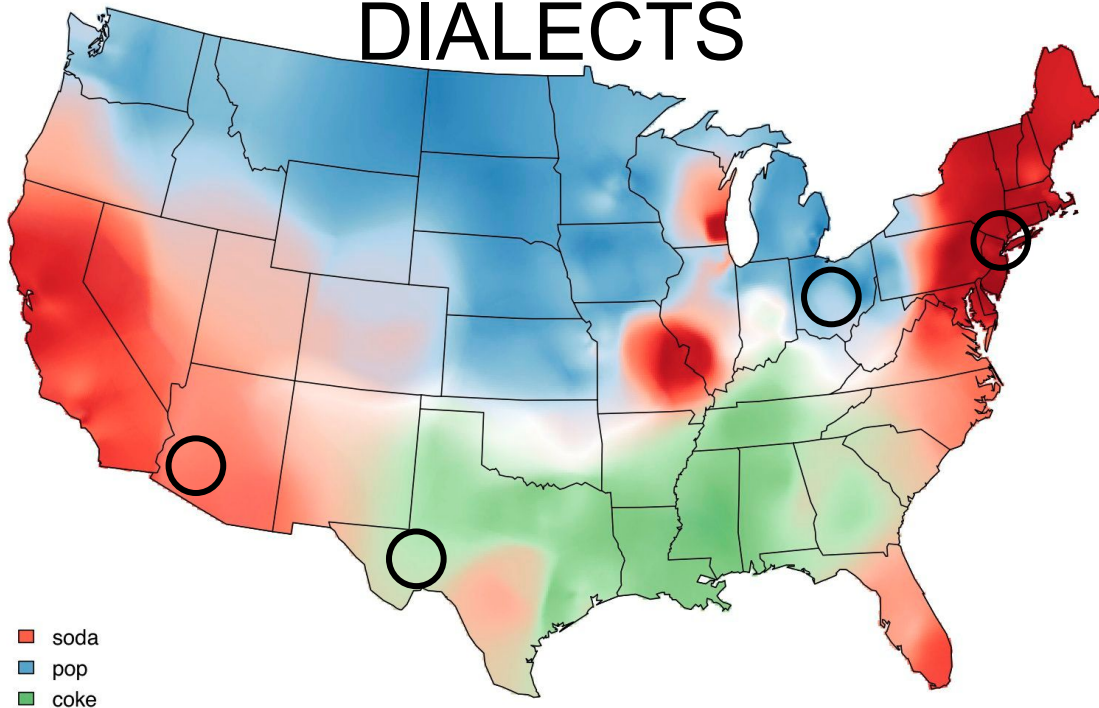




Species sound different in
different areas...why?

What is your generic term for a sweetened, carbonated beverage?

