

What's Different About That Bird??

By: Rick Schmid

October 24, 2017

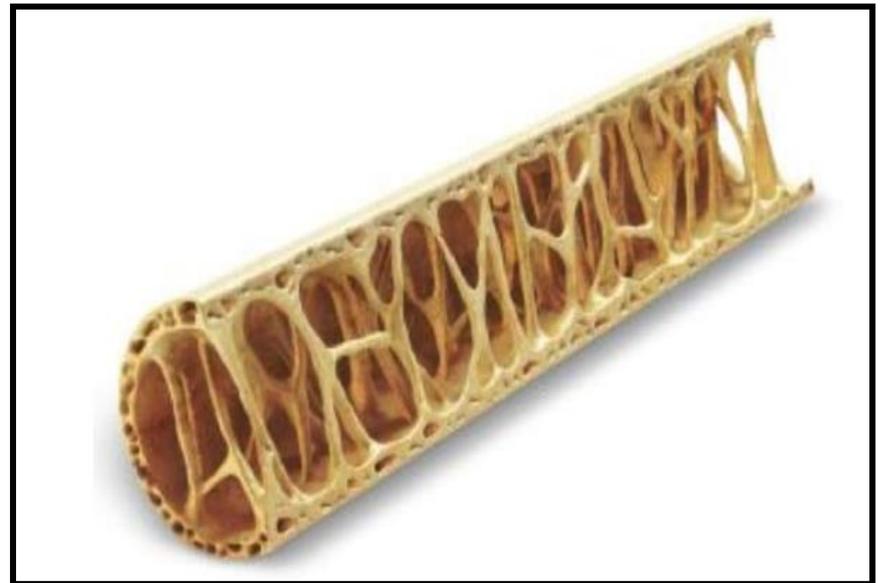
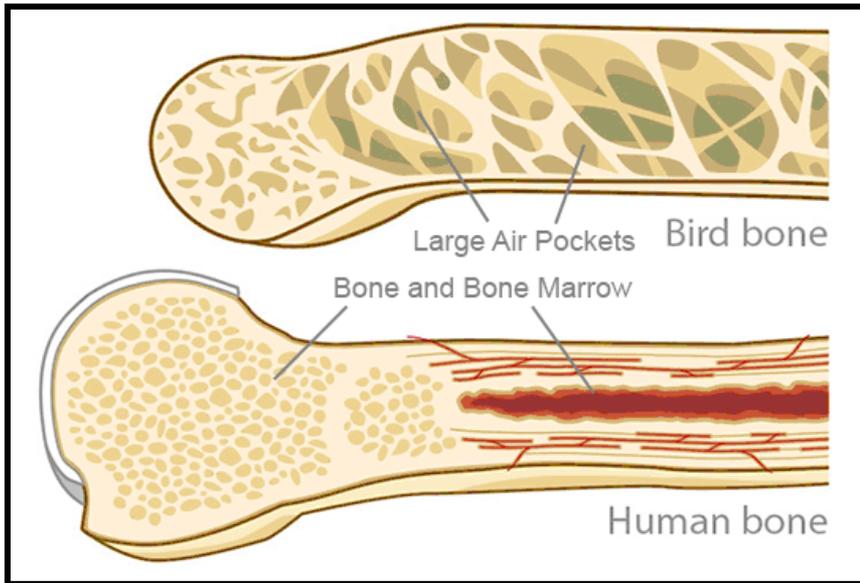
The Plan

- Tue Oct 24 Presentation
 - Bird basics (40 min)
 - Geeky activity + break (20-30 min)
 - Human impact on birds (30 min)
- Sat Oct 28 Field Work at Hitchcock Nature Center (9:00am-12:00pm)
 - Bird banding
 - Guided bird hike with binocular
 - Lunch

