



BIRDING BASICS

Southern California Horticultural Society

May 14, 2020

Sandy Masuo, Bird Nerd

Photo by Michael Elliott

OVERVIEW

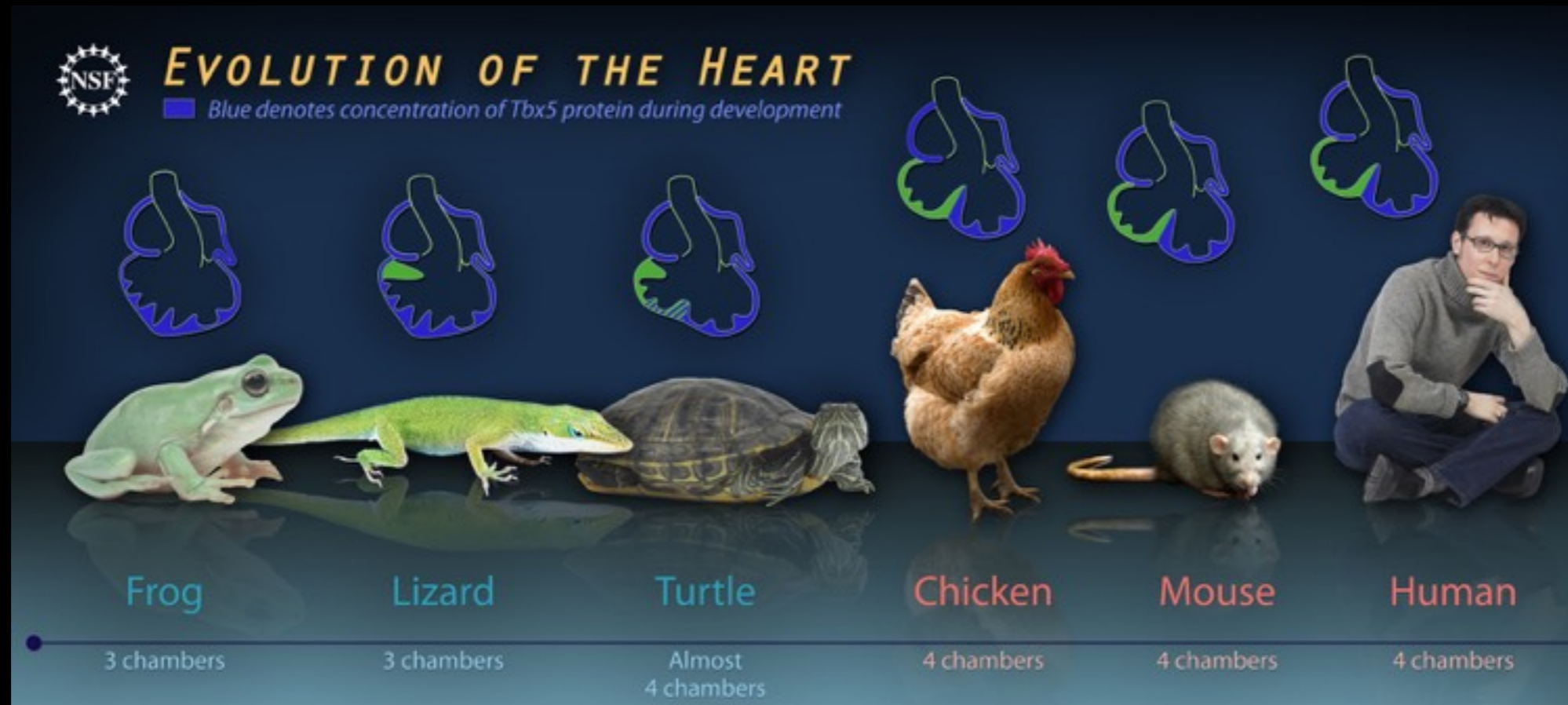
1. A Bit About Birds
2. Why Birding Matters
3. Helping Wild Birds/Bird-ifying Your Home
4. Birding Opportunities

A BIT ABOUT BIRDS:

Birds are a group of endothermic (warm-blooded) vertebrates (animals with backbones), characterized by the ability to fly.



