

## 2017 Wildlife Key Topics

- Identify common wildlife species from silhouettes, mounted specimens or pictures (part of an animal may be shown instead of the whole animal). Keys will be used for more extensive identification.
- Identify common wildlife species based on wildlife sign – tracks, scat, gnawings, rubbings, pellets, feathers, hair, fur, etc.
- Identify white-tail deer age based on the jaw.
- Answer questions concerning the natural history of wildlife species occurring in Delaware. For example, the history of DDT and its effects on wildlife.
- Understand the Wildlife Restoration Act (also known as the Pittman-Robertson Act) and how it funds wildlife and habitat conservation
- Understand basic wildlife survival needs
  - Habitat components
  - Biological carrying capacity vs. social carrying capacity
  - Territory vs. home range
  - Factors that limit or enhance population growth
  - Habitat requirements for specific species. Be able to identify a given habitat and select or list species most likely to live there. Describe ways habitat can be improved for specific species by knowing their requirements.
- Describe specific adaptations of wildlife to their environment and role in the ecosystem
  - Understand the definition and importance of a keystone species.
- Understand food chains and food webs and be able to identify examples
  - Be able to identify/define trophic levels: decomposers, primary producers (autotrophs), primary consumers, secondary consumers, tertiary consumers
- Understand predatory/prey relationships and be able to identify examples
- Understand hibernation, estivation, nocturnal, and crepuscular. Be able to provide examples of animals who fall into each of these categories.
- Describe how forestry practices and meadow/grassland management can enhance or impact wildlife habitat.
  - Know the difference between cool season grasses and warm season grasses used for meadow/grassland management.
  - Be able to list methods of maintaining early successional grassland habitat.
  - Understand ecotone and edge effect.
  - Understand the importance of hedgerows and food plots.
- Understand and be able to list the stages of plant succession.
- Understand hunting regulations and how they pertain to wildlife management.
  - Be able to read and understand the DE hunting guide.
  - Understand the difference between game and non-game species.
- Describe various ways people can help in the protection, conservation, management, and enhancement of wildlife populations.

- Understand and be able to provide examples of Best Management Practices for wildlife and habitat conservation
- Identify agencies responsible for providing the protection and management of wildlife resources.
- Understand the importance of the Atlantic Flyway and the Migratory Bird Treaty Act.
- Identify wildlife species that are listed as endangered or threatened and describe the main causes that have led to depleted populations. Know about the Endangered Species Act.
- Understand the functions of wetlands, methods of wetland creation/restoration, and identify the major consequences of wetland destruction on wildlife. Understand the importance of vegetative wetland buffers.
  - Know what a vernal pool is and be able to discuss why they are important.
- Understand the definition of and the effects of invasive species.
  - Identify non-native and/or invasive wildlife species that have been introduced into Delaware accidentally and purposely.
  - Know the difference between invasive and nuisance wildlife species. Be able to list examples of both.
  - Identify non-native and/or invasive plant species that have been introduced into Delaware accidentally and purposely. Know the characteristics of invasive plants.
- Know the cause, symptoms, species affected, and management/monitoring methods for the following wildlife diseases:
  - Rabies
  - White-nose Syndrome (WNS)
  - Epizootic Hemorrhagic Disease (EHD)
  - Chronic Wasting Disease (CWD)
- Understand the purpose and methods of wildlife banding and be able to list species that are banded in Delaware.
- Be able to identify wildlife nest boxes and species that use the nest boxes.
- Audio Challenge – be able to identify a wildlife species based on its call. Species chosen for the audio challenge vary from year to year.