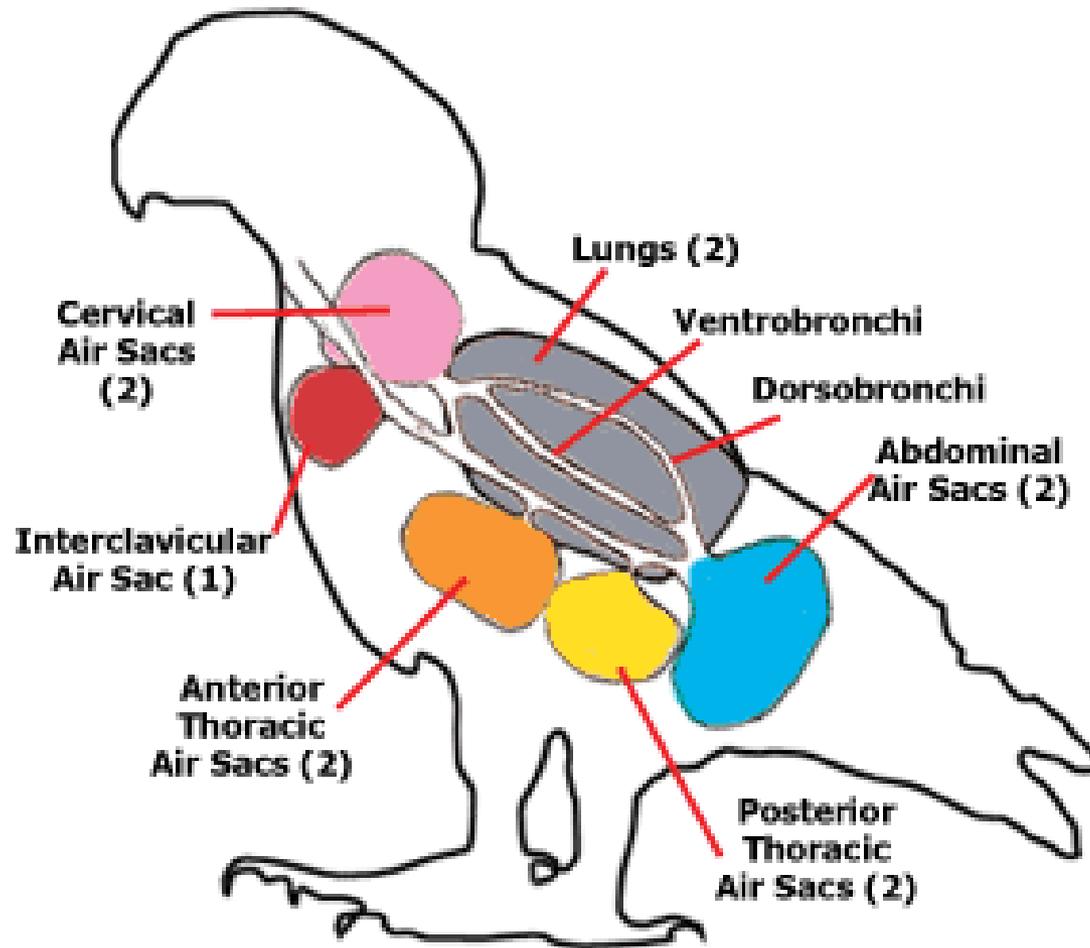
What three characteristics
make an animal a bird?

please participate...

Hollow Bones



Respiration



What's the same? What's different?

shape



color

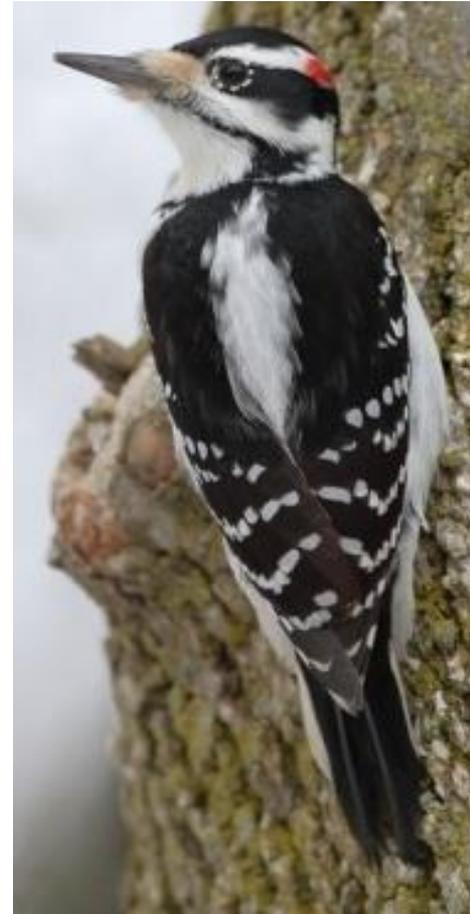


What's the same? What's different?

color



length of bill



Now what's different?