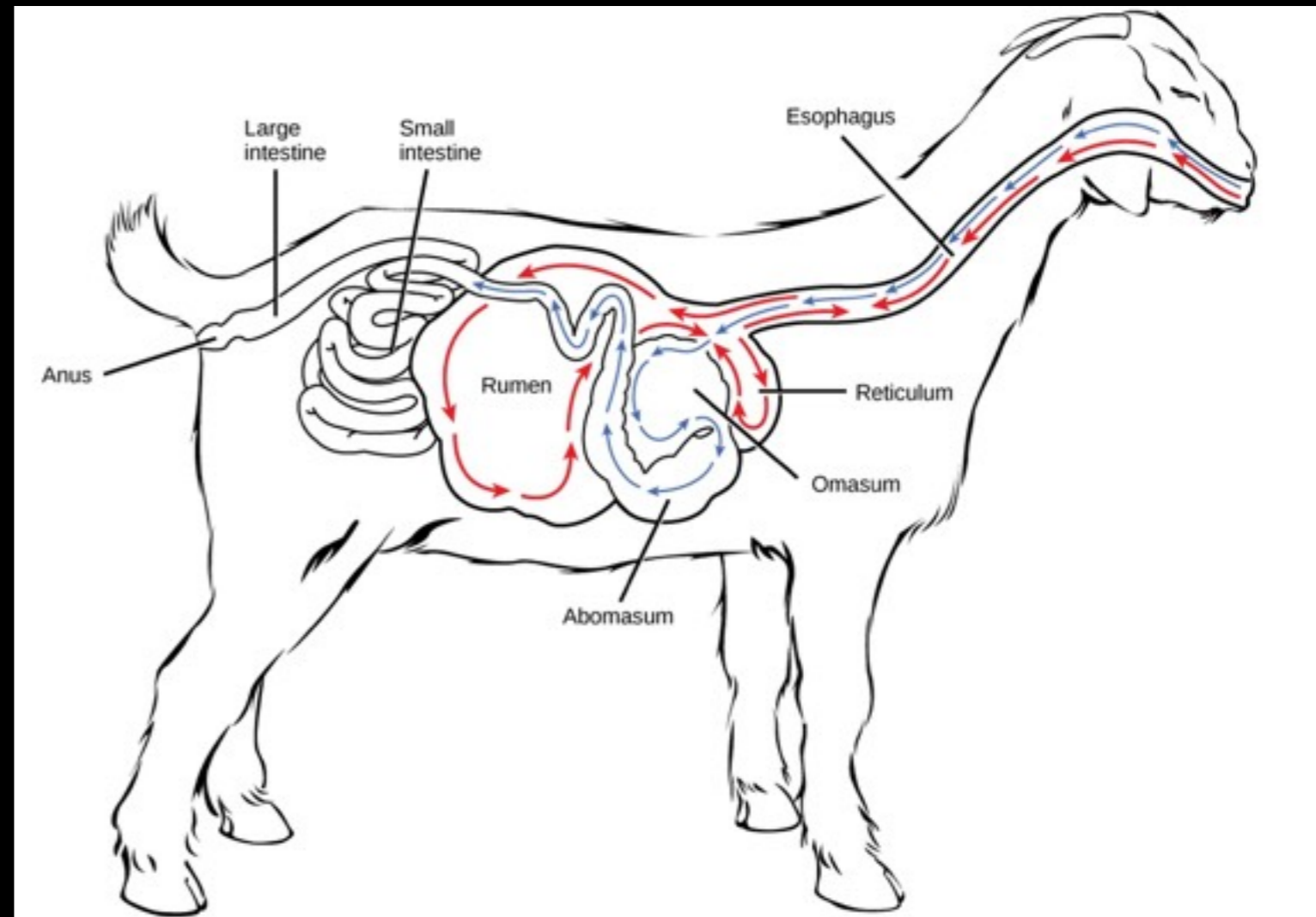
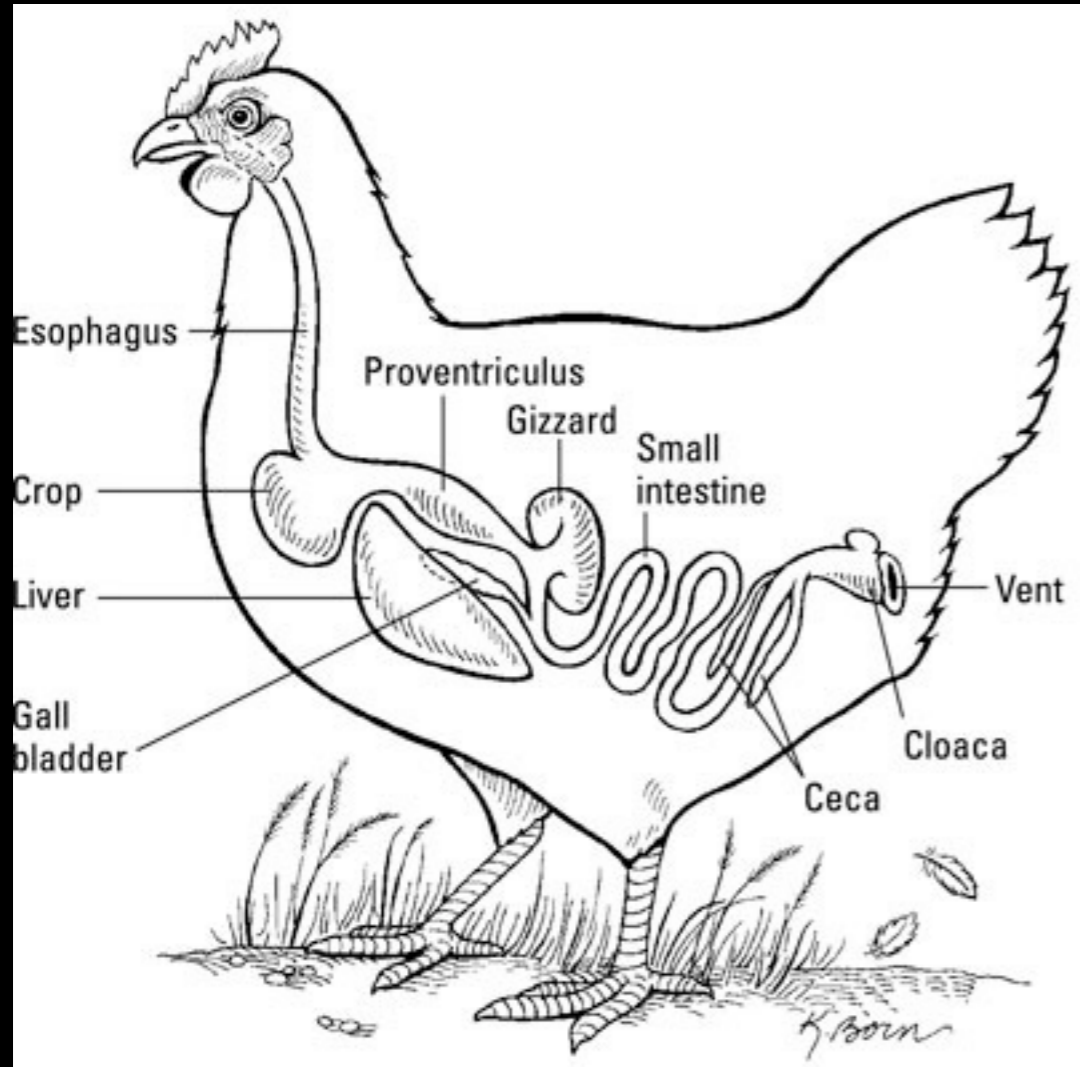
FLIGHT ADAPTATIONS: High Metabolism



