

Species Status Assessment

Class: Birds
Family: Anatidae
Scientific Name: *Anas rubripes*
Common Name: American Black Duck

Species synopsis:

Until 1874, ornithologists did not distinguish between American black duck and mottled duck; both were then known collectively as dusky duck, under the name *Anas obscura*. In 1908, the American Ornithologists' Union adopted *rubripes* as the species name. American black duck commonly interbreeds with mallard (*A. platyrhynchos*) and other species (AOU 1983). Some authors suggest that it might be taxonomically appropriate to recognize the black duck as a dark morph (rather than a subspecies) of the mallard, based on genetic and behavioral similarity and frequent hybridization (Ankney et al. 1986).

American black ducks occur in the eastern half of the United States and Canada, occurring year-round in the middle of this distribution, including New York. Breeding has been documented in a wide variety of habitats across its range including coastal salt marshes, brackish tidal marshes, and inland water bodies as well as open woodlands away from water. Severe declines of more than 90% rangewide began in the 1950s, but changes to hunting regulations in 1983 appear to have resulted in a stabilized—though much reduced—population in the Atlantic Flyway.

I. Status

a. Current Legal Protected Status

- i. Federal Not Listed Candidate: No
- ii. New York SGCN

b. Natural Heritage Program Rank

- i. Global G5
- ii. New York S3B, SNRN Tracked by NYNHP? No

Other Rank:

NY Natural Heritage Program Watch List

Status Discussion:

American black duck is a game species with an open season in New York. Black ducks are widespread across New York, though less common in western New York. Breeding Bird Atlas data (2000-2005), Breeding Bird Survey data (1965-2005), and Breeding Waterfowl Plot Survey data (1989-2012) for New York show a declining trend. Winter counts in the Atlantic Flyway show that numbers have declined range wide by as much as 50% since the 1950s. Changes to hunting regulations seem to have resulted in stabilization of winter counts in the Atlantic Flyway in the past 30 years. Population indexes from surveys conducted mostly in Canada show a stable to increasing population since 1990.

II. Abundance and Distribution Trends

a. North America:

i. Abundance

 declining increasing X stable unknown

ii. Distribution:

 declining increasing X stable unknown

Time frame considered: Stable in the past 30 years though dramatic long-term decline since 1950s.

b. Regional

i. Abundance

declining increasing stable unknown

ii. Distribution:

declining increasing stable unknown

Regional Unit Considered: Atlantic Flyway

Time frame considered: Stable in the past 30 years despite dramatic long-term decline since 1950s.

c. Adjacent States and Provinces

CONNECTICUT Not Present No data

i. Abundance

declining increasing stable unknown

ii. Distribution:

declining increasing stable unknown

Time frame considered: BBS: -9.5% from 1999-2009

Listing Status: Not Listed SGCN? Yes

MASSACHUSETTS Not Present No data

i. Abundance

declining increasing stable unknown

ii. Distribution:

declining increasing stable unknown

Time frame considered: BBS: -4.8% from 1999-2009

Listing Status: Not Listed SGCN? Yes

NEW JERSEY Not Present _____ No data _____

i. Abundance

X declining ___increasing ___stable ___unknown

ii. Distribution:

X declining ___increasing ___stable ___unknown

Time frame considered: BBS: -5.6% from 1999-2009

Listing Status: Not Listed SGCN? Yes

ONTARIO Not Present _____ No data _____

i. Abundance

X declining ___increasing ___stable ___unknown

ii. Distribution:

X declining ___increasing ___stable ___unknown

Time frame considered: 22% decline in last 20 years (Atlas data)

Listing Status: Not Listed

PENNSYLVANIA Not Present _____ No data _____

i. Abundance

X declining ___increasing ___stable ___unknown

ii. Distribution:

X declining ___increasing ___stable ___unknown

Time frame considered: BBS: -5.5% from 1999-2009

Listing Status: Not Listed SGCN? Yes

QUEBEC Not Present _____ No data _____

i. Abundance

___ declining X increasing ___ stable ___ unknown

ii. Distribution:

___ declining X increasing ___ stable ___ unknown

Time frame considered: BBS: 3.6% from 1999-2009

Listing Status: Not Listed

VERMONT Not Present _____ No data _____

i. Abundance

X declining ___ increasing ___ stable ___ unknown

ii. Distribution:

X declining ___ increasing ___ stable ___ unknown

Time frame considered: BBS: -6.2% from 1999-2009

Listing Status: Not Listed SGCN? Yes

d. New York

i. Abundance

X declining ___ increasing ___ stable ___ unknown

ii. Distribution:

X declining ___ increasing ___ stable ___ unknown

Time frame considered: 1980-85 to 2000-05

Monitoring in New York.