Shorebirds are difficult



This is very tricky!

Alder Flycatcher



Willow Flycatcher



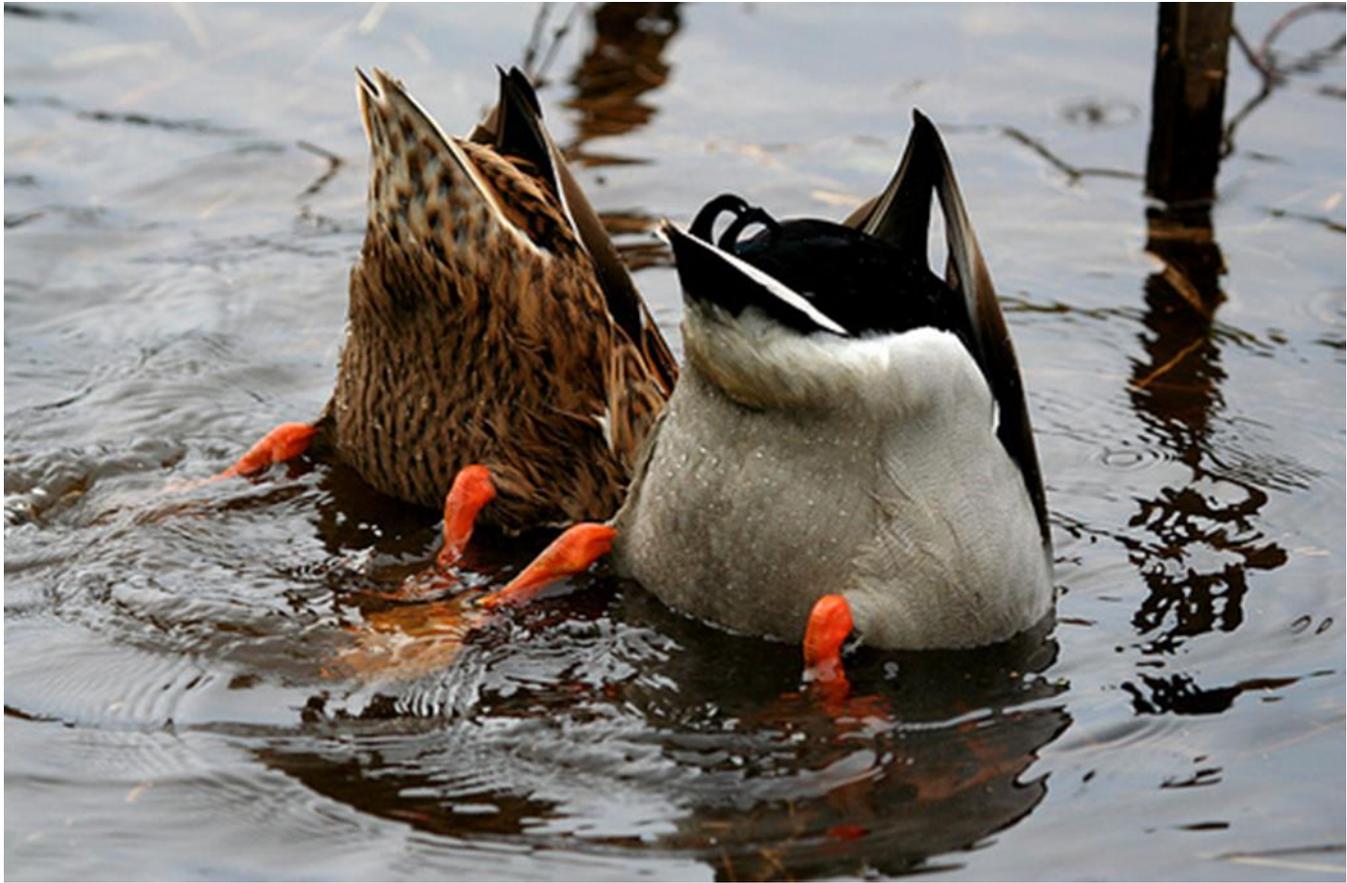


American Kestrel

(photo by Mark Hancox)