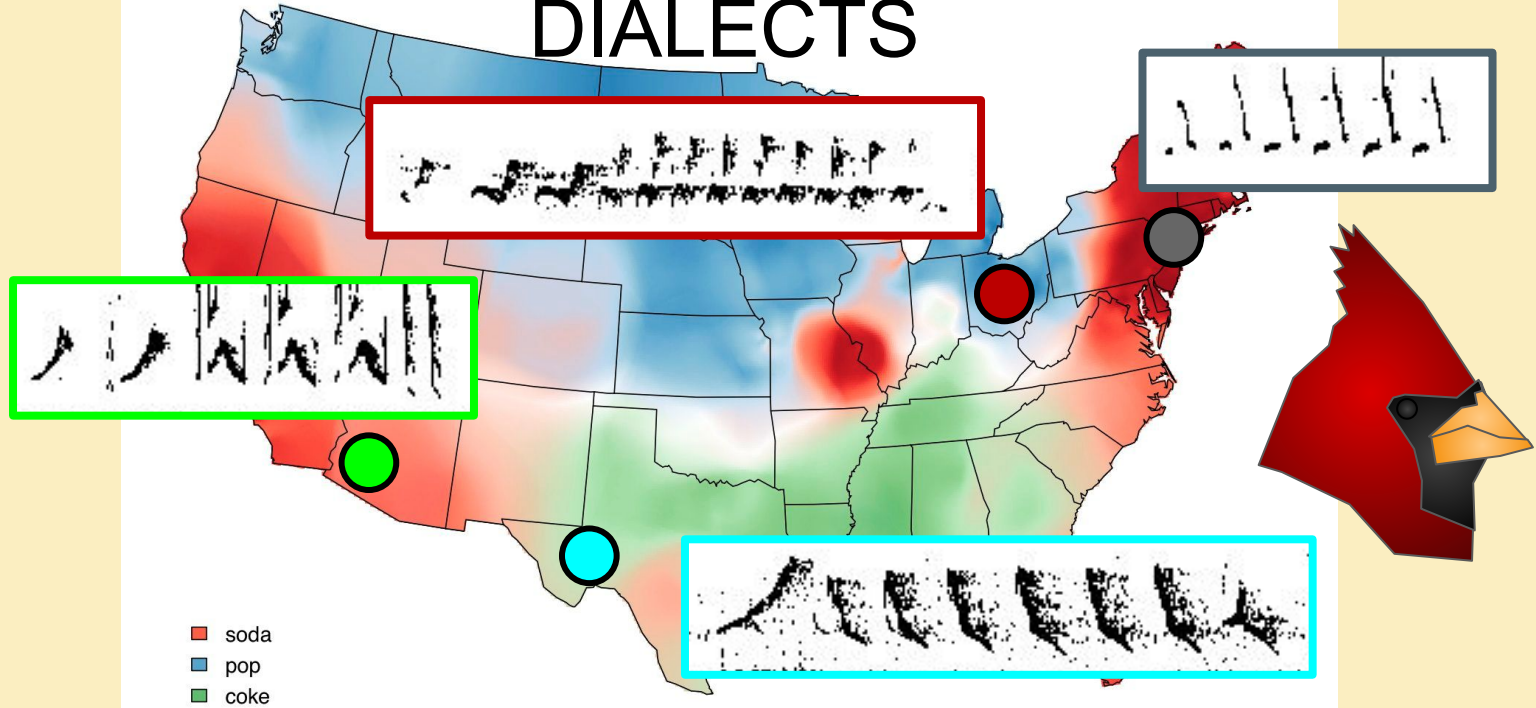
DIALECTS



Map by Joshua Katz, Department of Statistics, NC State University
Based on survey data from Bert Vaux, Department of Linguistics, University of Cambridge

What is your generic term for a sweetened, carbonated beverage?

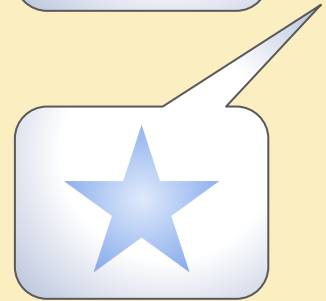
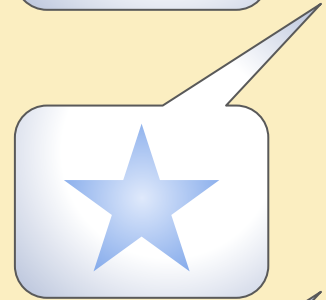
DIALECTS



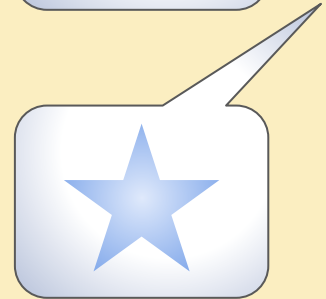
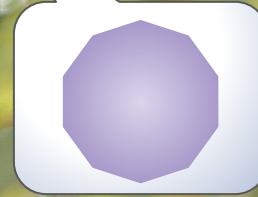
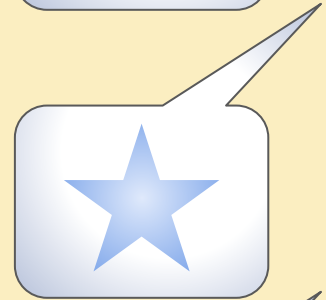
Map by Joshua Katz, Department of Statistics, NC State University
Based on survey data from Bert Vaux, Department of Linguistics, University of Cambridge