NYSDEC has conducted an annual Mid-winter Inventory since 1955 and breeding waterfowl plot surveys since 1989.

Trends Discussion:

The Mid-winter Inventory: between the periods 1955–1960 and 1991–1995, mean numbers declined 63% in the Mississippi Flyway (205,000 to 76,000) and 43% in the Atlantic Flyway (398,000 to 225,000; Serie and Cruz 1997). After substantial reduction in harvest (i.e., 39–65% for each state in the Atlantic Flyway referenced to 1977–1981 average harvest) beginning in 1983 (Serie and Cruz 1997), and more restrictive regulations in 1989–1990 in Canada (Dilworth-Christie and Dickson 1997), numbers stabilized at about 280,000 (Longcore and Clugston 1998) and began to increase in 1992 and has continued.

Winter counts in Atlantic Flyway averaged 36,000 in New York in the 1950s and 20,000 in the early 1980s. Since then, counts have remained stable around 17,500.

Breeding Bird Atlas data show a decline of 34% from the first Atlas (1980-85) to the second Atlas (2000-05). Breeding Bird Survey data show no significant trend range-wide but New York data show a nonsignificant decline from 0.30 bird/route in the late 1960s to 0.12 in the 1980s, and fewer than 0.08 birds/route in 2000.

The Atlantic Flyway Breeding Waterfowl Plot Surveys have shown a downward trend in breeding pairs and total population in New York and the Atlantic Flyway from 1989 to 2012. Breeding pair estimates for New York have ranged from a high of 11,077 pairs in 1991 to a low of 289 pairs in 2010. Total population estimates for New York have fluctuated greatly over the survey period while total population estimates for the Atlantic Flyway have shown a steady decline from a high of 87,009 in 2000 to a low of 28,619 in 2012.

The U.S. Fish and Wildlife Service, in conjunction with the Canadian Wildlife Service, estimates black duck breeding populations annually through the Waterfowl Breeding Population and Habitat Survey. Since 1990, the core black duck breeding areas of Ontario, Quebec, Maine, and the Maritime Provinces have been surveyed and show a stable to slightly increasing population.

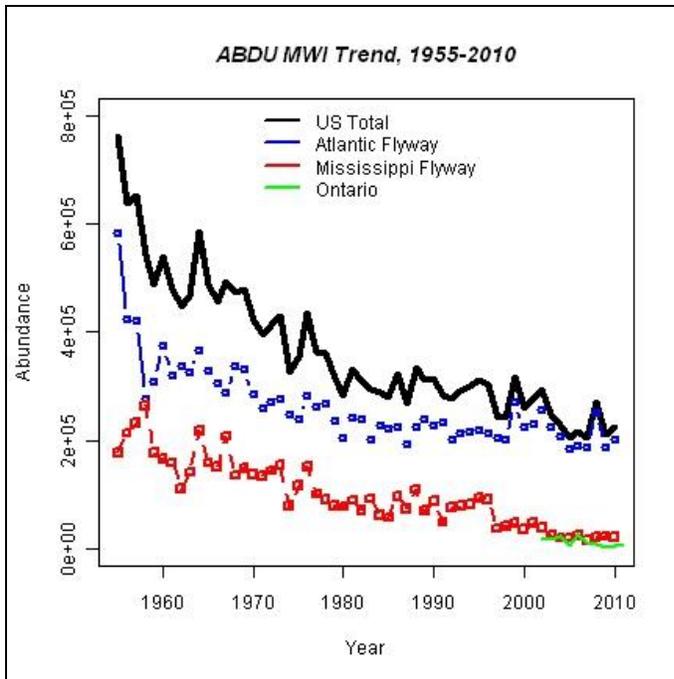


Figure 1: Population trend for American black duck. Black Duck Joint Venture website (http://www.blackduckjv.org/index_new.asp)