MARK HANCOX



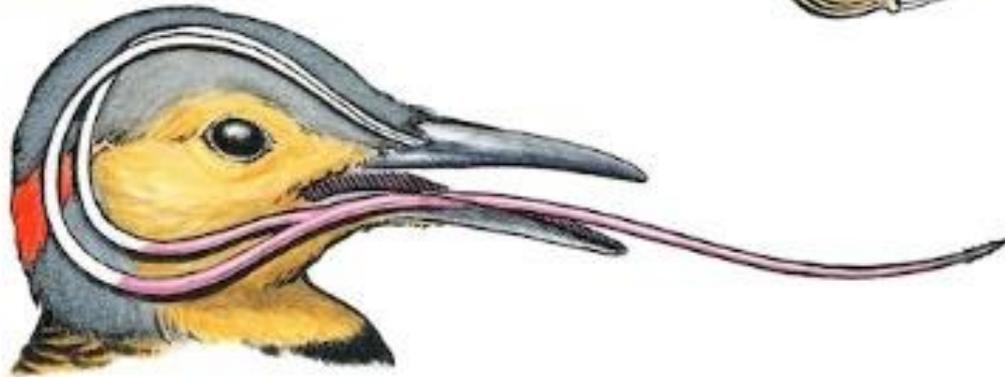
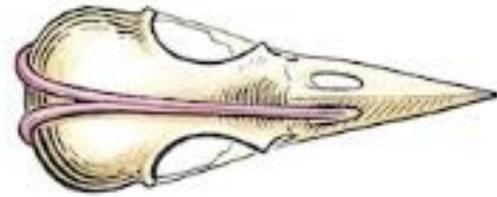


Why do animals migrate?

- Habitat
 - Food
 - Water
 - Shelter
 - Air/Space

Habitat







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Molt

- Periodic replacement of feathers – Highly Variable!
 - Adventitious as needed (damage, loss)
 - Prebasic molt (full replacement – except in the hatch year)
 - Prealternate molt (prior to breeding)

Prebasic Molt



Prealternate Molt



Determining Age by Molt Limits



Activity: Design a Bird

- Color
- Shape
- Body Part Size/Proportions
- Song
- Physical Adaptations
- Behavioral Adaptations
- Habitat
- Molt

Human Impact

Positive or Negative?

Bird Feeding



Conjunctivitis...



Bird Feeding Tips

- Put out only as much seed as they will eat in 1-3 days
- Keep feeders clean and dry
- Throw away old food
- Clean feeders after every rain (and in high humidity)
- Replace feeders when they get old