Dialects form from
Imperfect learning

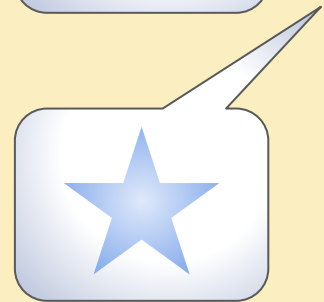
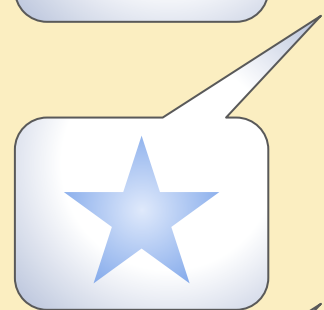
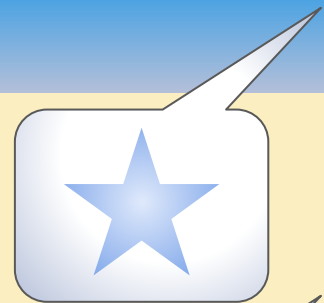
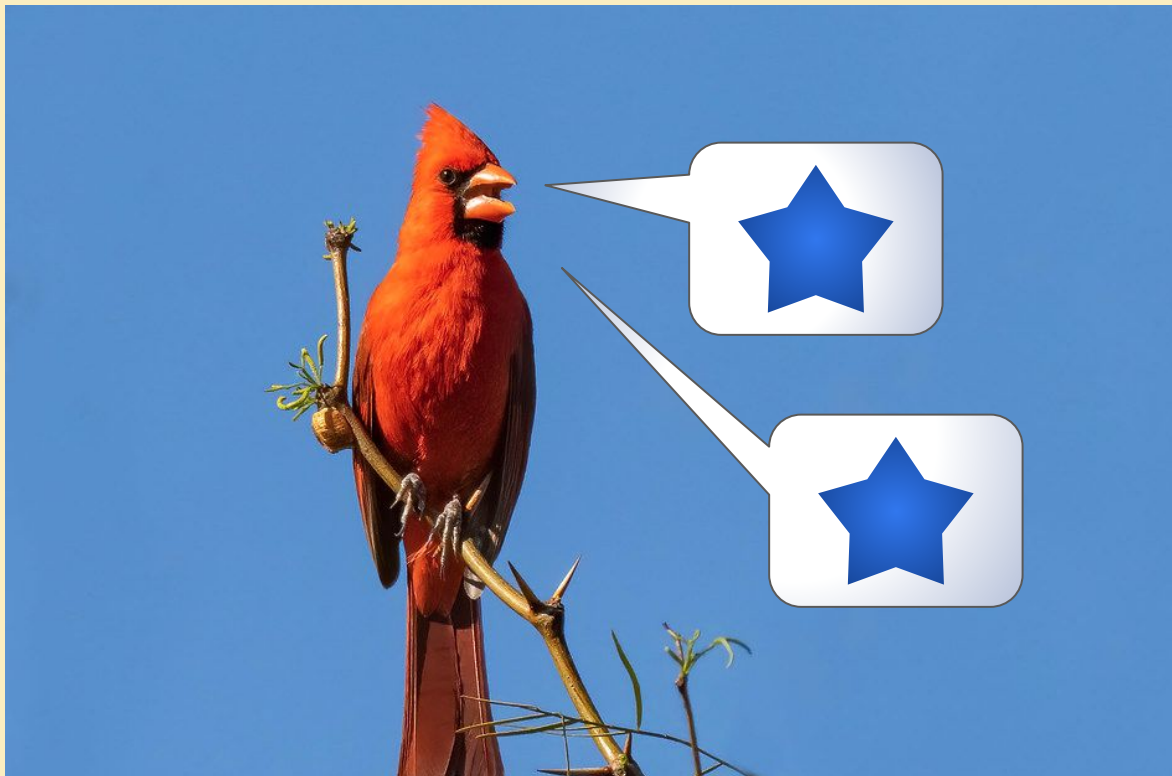
Nestling