A 747 jetliner burns 5 gallons fuel per mile.

Hummingbirds consume less than 10 calories daily, but this is the human equivalent of 155,000 calories per day.

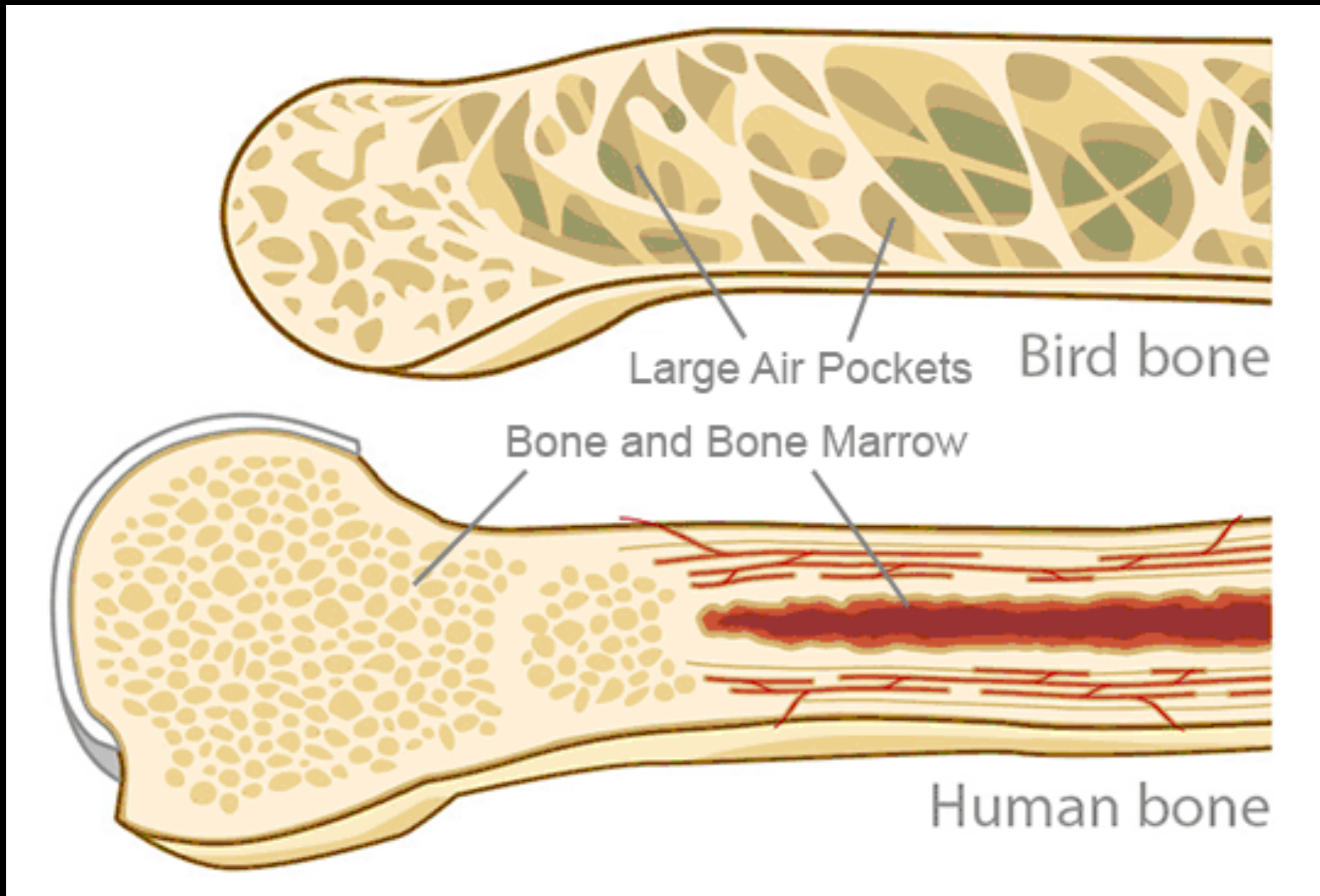
FLIGHT ADAPTATIONS: Simple Digestive Tract



