The Life of Birds – Disc 1 – “To Fly or Not to Fly”

1. How many millions of years ago (MYA) did bats fly? Reptiles? Dragonflies?

2. What are 3 features of Archeaopteryx that are still reptile-like?

3. What are 2 hypotheses for how birds may have evolved flight?

4. A modern bird that has well developed claws especially as chicks.

5. How wide is the wing span of the largest flying bird ever?

6. After the demise of dinosaurs, what 2 warm-blooded groups were in competition for the dominance of land?

7. What digestive structure does the grinding work of teeth for birds?

8. What is the main advantage of flight for birds?

9. Why do many birds become flightless?
The Life of Birds – Disc 1 – “The Mastery of Flight”

1. What are 3 ways different species of birds use to become airborne?

2. What is one method of flying that many large birds use that is almost effortless?

3. Three ways birds may dislodge parasites and maintain their feathers?

4. How fast can a peregrine falcon fly while in a dive?

5. What is the only group of birds that can truly hover? How fast must they beat their wings?

6. Three methods birds use to cover longs distances during migration.

7. Why do large birds (raptors and vultures) form dense flocks over Central America?

8. What important function do hummingbirds serve in the high Andes Mountains and why?
The Life of Birds – “The Insatiable Appetite”

1. Why can’t birds store large quantities of food? How does this restrict what most birds can eat?

2. How are crossbills able to eat noxious and resinous pine seeds?

3. What is one limiting factor that causes many birds of temperate climates to migrate to warmer climates during the winter? How do the many birds that over-winter in temperate climates make it through winter?

4. Why do geese defecate such an enormous amount?

5. The only true ruminant-like bird that can digest plant material is the _____________.

6. How are birds and trees co-dependent?

7. List some partnerships some birds have evolved with other animals to get a meal.
The Life of Birds – “Signals and Songs”

1. How does the potoo of South America (similar to our whip-or-will) avoid danger?

2. How do hornbills decorate themselves to distinguish species?

3. Other than song, what are some ways birds establish dominance and territory?

4. How fast can a bird respirate (breathe) while singing?

5. Why do birds sing mostly in the early morning hours?

6. How many courtship songs does the nightingale have?

7. How does the lyre bird of Australia come up with so many courtship songs?
The Life of Birds – “Finding Partners”

1. List some of the ways male birds, or sometimes males and females, carry out courtship.

2. Why do most bird species have long-term pair bonds (monogamy) rather than have many mates in one breeding season (polygamy)?

3. Why are female red phalaropes more brightly colored than males (usually the other way around)?
The Life of Birds – “The demands of the egg”

1. Why do we not see internal incubation of young like we do in other vertebrate groups (fish, amphibians, reptiles, mammals)?

2. List some other types of animals some birds have nest associations with to protect their nests.

3. What do the golden-headed cisticola and sittella of Australia use for nest construction?

4. How old are some nests of the sociable weaverbirds and why are they so large?

5. Why do some birds lay many eggs and some only 1 or 2?

6. How do yellow-rumped thornbills protect against nest predators?

7. How are maleo birds of Sulawesi Island in Indonesia able to abandon eggs after they are laid without incubating them?

8. What is the tradeoff for canvasback and redhead ducks that lay their eggs in other’s nests?

9. What is the most notorious group of brood parasites around the world? List some ways various bird species deal with brood parasites to avoid raising their offspring?
The Life of Birds – “The problems of parenthood”

1. Why does the Lapland bunting in the Arctic work so hard to get its young out of the nest?

2. How often do dippers bring food to their young?

3. How do gouldian finches in Australia locate their young in dark cavities?

4. Unlike most birds, rosella parrot chicks hatch at different times. How do they end up at the same level of maturity after 3 weeks?

5. Why do grebes feed their young feathers?

6. What is the biggest threat to chicks of open-billed storks and how do the parents deal with it?

7. Why do so many chicks of coots and pelicans die because of their parents? Why don’t they have fewer chicks?

8. Why would a female goldeneye take over the broods of other females and watch over them?

9. Why are stilts in Australia able to leave their young after a short time to fend for themselves?
The Life of Birds – “Meat Eaters”

1. Why is eating meat (carnivory) a great way for a bird (or any animal) to make a living?

2. What are some advanced visual cues meat-eating birds use to detect prey?

3. How do vultures sense/find a meal?

4. What demographic group of marine iguanas do Galapagos hawks hunt and when is it advantageous to hunt them?

5. What adaptations do African harrier hawks have that allow them to hunt prey in burrows and cavities?

6. How do lamagiers (or Himalayan eagle) access their food source?