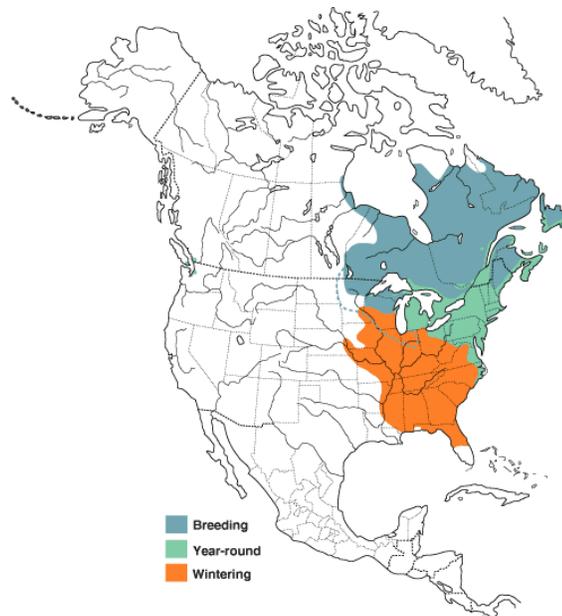


Figure 2: Distribution of black duck in North America (Birds of North America Online)

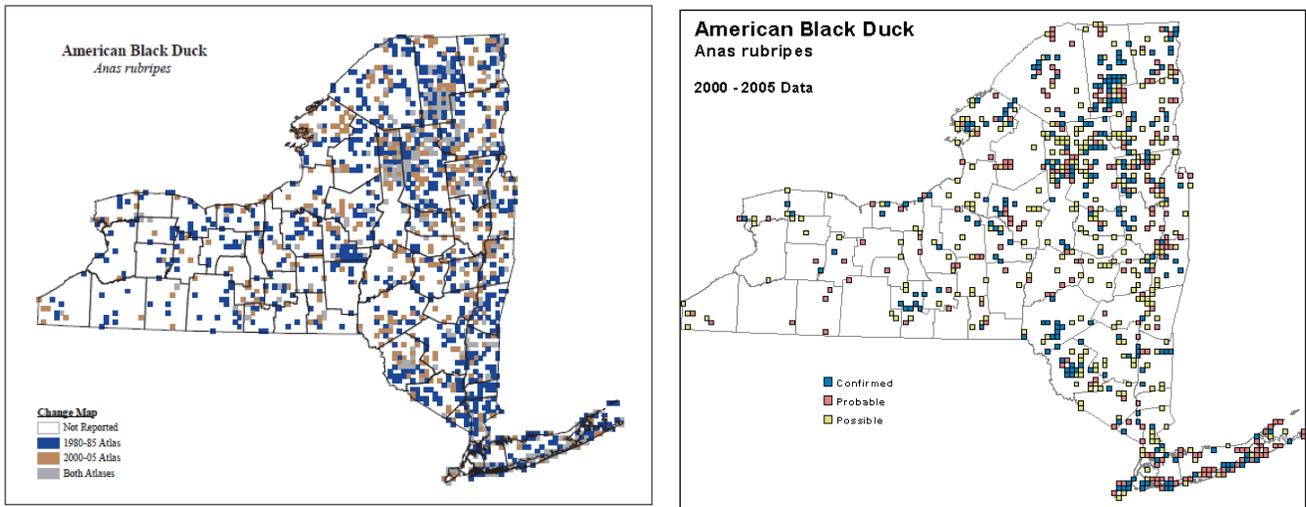


Figure 3: Distribution of black duck in New York (McGowan and Corwin 2008)