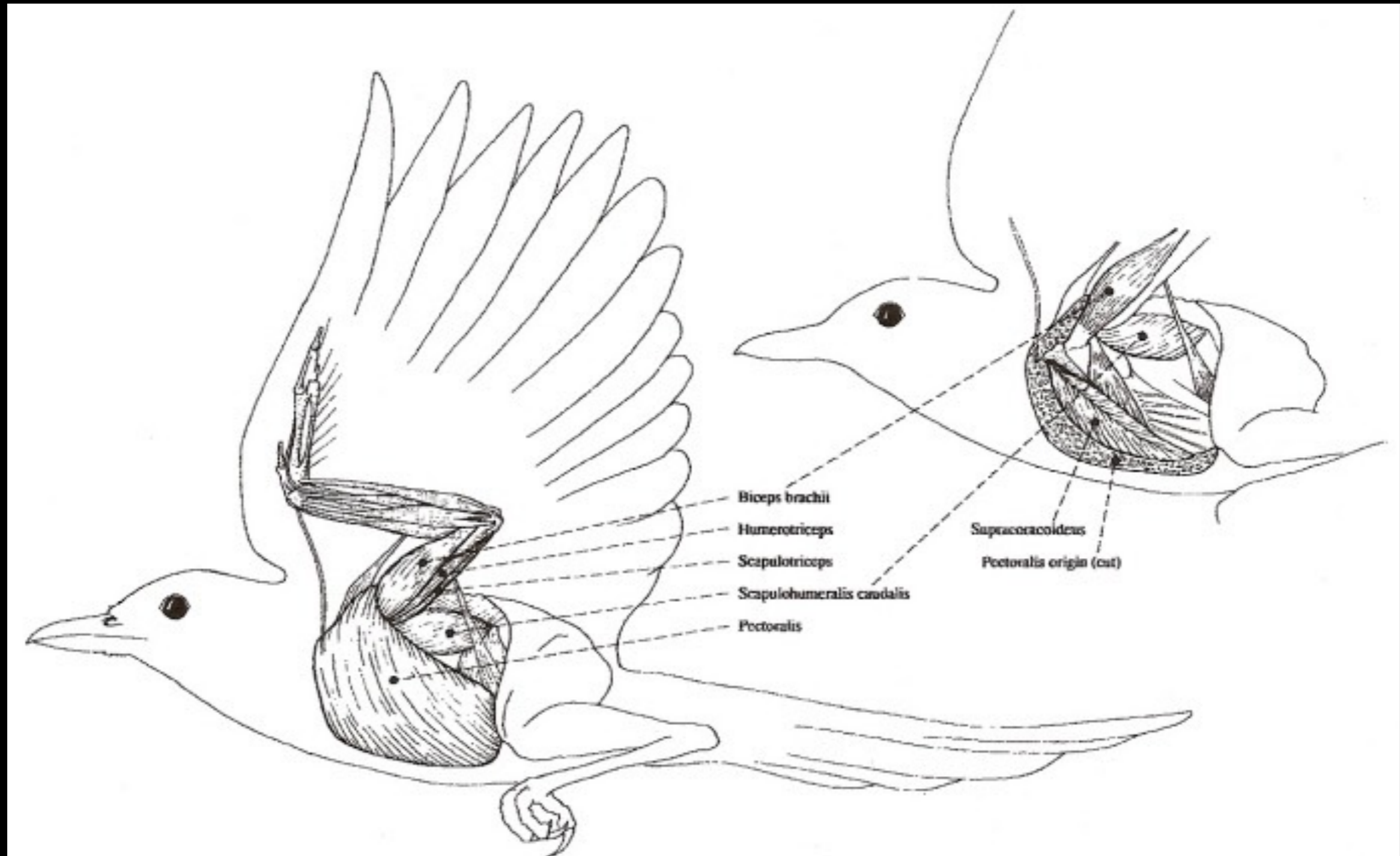
FLIGHT ADAPTATIONS:
Lay Hard-Shelled Eggs
Incubation Lasts 11 to 67 Days