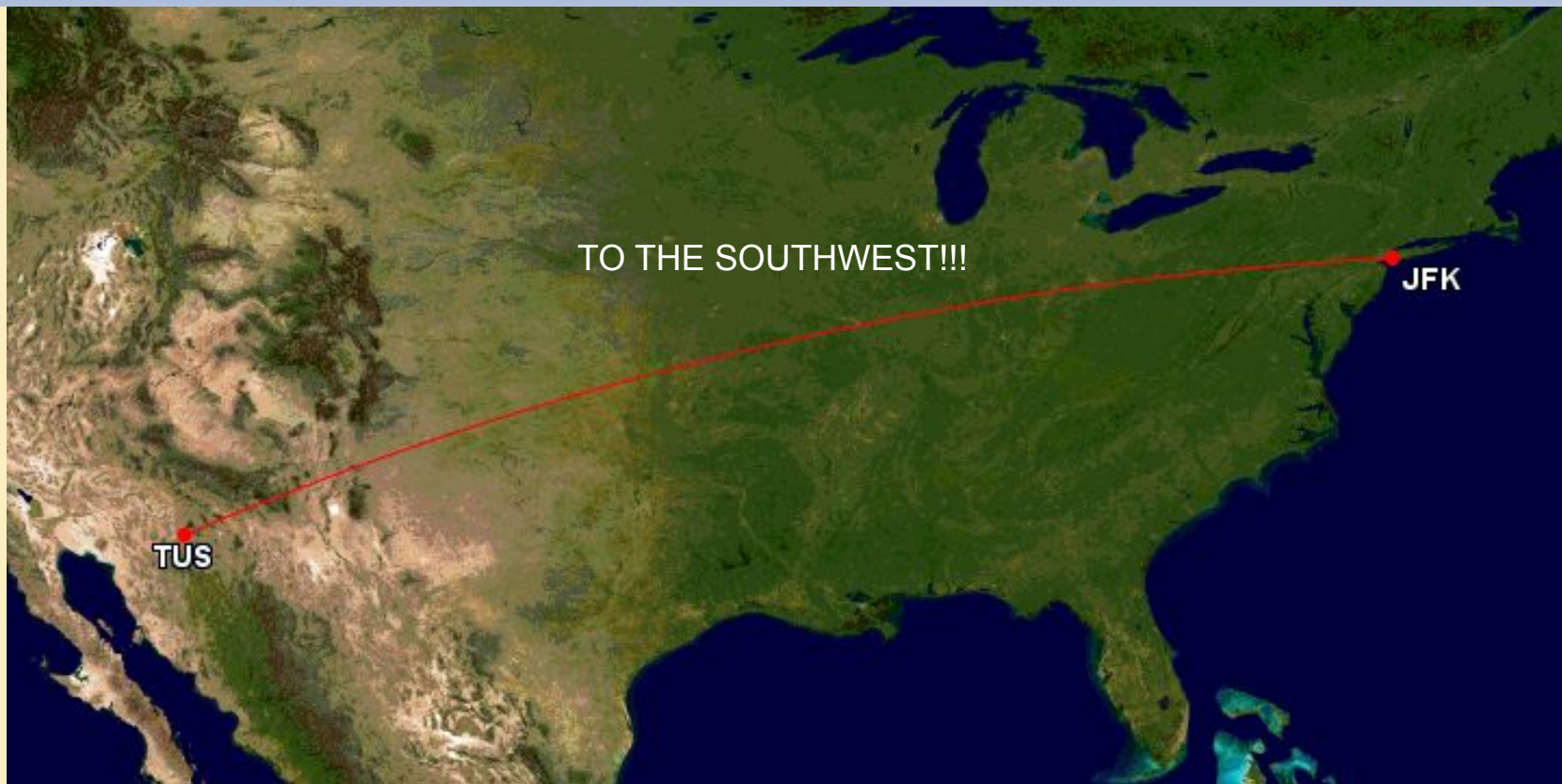
Juvenile



Adult



Do dialects matter?
Let's ask the birds.



TO THE SOUTHWEST!!!