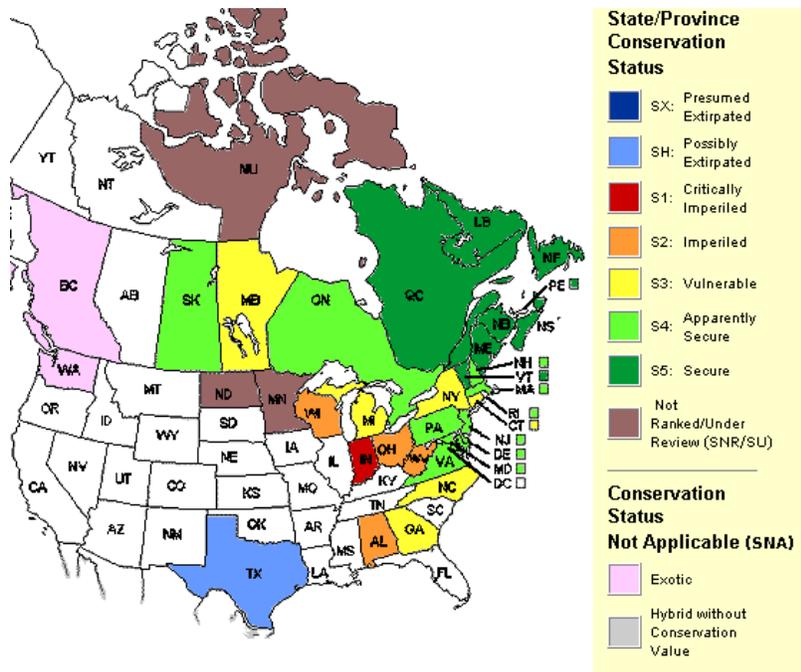


Figure 4: Conservation status of black duck in North America (NatureServe 2012)

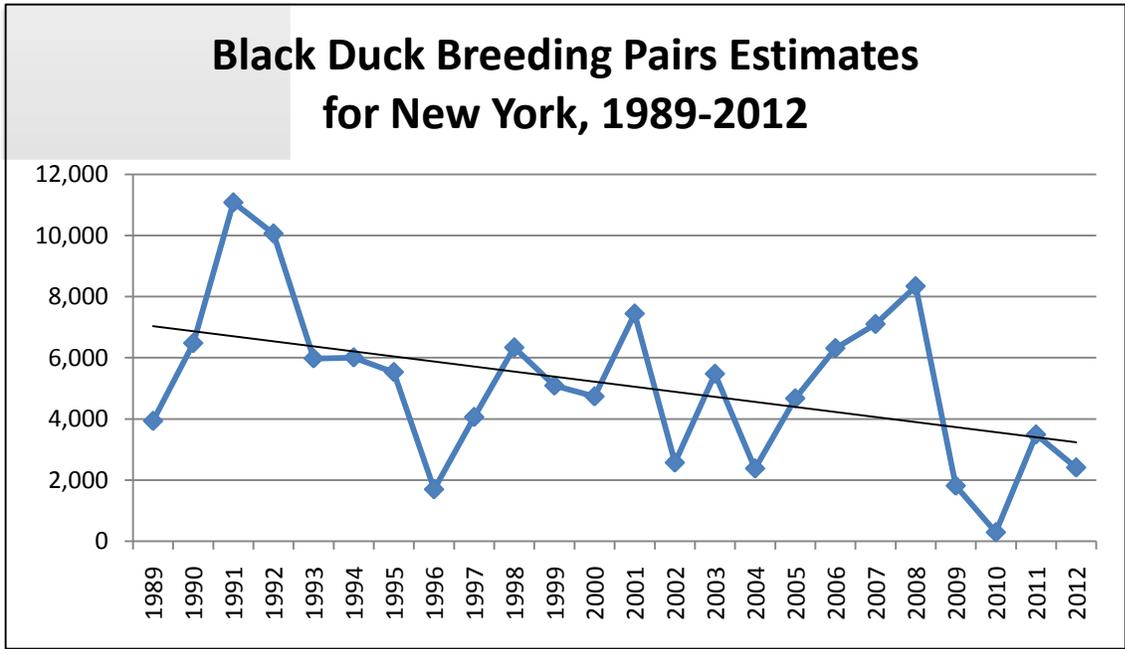


Figure 5: Estimates of breeding pairs of black duck in New York. Atlantic Flyway Harvest and Population Survey Data (USFWS).