FLIGHT ADAPTATIONS: Light Weight Skeleton



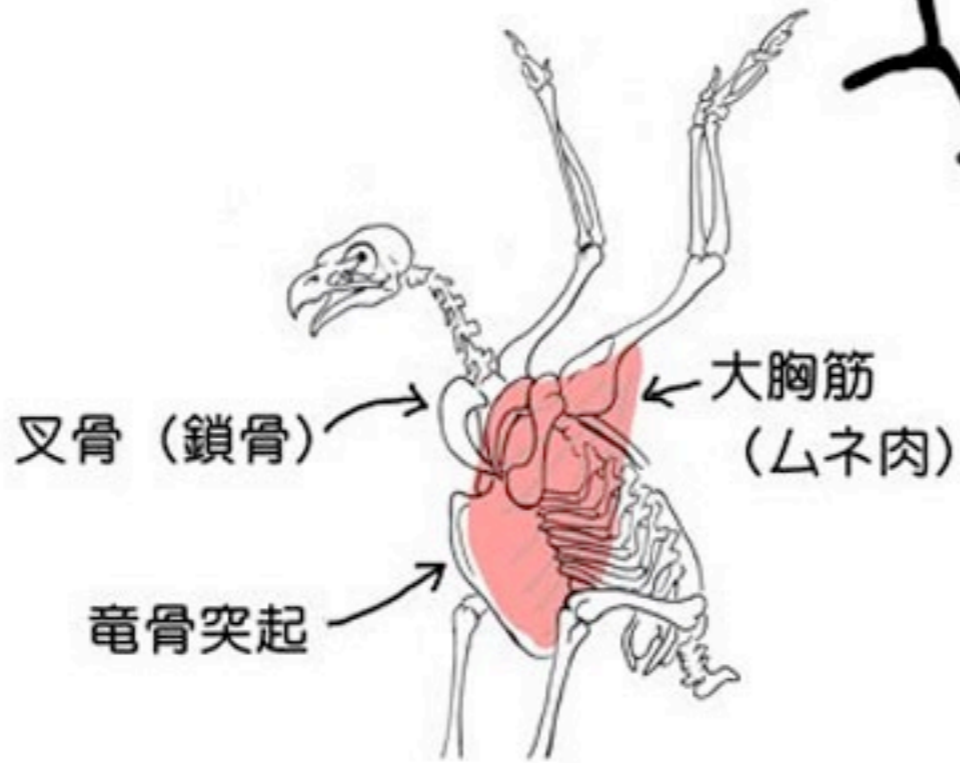
FLIGHT ADAPTATIONS: Powerful Muscles/High Endurance







人間の骨



叉骨 (鎖骨)

大胸筋 (ムネ肉)

腕骨突起

イヌワシの骨



真・ハト胸

FLIGHT ADAPTATIONS: Feathers?





Flight feather



Down feather



Bird Species: 11,000 (18,000–20,000)

Mammal Species: approximately 5,500

Roughly two (or four) bird species for every mammal species.



Human population: roughly **5 billion**

Estimated bird population: **200–400 billion** individuals

40–60 birds per person

There are **19 billion chickens** on the planet according to the United Nations. The nation with the highest chicken to human ratio is Bahrain. The gulf nation apparently has **40 chickens** for every person,!



SOCIAL HABITS: Gregarious



cedar waxwings



acorn woodpeckers



bushtits



yellow-chevrons parakeets



Oregon juncos

SOCIAL HABITS: Solitary



Northern mockingbird



egret



hummingbird



red-tailed hawk



American robin



common raven



Nuttall's woodpecker (female)



black phoebe

SOCIAL HABITS: can be variable!



common ravens



hummingbirds



Nuttall's woodpeckers



American robins

SOCIAL HABITS: Territoriality



Male hummingbirds battle over territory. Photo by Tad Motoyama

Huitzilopochtli

(weetz-ee-loh-POSHT-lee)

"Hummingbird on the Left"

Aztec god of the sun, warfare, military

conquest, and human sacrifice



Codex Borbonicus



Grackle Battle
Photos by Wei Zhang



Red-Wing Blackbird Battle
Photos by Matthew Hamre





WHY BIRDING MATTERS

English 中文 (Chinese) Deutsch (German) Español (Spanish) Français (French) Bahasa Indonesia (Indonesian) Italiano (Italian) 日本語 (Japanese) Português (Portuguese)



RAINFORESTS OCEANS ANIMALS & ENVIRONMENT FOR KIDS PHOTOGRAPHY WILDTECH MORE

Scientists combine crowd-sourced field observations with land-use and climate models to identify steps for migratory bird protection

by Sue Palminteri on 18 August 2017



- Scientists used crowd-sourced data from the eBird platform to model how the distribution of 21 migratory bird species changes throughout the year and to determine how these distributions overlap with protected areas and projected changes in climate and land-use.

k.streamrail.com... y found that the conversion of natural forest to agricultural and/or urban land uses will

Most Read

- A rich person's profession? Young conservationists struggle to make it

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YaleEnvironment360

Published at the Yale School of Forestry & Environmental Studies

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LUCA RUSSA / WILD EARTH

Species Sleuths: Amateur Naturalists Spark a New Wave of Discovery

Scientists have not kept pace with the work of discovering new species. Now, a growing number of committed hobbyists - ranging from a Belgian bus driver to a California cybersecurity expert - are out in the field, igniting a boom in documenting the world's biodiversity.