TUS

JFK

Field Work in New Mexico



Fine Dining in the Field





WORTH IT





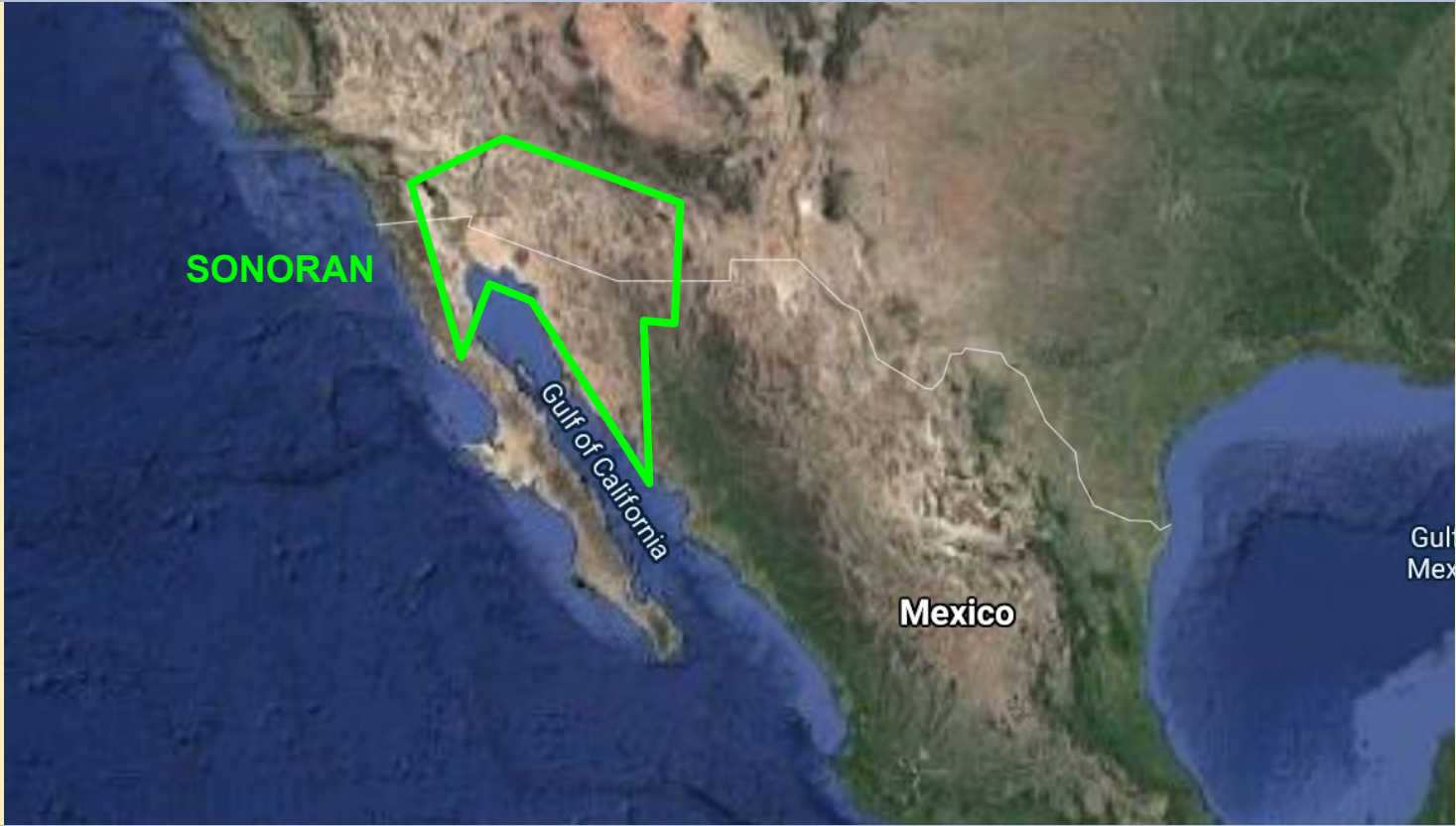














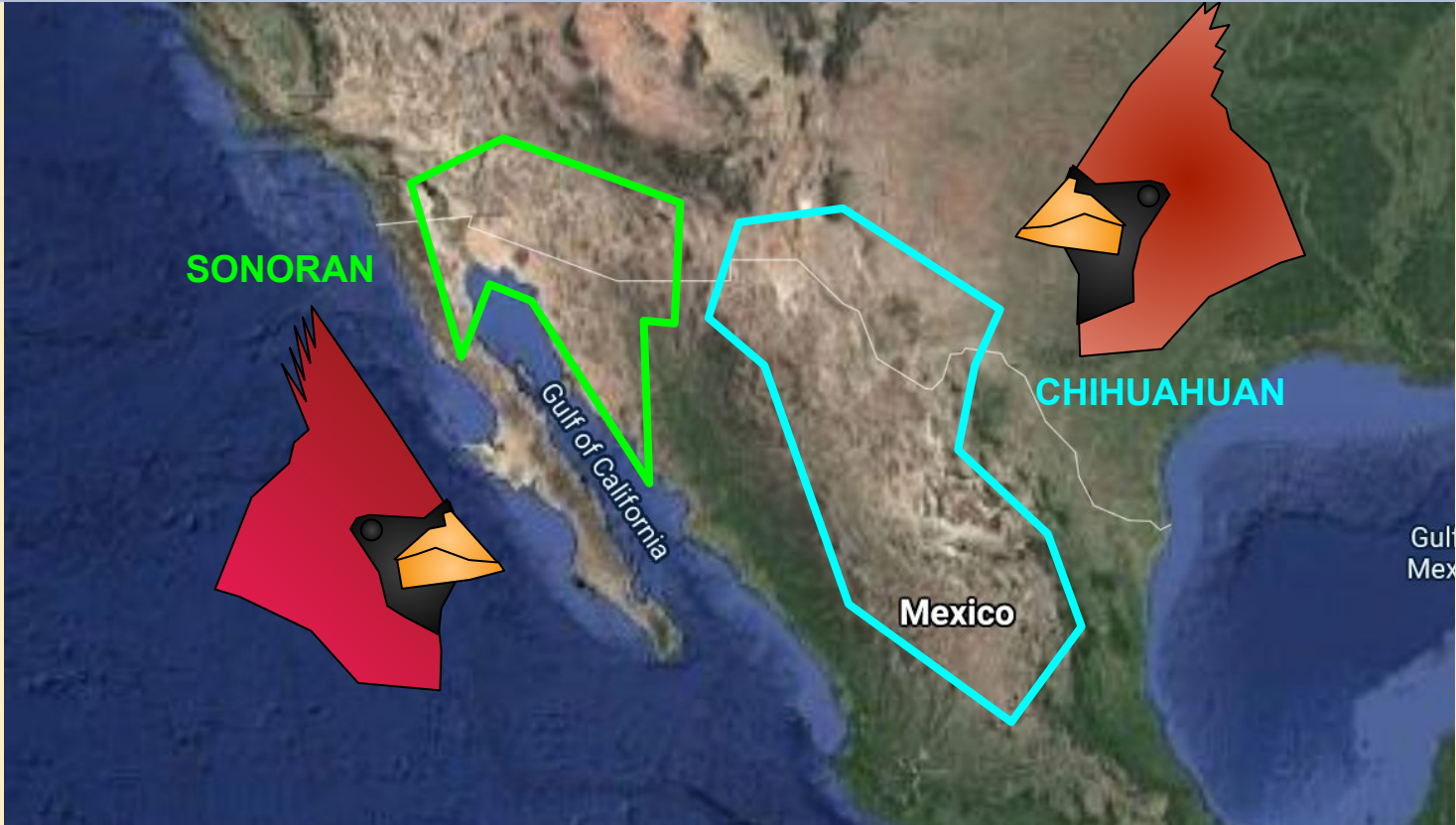