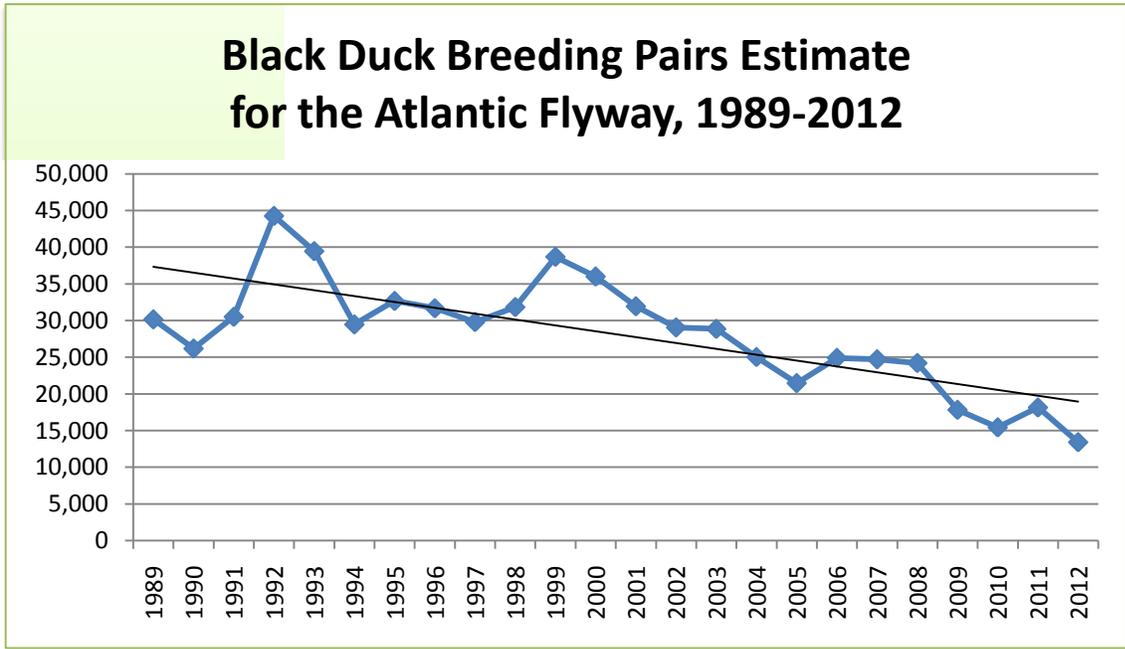


Figure 6: Estimates of breeding pairs of black duck in the Atlantic Flyway. Atlantic Flyway Harvest and Population Survey Data (USFWS).

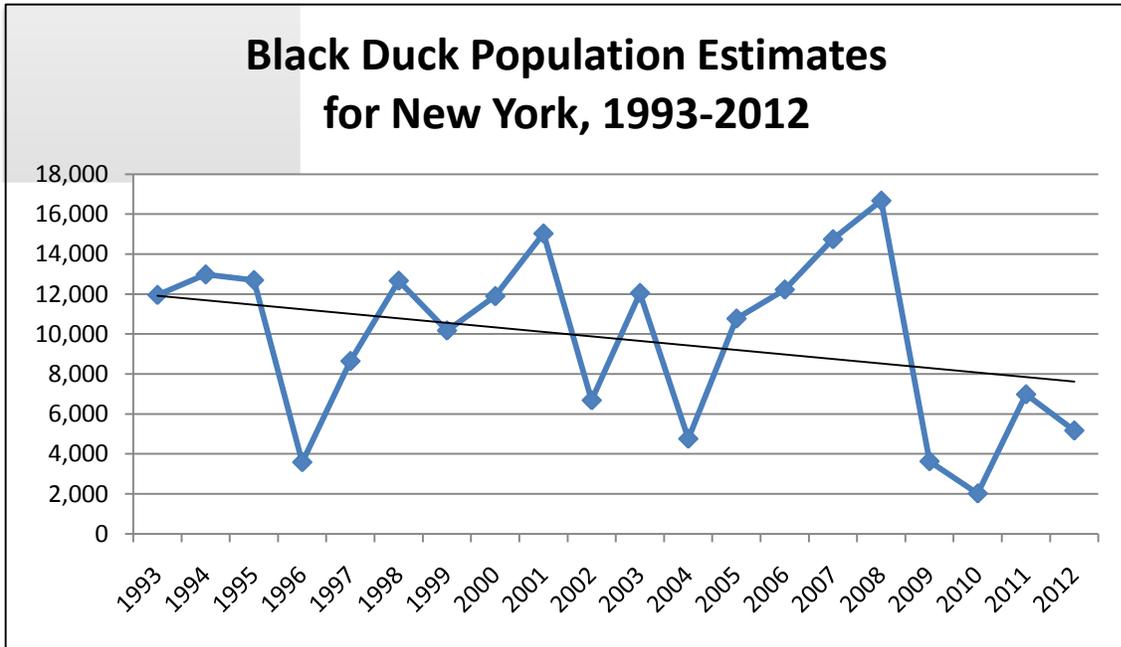


Figure 6: Black duck population estimates in New York. Atlantic Flyway Harvest and Population Survey Data (USFWS).