BY JESSICA LEBES - MARCH 12, 2019

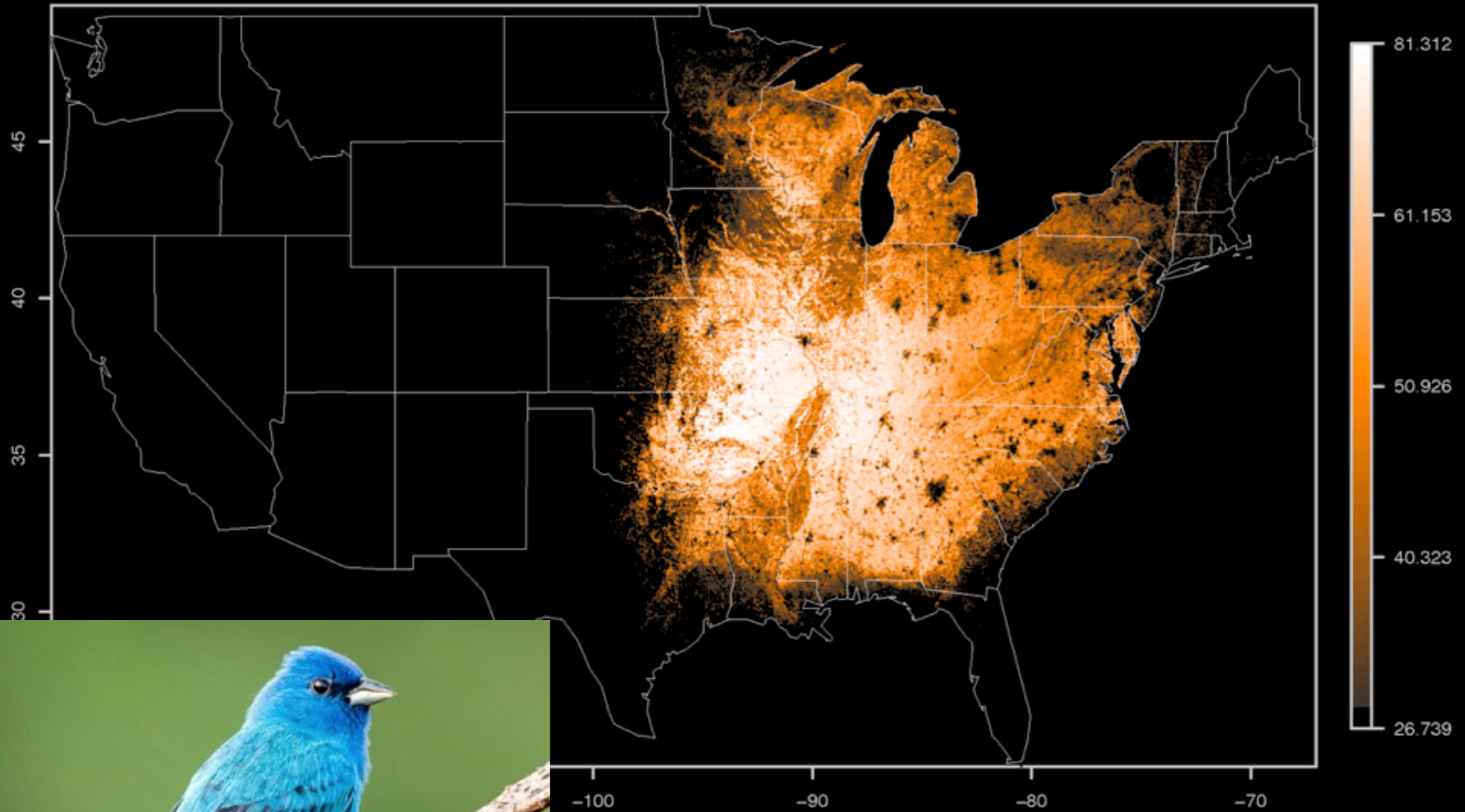


When mushroom hunter Terri Clements found a unique specimen near her home in Arizona, she couldn't be certain by its appearance that she'd stumbled across a new species. She tracked down a commercial lab that would process DNA from samples she collected and studied the resulting sequences. Only later did she could email a mycological scientist, who

Chimney_Swift : June 7



Indigo_Bunting : June 7



Cornell Lab of Ornithology (c) 2012

HOW TO HELP WILD BIRDS: Offer Appropriate Food Sources



Mississippi Americas Flyway



Atlantic Americas Flyway

Pacific Americas Flyway

U.S. Fish & Wildlife Service

Pacific Flyway



HOW TO HELP WILD BIRDS:

Varied habitat with shelter, food sources, water source, and nesting materials

YES!



NO!



YES!



Toyon

Valencia Orange

Dana Point Buckwheat

Howard McMinn Manzanita

Calif Buckwheat

unflappy encelia

baby toyon

blue eyed grass and other wildflower

white sage

pointy dudleya

pointy dudleya

Canyon copperleaf

San Nicolas prostrate chamise

bird magnet

annual lupine

conejo buckwheat



YES!



Excellent Bird Plants (in My Experience)

Big, Structural Plants:

Sycamore

Oak

Pine

Small Trees/Shrubs:

Toyon

Mexican Elderberry

Catalina Cherry

Mahonia

Hummingbird Plants:

Aloe

Gasteria

Bulbine

Hesperaloe

Salvia

Bladderpod

Zauschneria

Seed Eaters:

Rudbeckia

Helianthus

Eriogonum

Grasses

Bird Baths





July 6, 2018... 112° in Burbank



Invasive species—mosquitoes in the genus *Aedes*... completes life cycle in about a week, so change the water often!

