Waterfowl Life Cycle Needs and Habitats

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Overview

- Priority species and distribution
- Non-breeding annual cycle events
- Foraging and resting habitat in western Colorado
All birds on this page are drawn to the same scale.
Priority Species

- American green-winged teal
- American wigeon (OP)
- Blue-winged teal
- Cinnamon teal
- Gadwall
- Mallard (HP)
- Northern pintail (HP)
- Lesser scaup (HP)
- Greater sandhill crane
Pacific Flyway Portion of Colorado
Midwinter Survey
Ducks
Western Colorado River Valleys: Emphasize Non-breeding Habitat
Duck Annual Cycle

- **WINTERING (Dec-Feb)** – high-energy foods + nutrients, escape from disturbance, open water
- **COURTSHIP/PAIRING (Dec-Apr)** – nutritional diversity, secure areas for interaction
- **SPRING MIGRATION (Feb-May)** – abundant energy and protein
- **PRE-BREEDING (Mar-May)** – protein (and energy)
- **NESTING (Apr-Jul)** – cover, travel routes to water
- **BROOD-REARING (May-Aug)** – nutritional diversity, escape
- **MOLT (Jul-Nov)** – protein, escape
- **FALL MIGRATION (Aug-Nov)** – abundant energy, escape from disturbance
Non-breeding Resource Needs

• Abundant, diverse food
• Secure resting areas
• Both in close proximity
• Hunting = need more habitat, manage access

• Non-breeding duck and crane habitat evaluated using an energetics-based approach
  – How much food, how many “use-days”? 
Feeding Habitats

• Omnivorous diets
• Shallowly-flooded habitats, uplands

• Abundant food = high productivity
  – Seed-producing annuals
  – Invertebrates

• Early successional stages = disturbance
  – Hydrology (timing, frequency, depth, duration)
  – Grazing, fire, mechanical
Resting Habitats

• Non-breeding waterfowl, cranes gregarious - extensive flooded areas
• Open, large – detect predators, buffer disturbances, thermal environment
• Near high-quality feeding areas

• River corridors (sandbars)
• Larger reservoirs, wetlands
• Can be feeding sites
Habitat Implications

- A single wetland can’t meet all waterfowl needs – wetland complexes
- Need to consider location in relation to soils, hydrology, water quality
- All systems are highly altered from historic conditions
- Habitat disturbance is an essential management tool
Summary

- Priority species – dabbling ducks, RMP sandhill cranes
- Non-breeding habitats – resting and feeding (energetics)
- Feeding habitats – high productivity requires disturbance, management control
- Resting areas – maintain open habitats, manage access, prioritize proximity to feeding areas