SONORAN

Gulf of California

CHIHUAHUAN

Mexico

Gulf Mex



SONORAN

Gulf of California

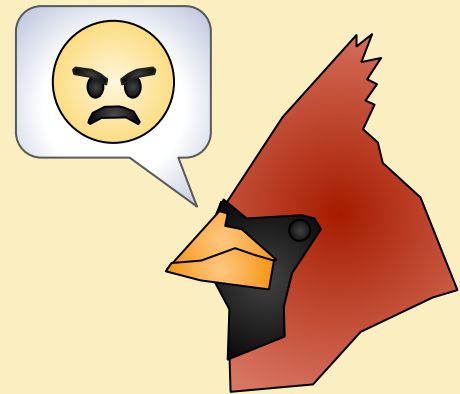
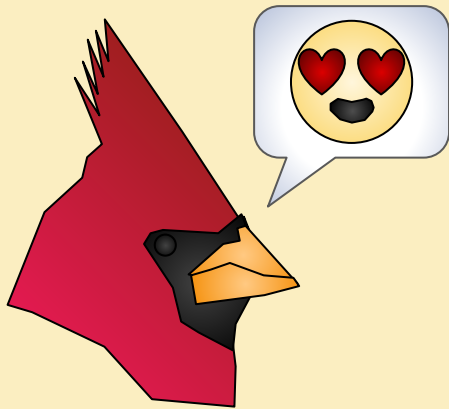
CHIUAHUAN