HOW TO HELP WILD BIRDS: Prevent Predation by Pets





HOW TO HELP WILD BIRDS

Prevent Bird-Window Strikes



HOW TO HELP WILD BIRDS: Reduce Nighttime Light Sources



February 15 through May 30 for spring migration.
August 15 through November 30 for fall migration.



Light Pollution



 Follow ...

travislongcore.net/research/light-pollution/

HOW TO HELP WILD BIRDS: Minimize Pesticide/Herbicide Use



- Native plants tolerate more native insects and support more butterfly/moth larvae (caterpillars), an important food source for birds raising babies.
 - The majority of birds rely on insects for at least part of their diets. A single pair of breeding chickadees must find 6,000 to 9,000 *caterpillars* to rear one clutch of young, according to Doug Tallamy, a professor of entomology and wildlife ecology at the University of Delaware. Even though seeds are a nutritious winter staple, insects are best for feeding growing fledglings.
 - Ninety percent of the insects that eat plants can only eat specific plants; if those plants are absent from our landscapes, so will be the bird food they produce.

California towhee with food delivery!
Photo by Matt Carey

HOW TO HELP WILD BIRDS: Reduce Single-Use Plastics

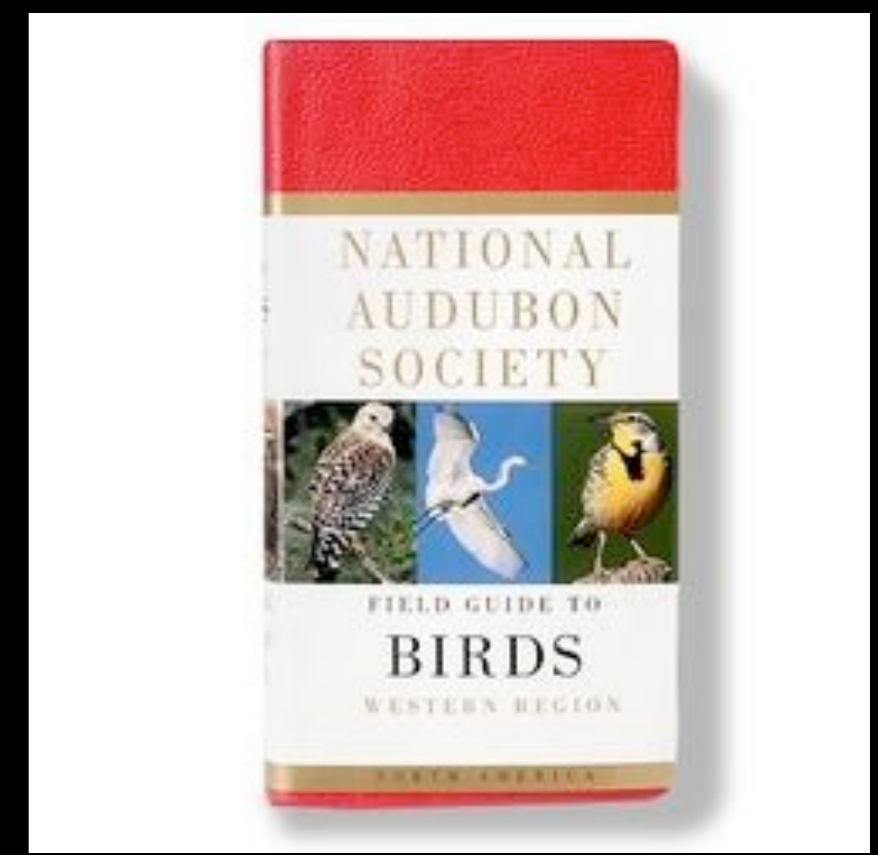
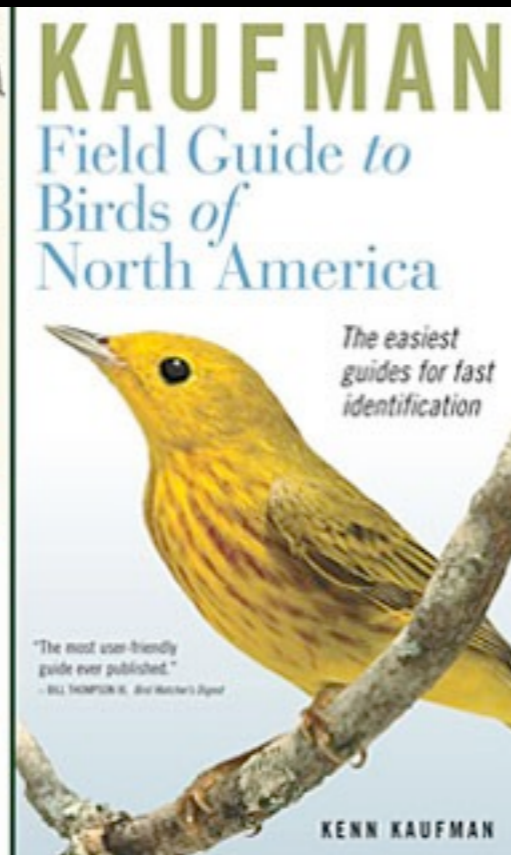
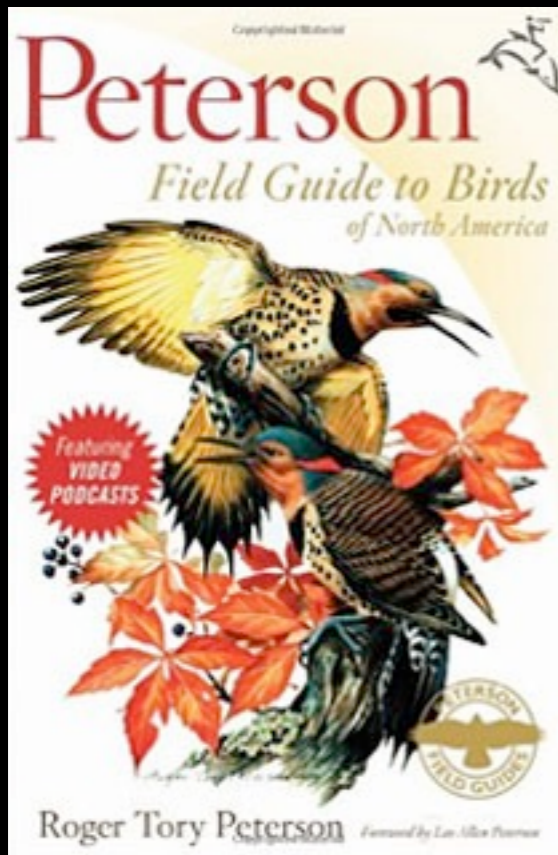