Brown-headed Cowbird

male

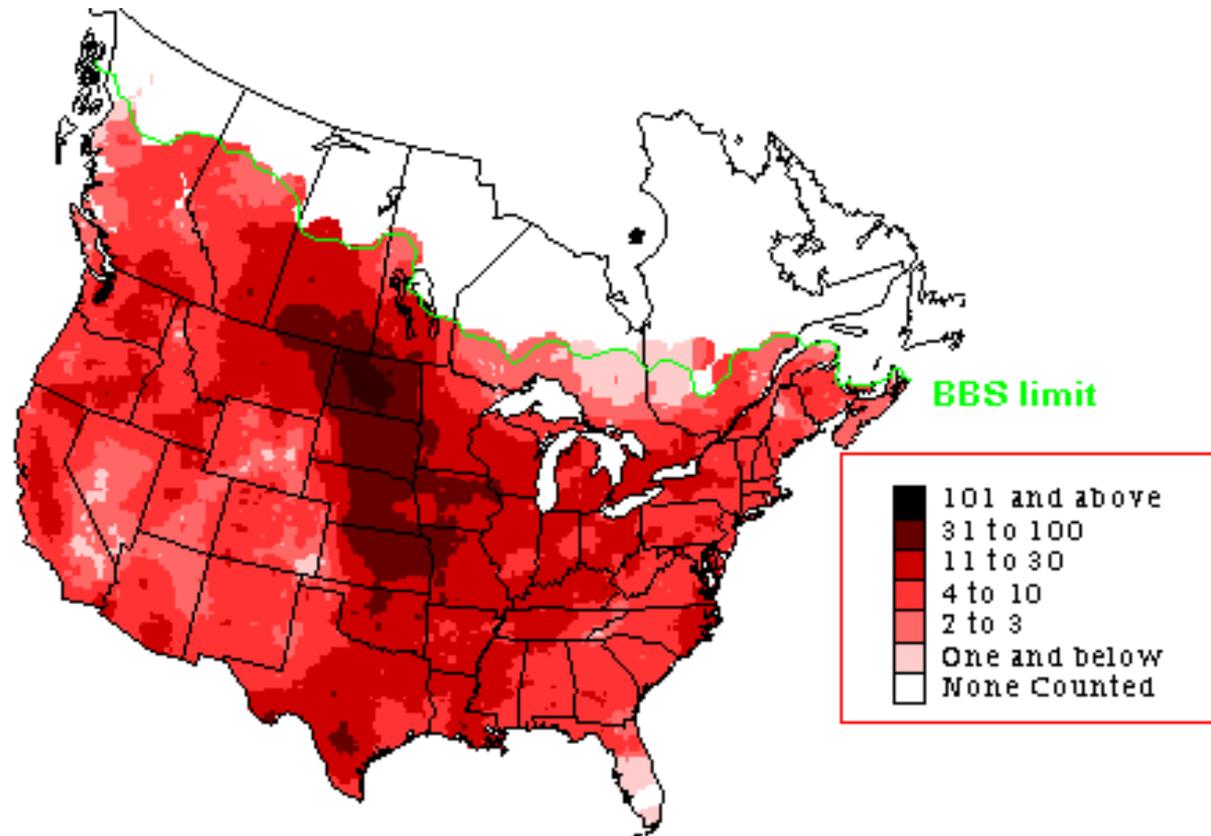


female



Range

(note original range in darkest areas)



Nest Parasitism



Effect...



Impact...



Bald Eagles



History

1800: population = ~100,000

1850-1940: population decline due to hunting

1940: Federally protected from hunting

1950: DDT became popular for pest control

1963: population = < 1,000

1972: DDT outlawed by EPA

Today...



Bald Eagles

- Population = 20,000+
- June 28, 2007 – no longer listed as threatened or endangered
- 100+ active nests in Nebraska

Hunting...good or bad?



There are five different populations of Snow Geese:

- Atlantic flyway
- Mid-continent
- 3 in the west

The mid-continent population is the largest. They migrate through Nebraska in the spring and fall.

Snow Goose explosion



Why the population growth?

- Waste grain on farm lands (more food)
- Restricted hunting laws in the 1970s & 1980s (reduced predation)
- Conservation land management for waterfowl (more winter/migration habitat)
- The mid-continent population (~3.5M in 2017) is twice as large as its breeding habitat will support.







Bird Banding



Bird Banding

- Capture of live birds
- Recording of data
- Placement of aluminum band
- Release of bird
- Bird must be recaptured to obtain more data

Positive or Negative?

How can I help?



How can I help?

- Birding and bird watching
 - Feed the birds (but do it responsibly)
 - Join a group (Fontenelle Forest Bird Club, Audubon Society of Omaha)
- Record what you see
 - eBird: ebird.org
 - NEBirds: birding.aba.org

How can I help?

- Participate in a count
 - Audubon's Omaha Christmas Bird Count (Sat Dec 16, 2017 – schmid_r@msn.com)
 - Project Feederwatch: <https://feederwatch.org>
- Volunteer
 - Nebraska Wildlife Rehab, Inc.: nebraskawildliferehab.org
 - Fontenelle Forest Raptor Recovery: fontenelleforest.org

How can I help?

- Pursue a career in environmental studies – follow your heart...