Mexico

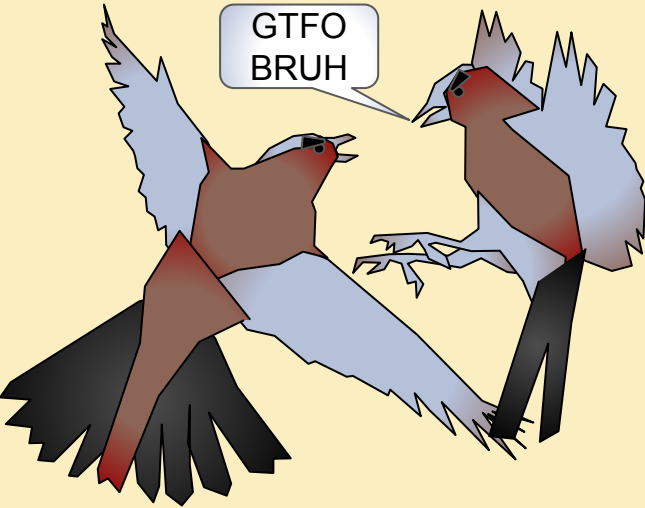
Gulf
Mex



Shotgun Microphone

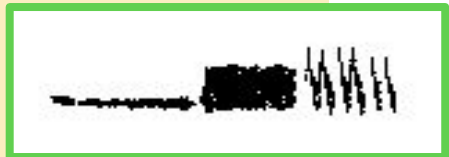
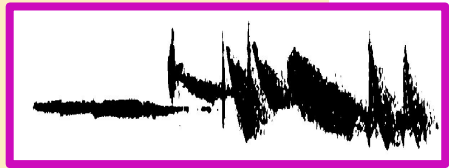
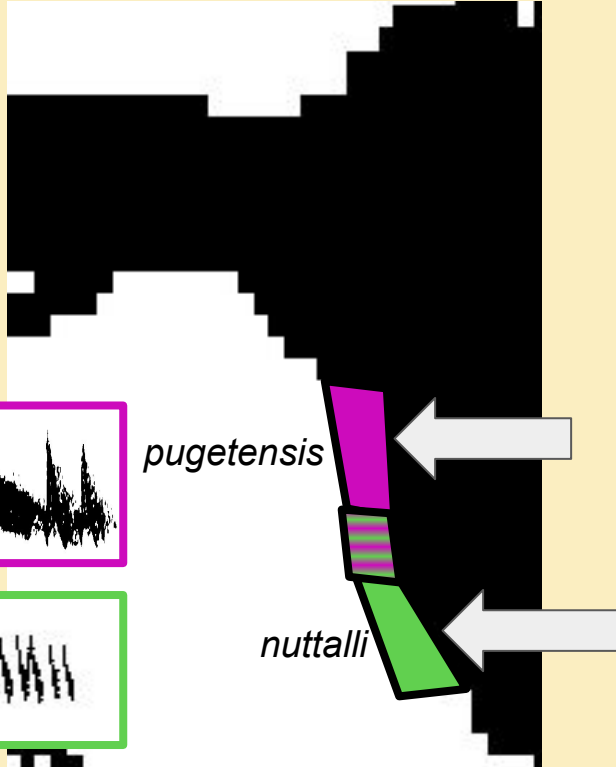
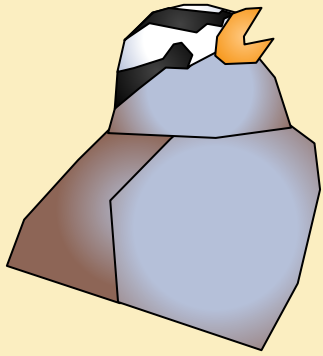


Same Desert



Different Desert



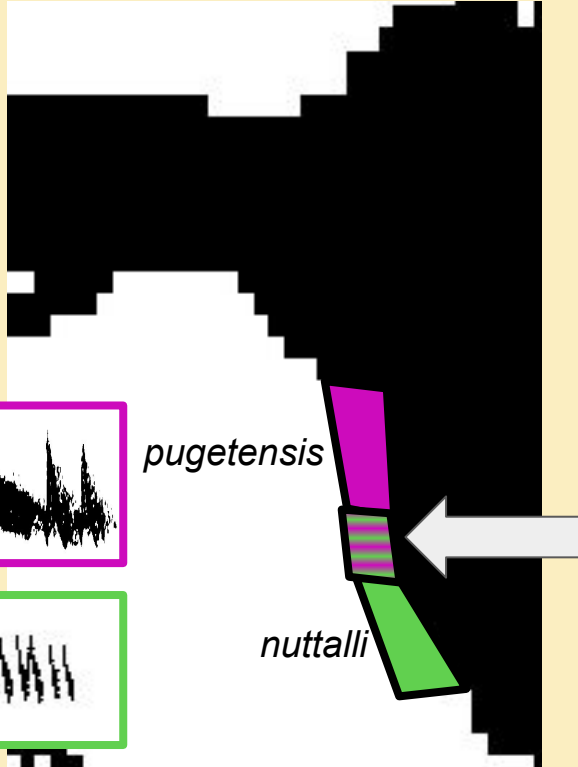
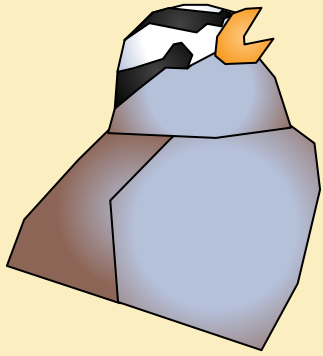