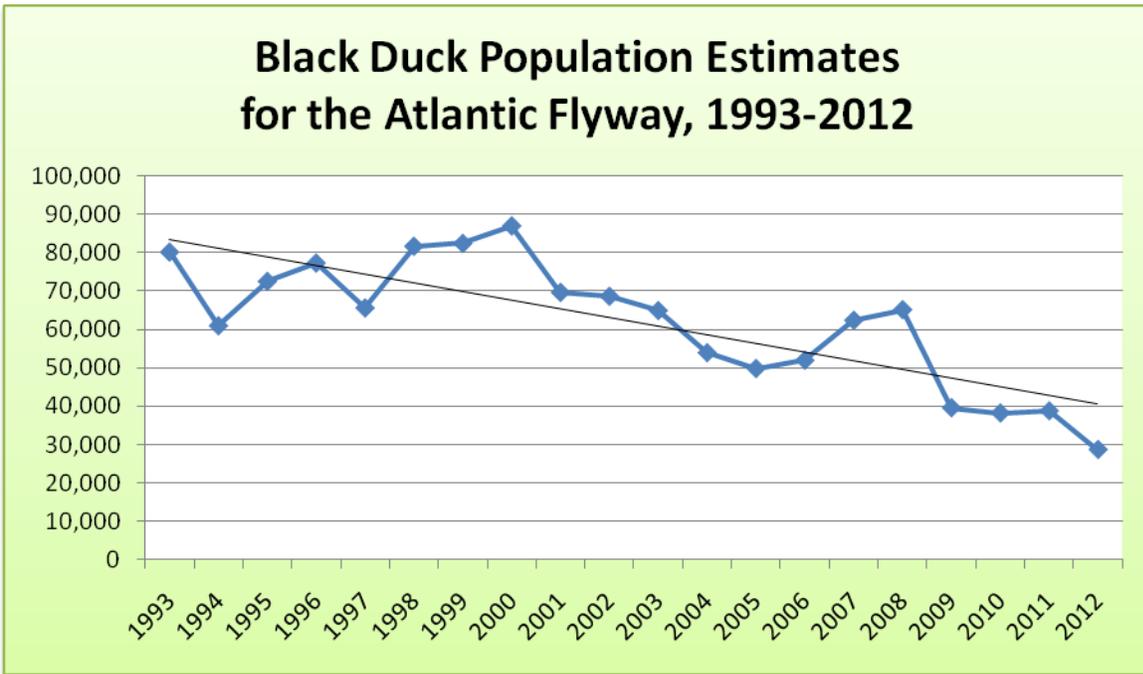


Figure 7: Black duck population estimates in the Atlantic Flyway. Atlantic Flyway Harvest and Population Survey Data (USFWS)