Radiograph of California condor showing ingested microtrash. Los Angeles Zoo



Photograph by John Cancalosi, National Geographic

BIRDING GEAR: Bird Guides



BIRDING GEAR: Apps



Merlin

Download the Free Merlin Bird ID App

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What's Merlin? Watch now!

Merlin Bird ID—Free app from the Cornell Lab

Merlin Bird ID

From the Cornell Lab of Ornithology

<http://bit.ly/MerlinApp>

Bird ID Wizard—Step-by-step

Answer five simple questions about a bird you are trying to identify and Merlin will come up with a list of possible matches. Merlin offers quick identification help for all levels of bird watchers to learn about North America and Europe's common and rare birds!

Or Use a Photo

Snap a photo of a bird, or pull one in from your camera roll, and Merlin Photo ID will offer a short list of possible matches. Photo ID works completely offline, so you can even identify birds in the photos you take when you are far from cell service.

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Greg Leley - Snowy Egret from Anahuac NWA, Texas, USA

How It Works

Record your observations

Share with fellow naturalists

Discuss your findings

BIRDING GEAR: Field Glasses



BIRDING OPPORTUNITIES: Everywhere!



Common ravens nesting at Macy's in Glendale!



Bewick's wren roosting in a *Hoya carnosia* (Indian rope plant).

LOS ANGELES AUDUBON

The mission of Los Angeles Audubon is to promote the enjoyment and protection of birds and other wildlife through recreation, education, conservation and restoration. (323) 876-8282

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1ST SATURDAY—Open Wetlands Bird Walk at Ballona Salt Marsh

Published: 04 January 2016



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EVENTS Saturday, July 6, 8:00AM - 10:00AM

Family Bird Walk
Located in Entrance

ABOUT THE EVENT

Cost
Admission and Audubon members free / non-members \$2 / children 12 and under admitted for free.


More Event Dates

9-10:00 / Entrance
Early Morn. Outside from Pasadena Audubon Society
Admission and Audubon members free / non-members \$2 / children 12 and under admitted for free.

To Register please call the Education Department at 626.822.4832 or pay at the door

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The Museum's Ornithology Collections Manager, Kimball Garrett, in the Ballona freshwater marsh.

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Ornithology

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Ornithology Resources

On this page you will find further information about birds inside and outside the Museum. Revisit us often as we continue to add material about ornithology, local birds, and resources from our collections.

Birds of the Exposition Park area, Los Angeles

The Natural History Museum of Los Angeles County has made Exposition Park its home since 1911. The Museum has changed over the decades, and so has the surrounding landscape. Originally an alluvial plain with nearly seasonal river channels, this part of Los Angeles later became agricultural, then saw low density urban and industrial development. In recent decades Exposition Park has been surrounded by miles of residential and commercial areas with quiet tree-lined streets and busy boulevards. The open spaces in the park and the park-like settings of portions of the adjacent campus of the University of Southern California have proven attractive to birds. Ornithology Collections Manager Kimball Garrett and others have kept track of bird sightings in the Exposition Park area since the early 1980s, and publications, collections, and field notes of various observers provide us

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6th Annual BIRD DAY

Coming May 2019



Gottlieb Native Garden
thegottliebnativegarden.com

THANK YOU!
Happy Birding...



Black phoebe in action.