Same

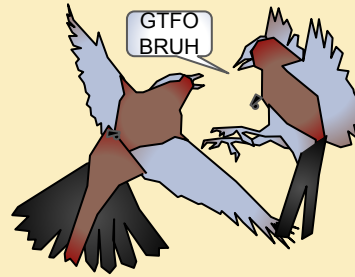


Different





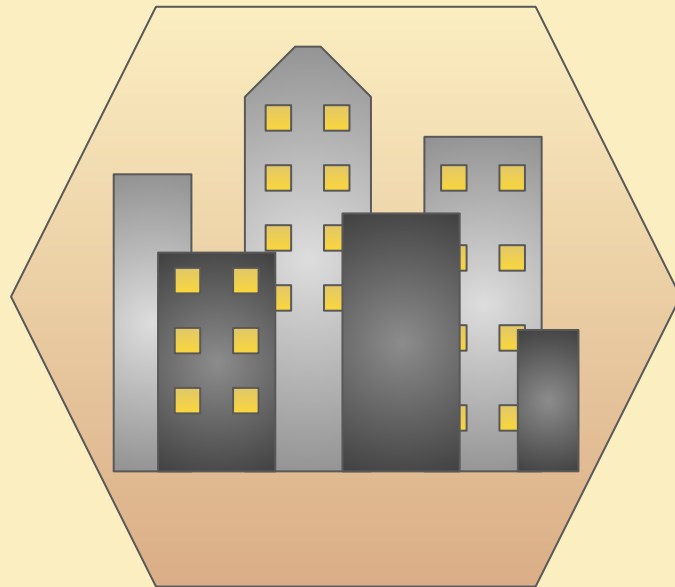
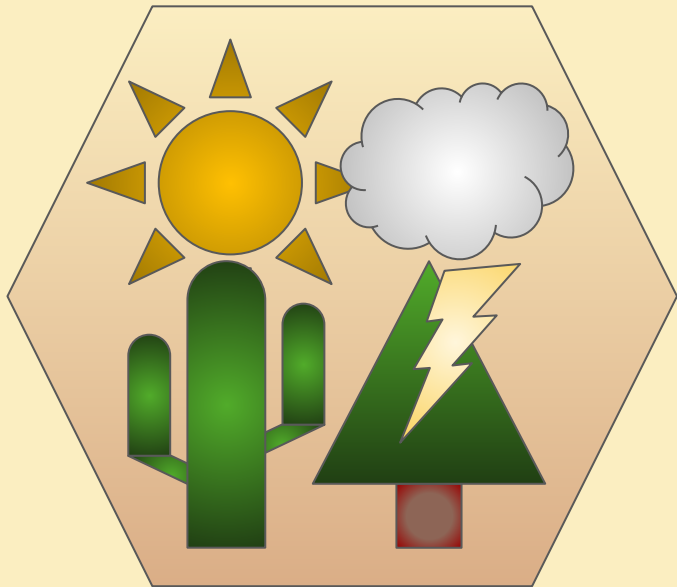
Same



Different



What makes songs change
besides dialects?











Birds change how they sing
based on the environment

Birds are struggling



BUT WE CAN HELP!

7 SIMPLE ACTIONS TO HELP BIRDS



Do Citizen Science



Make Windows Safer



Keep Cats Indoors



Reduce Plastic Use



Use Native Plants



Drink Shade-Grown Coffee



Avoid Pesticides





Record and upload bird recordings while you bird!
Preserve our soundscapes!





Thanks!

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