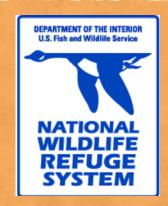


Waterfowl & Wetlands

Kirstin Underwood, USFWS







Federal Duck Stamp Program



- Established in 1934 to conserve waterfowl and their habitats
- Conservation tool to protect and manage wetlands
- 98% of proceeds go directly to help protect wetlands and associated habitats
- Synergy between hunting and conservation (required for waterfowl hunters)
- Sold at National Wildlife Refuges, Postal Stores

Cooperative Duck Banding Program



- Cooperative waterfowl banding effort between USFWS, state and provincial wildlife management agencies, nongovernmental organizations
- Contributes data to migration/dispersal patterns and waterfowl population dynamics
- Map of recovered bands available online: https://www.ducks.org/hunting/bandreturn/ ME

Junior Duck Stamp Program: Conservation Through The Arts





After learning about wetlands and waterfowl conservation, students paint a picture of a duck or goose./USFWS

- Art and science-based curriculum for K-12 students
- Encourage youth interest and engagement in conservation
- Art project: accurate depiction of North American duck and its habitat
- Culminating event: National Art Contest
- Sold as collectors' item (\$5), supports conservation education

Importance of Habitat



- Ducks, swans and geese are wetland obligate species.
- Wetlands provide food and shelter for obligate species.
- Ecosystem services: groundwater recharge, biodiversity enhancement, flood protection, water quality improvement.

Importance of Habitat: A Shifting Dynamic

Nesting



Foraging



Migration



Threats to Habitat

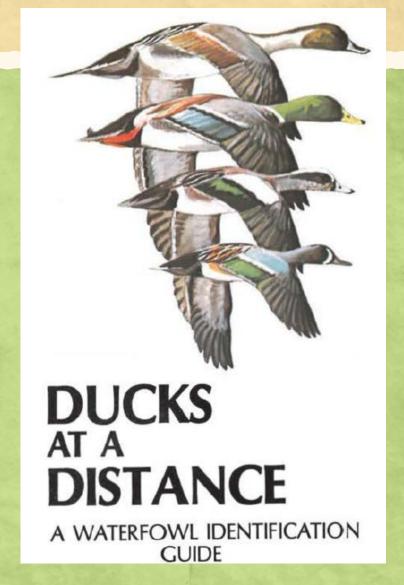


- Development & landscape alterations
- Pollution
- Climate change
 - Sea level rise (marsh → mudflat or open water)
 - Drought
 - Warming waters
 - Inundation (more frequent and severe storms)
 - Loss of carbon storage

Waterfowl: A Few Defining Characteristics

https://www.fws.gov/birds/bird-enthusiasts/bird-watching/waterfowl-identification.php

- Dabbling ducks
 - Includes swans/geese, whistling ducks
- Diving ducks
 - Includes sea ducks
- Size, shape, plumage patterns
- Colors, voice, wing beat, flocking behavior
- Habitat



Author: Bob Hines, USFWS

Dabbling Ducks





- Fresh, shallow marshes and rivers
- Diet generally vegetarian (nuts, seeds, fruits, aquatic vegetation, some insects/arthropods/crustaceans)
- Good divers, but feed by dabbling or tipping
- Speculum iridescent and bright
- Suited to walk or run on land

Dabbling Ducks

- Wood ducks
- Mallards
- American Black Duck
- American Wigeon (rare in ME)
- Blue-winged and green-winged teal
- Northern Pintail
- Northern Shoveler
- Gadwall

Many are migratory species that breed in Maine.

Mallard (rare), gadwall (coastal), American black duck are year-round residents.



Swans and Geese: Habits/habitats similar to dabbling ducks, more on land

- Brant
- Canada Goose
- Greater White-Fronted Goose
- Snow Goose
- Tundra Swan (rare/uncommon, southern New England)

Most are migratory, though they winter as far north as MA or NJ.



Menke, Dave, USFWS

Diving Ducks



- Larger, deeper lakes and rivers; coastal bays, inlets
- Less brilliant speculum patch
- Generally eat fish, shellfish, mollusks, aquatic plants (some exceptions feed primarily on eelgrass, wild celery)
- Can travel great distances underwater

Diving Ducks

- Canvasback
- Common Merganser
- Greater Scaup
- Lesser Scaup (rarer in ME)
- Hooded Merganser
- Red-breasted Merganser
- Ring-necked Duck
- Ruddy Duck (rare in ME)



Most migrants or summer breeders, some mergansers year-round or winter residents.

Sea Ducks

- Barrow's Goldeneye (rare)
- Common Goldeneye
- Black Scoter
- White-Winged Scoter
- Surf Scoter
- Bufflehead
- Common Eider
- King Eider
- Harlequin Duck
- Long-Tailed Duck



Common Goldeneye is known to nest in Maine (central to northern); all others are winter residents, generally coastal, and breed far north in Canada.

Resources

- Cornell Lab of Ornithology (look up bird calls, range, habitat, description by species): https://www.allaboutbirds.org/
- USFWS "Ducks at a Distance" identification guide: <u>https://www.fws.gov/birds/bird-enthusiasts/bird-watching/waterfowl-identification.php</u>
- Bird Identification Apps: Audubon, Merlin
- Migration Map Apps: Ducks Unlimited, American Waterfowler
- Map of recovered banded birds: https://www.ducks.org/hunting/bandreturn

Thank you! Questions?