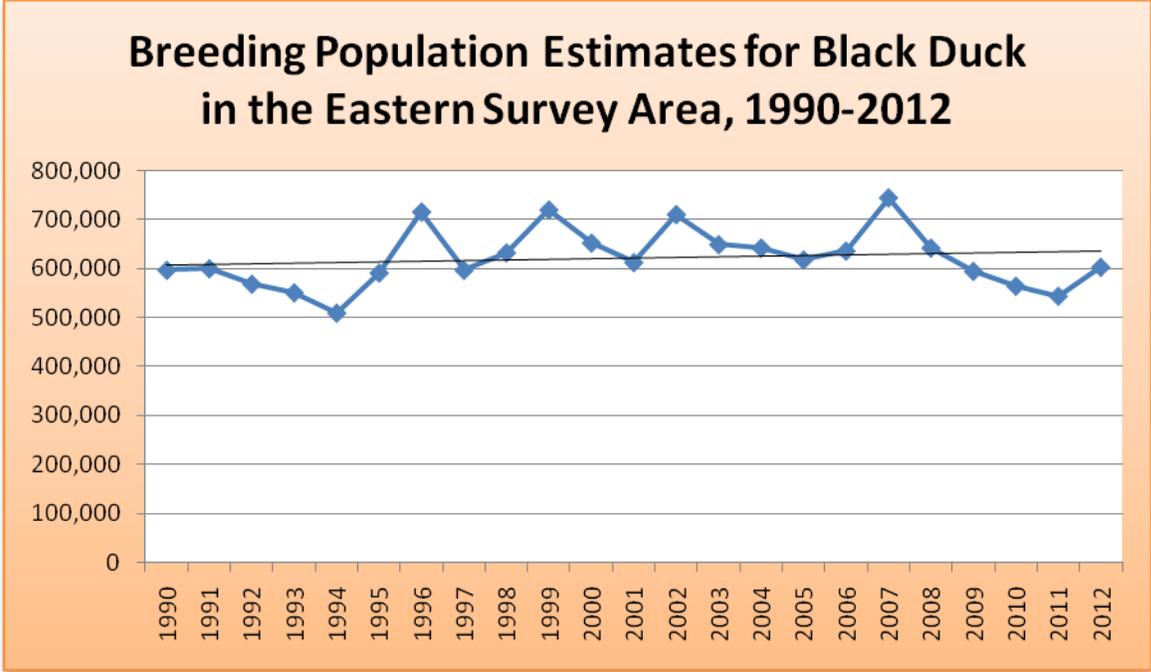


Figure 8: Breeding population estimates for black duck in the eastern survey area, 1990-2012. Waterfowl Population Status, 2012 (USFWS)

III. New York Rarity, if known:

Historic	<u># of Animals</u>	<u># of Locations</u>	<u>% of State</u>
prior to 1970	_____	_____	_____
prior to 1980	_____	_____	_____
prior to 1990	_____	<u>1,102 blocks</u>	<u>21%</u>

Details of historic occurrence:

The first Breeding Bird Atlas (1980-85) documented occurrence in 1,102 survey blocks, 21% of the state (Andrle and Carroll 1988).

Current	<u># of Animals</u>	<u># of Locations</u>	<u>% of State</u>
	_____	<u>728 blocks</u>	<u>14%</u>

Details of current occurrence:

The second Breeding Bird Atlas (2000-05) documented occurrence in 728 survey blocks, 14% of the state (McGowan and Corwin 2008). This represents a 34% decline in occupancy from 1980-85 to 2000-05.

New York's Contribution to Species North American Range:

Distribution (percent of NY where species occurs)

- ___ 0-5%
- ___ 6-10%
- X 11-25%
- ___ 26-50%
- ___ >50%

Abundance (within NY distribution)

- ___ abundant
- ___ common
- X fairly common
- ___ uncommon
- ___ rare

NY's Contribution to North American range

- ___ 0-5%
- X 6-10%

- ___ 11-25%
- ___ 26-50%
- ___ >50%

Classification of New York Range

- Core
- Peripheral
- Disjunct

Distance to core population:

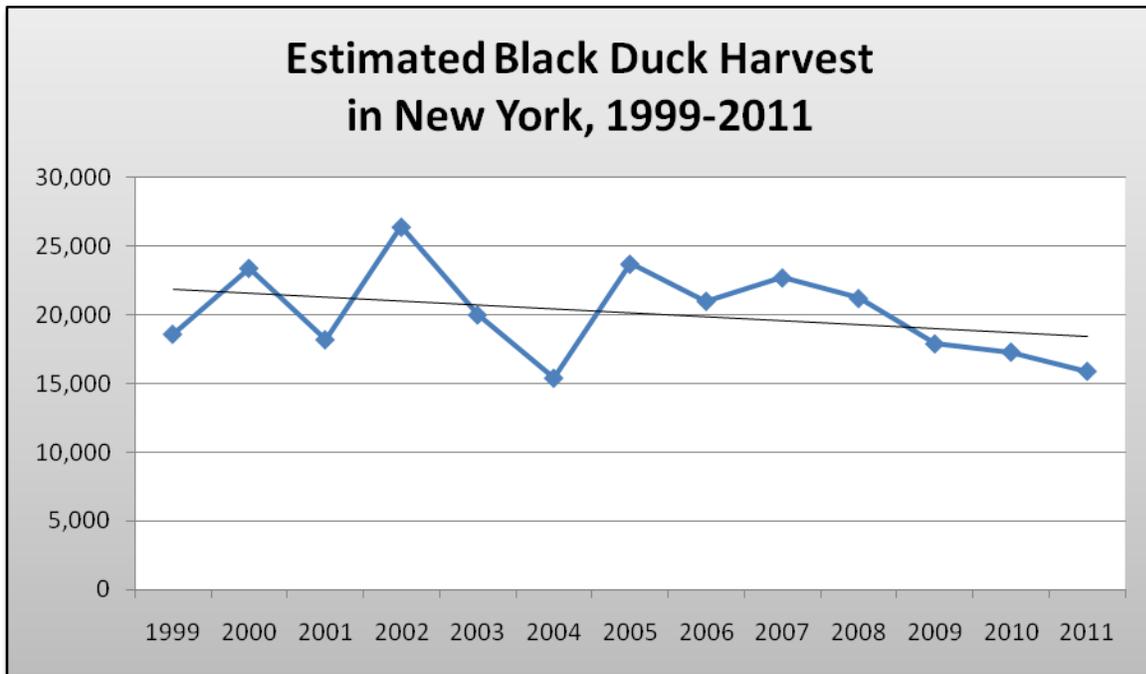


Figure 9: Estimated black duck harvest in New York, 1999-2012 Atlantic Flyway Harvest and Population Survey Data (USFWS)

