

2026 Envirothon Study Guide–Wildlife

Areas to Review:

1. History of and Legislation of Conservation
2. Wildlife Diseases
3. Calls/Vocalizations: target birds and frogs and toads
4. Invasive Species
5. SWAP: focus on Needs Title, Needs Category and Description of Action Taken
6. KY News: Operation River Gate, 5th Highest Deer Harvest in history, Alph-gal Prevalence
7. Specimen/Artifact Identification

History of Conservation (Kentucky)

- Be familiar with and able to explain how the Wildlife and Sport Fish Restoration Act (DJ and Pittman-Robinson Act(s) are important in funding KDFWR and wildlife conservation.
- Make sense of the importance of the Migratory Bird Treaty Act
- Identify and describe wildlife management and reintroduction efforts utilized in the effort to restore wildlife populations, including the benefits of each. Examples: hellbender egg program and “hacking” mussel breeding efforts.
- Describe the role of hunters in wildlife management and conservation.
- Describe the principles of wildlife management and recognize the difference between conservation and preservation.

Diseases

- Be familiar with Hemorrhagic Disease, Chytrid Fungus (Bsal), Whirling Disease and Black Spot
- Ticks and tick-borne diseases.

Calls/Vocalizations

- Be familiar with common bird and toad/frog calls.

Invasives

- Invasive species are nonnative species, often introduced by humans, either intentionally or by accident. They compete with native wildlife for resources, alter wildlife habitat and threaten biological diversity, overtaking native species and their habitats.
- Be able to identify all species of Asian Carp–Bighead, Silver, Grass and Black.
- Be able to identify wild pigs and describe the mechanism of their destruction to habitat.
- Be able to identify *Rosa multiflora*–multiflora rose, *Alliaria petiolata*–garlic mustard.
- Be able to identify *Agilus planipennis*–Emerald Ash Borer and describe how this insect uses the Ash tree for its benefit and the tree’s demise.

SWAP Species

- Be able to differentiate between these terms: endemic, extinct, threatened, extirpated and endangered.
- Be able to identify a few examples of species of greatest conservation need.
- Be able to describe how a species population is determined and suggest actions that may be taken for species identified as “greatest need”.
- Be able to suggest conservation actions to be taken.

Using the link below, read through pages 1361-1451, focus on Needs Title, Needs Category and Description of Action Taken

https://fw.ky.gov/WAP/Documents/2023_SWAP_PublicComment_AR02.pdf

Kentucky Conservation News

- Be able to describe Operation River Gate and outcomes.
- Suggest and defend reasons for this season being KY's 5th highest deer harvest.
- Connect habitat, topography and species with KY's Alpha-gal prevalence.

<https://fw.ky.gov/News/Pages/Operation-River-Raid-nets-more-than-700-criminal-charges.aspx>

<https://fw.ky.gov/News/Pages/Kentucky%E2%80%99s-2025-26-deer-harvest-was-fifth-highest-on-record.aspx>

<https://www.wkyufm.org/news/2025-08-19/tick-borne-meat-allergies-on-the-rise-in-kentucky-and-impacting-a-wildlife-rehab-in-bowling-green>

Specimen/Artifact Identification

- Be able to identify Kentucky mammals by their tracks, pelts/feathers and/or skull.
- Be able to age a white-tailed deer by their jawbone.

📺 Using teeth to age deer



