**Practice Question:** A cattle egret chick (*Bubulcus ibis*) undergoing rehabilitation and being fed exclusively capelin is found to have multiple rib fractures on survey radiographs. The chick has been on an extended course of meloxicam for pododermatitis. What is the most likely cause of the rib fractures?

1. Dietary Vitamin D deficiency
2. Inadequate Ca:P ratio
3. Trauma prior to admit
4. Renal secondary hyperparathyroidism
5. Insufficient exposure to sunlight

Answer: C

**Practice Question:** A colleague in South Africa asks for your recommendation on a vaccination protocol for a naïve southern ground-hornbill (*Bucorvus leadbeateri)* against Newcastle Disease. What do you recommend?

Answer: *A live vaccine given OD/OS followed by a killed vaccine SC three weeks later followed by annual killed booster vaccines IM booster.*

**ARTICLE**: Bahnson, Charlie S., et al. "Experimental infections and serology indicate that American white ibis (Eudociumus albus) are competent reservoirs for type A influenza virus." *Journal of Wildlife Diseases* 56.3 (2020): 530-537.

Q: Which of the following is true regarding avian influenza type A in White Ibis (*Eudociumus albus*)?

1. White Ibis are more susceptible to H3N8 than H11N9
2. Seropositivity is higher in summer than in spring
3. Exposure to multiple AI subtypes is common in White Ibis
4. Seroconversion is expected to take several months after infection
5. Oropharyngeal shedding will likely last longer than cloacal shedding

Answer: C - high proportion of wild White Ibis are seropositive for 2+ subtypes (in one subset, 81% had 2+ subtypes)

**ARTICLE**: Wonn, Amanda M., et al. "Hypocoagulability effect of adequan in domestic chickens (gallus gallus) and chilean flamingos (phoenicopterus chilensis)." *Journal of Zoo and Wildlife Medicine* 53.1 (2022): 126-132.

Q: Which coagulation factor do birds lack compared to mammals?

1. Factor XI
2. Factor X
3. Factor VII
4. Factor IX
5. Factor VIII

Answer: A – Birds lack factors XI and XII (intrinsic factors). In mammals, thrombin provides activation feedback to factor XI, but in birds provides feedback to factors IX and VIII.

1. Which of the following analytes differed between age classes of Greater Flamingos?
2. Bile Acids
3. Sodium
4. Creatinine
5. Lactate
6. Potassium

Answer: D. Lactate: CK and LDH differed significantly in greater flamingos in differing age classes; BA, CA, P differed significantly between age classes of American Flamingos

2. Which species of crane is the least likely to develop neoplasia based off of the study performed by Hawkins, et. al?

1. Sandhill Crane
2. Wattled Crane
3. White Naped Crane
4. Siberian Crane
5. Gray Crowned Crane

Answer: E- gray crowned cranes; Eurasian, wattled, and demoiselle were the species most likely to find neoplasia

Paired biochemical analysis of pigmented plasma samples from zoo-kept american flamingos (phoenicopterus ruber) using a point-of-care and a standard wet chemistry analyzer.

Gancz, A.Y., Eshar, D. and Beaufrère, H.

*Journal of Zoo and Wildlife Medicine*, 2019;50(3):619-626.

Which plasma biochemical analyte can be considered useful on VetScan VS2 Analyzer in American Flamingos?

1. Calcium
2. Phosphorus
3. Albumen
4. Glucose
5. Potassium

Answer: A

EVALUATION OF THE INTER-AND INTRAINDIVIDUAL AGREEMENT OF A PODODERMATITIS SCORING MODEL IN GREATER FLAMINGOS (PHOENICOPTERUS ROSEUS).

Webb, J.K., Keller, K.A., Welle, K. and Allender, M.C.

*Journal of Zoo and Wildlife Medicine*, 2020;51(2):379-384.

Which of the following characteristics of pododermatitis had good reliability and agreement when scored by specialists viewing images of greater flamingo feet, using a previously published scoring rubric?

1. Hyperkeratosis
2. Fissures
3. Nodules
4. Papillomatous growth
5. Overall subjective score

Answer: B

You perform an echocardiogram on a clinically healthy scarlet ibis (*Eudocimus ruber*) as part of a routine physical exam and find a high left-sided mid-ventricular velocity. What is your treatment plan?

Answer: Repeat echo with reduced stress as this can be a transient result of stressful handling in this species

What chelation agent has been shown to be successful in treating waldrapp ibis (*Geronticus eremita*) with clinical lead toxicosis?

Answer: Calcium EDTA