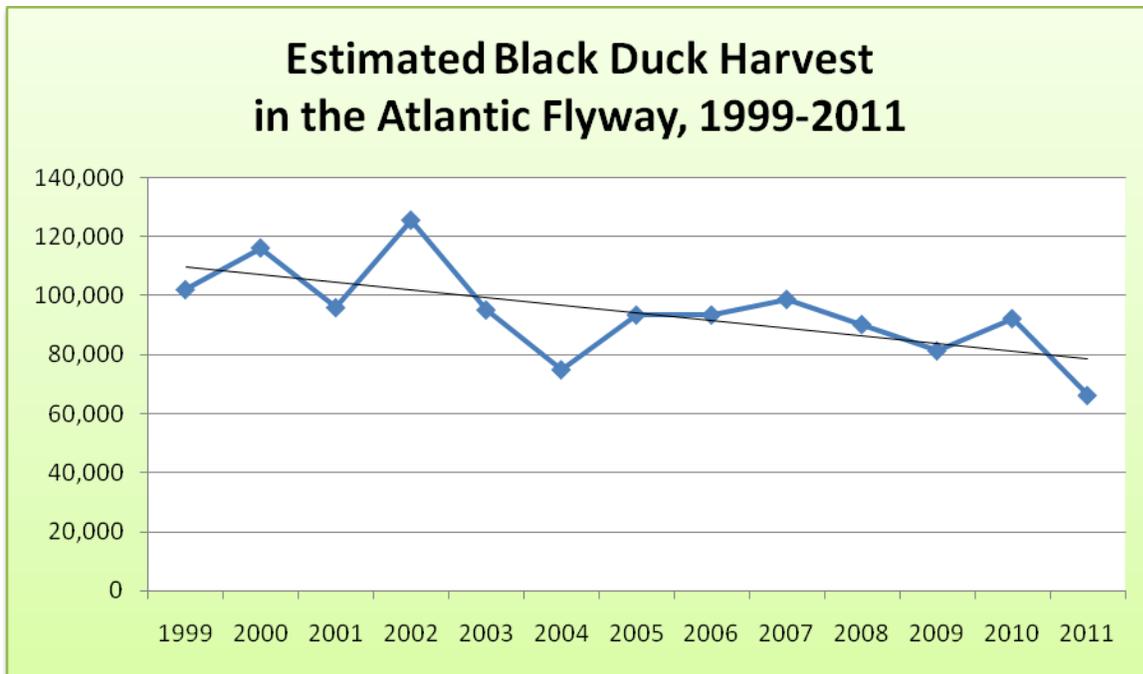


Figure 10: Estimated black duck harvest in the Atlantic Flyway, 1999-2012. Atlantic Flyway Harvest and Population Survey Data (USFWS)

IV. Primary Habitat or Community Type:

1. Hardwood Swamp
2. Floodplain Forest
3. Open Acidic Peatlands
4. Coastal Plain Pond
5. Freshwater Marsh
6. Wet Meadow/Shrub Swamp
7. Estuarine, Freshwater Intertidal, Benthic Geomorphology, Tidal Creek
8. Estuarine, Brackish Intertidal, Tidal Wetland, High Salt Marsh

Habitat or Community Type Trend in New York:

Declining Stable Increasing Unknown

Time frame of decline/increase: Coastal habitats declining since 1970s

Habitat Specialist? Yes No

Indicator Species? Yes No

Habitat Discussion:

American black duck is adaptable, nesting in boreal forest bogs and coastal marshes as well as ponds, streams and even scrub fields and open woodlands some distance from water. Coastal habitats are known to be declining, with long-term rates of decline accelerating since the 1970s. Inland habitats are stable.

V. New York Species Demographics and Life History

Breeder in New York

Summer Resident

Winter Resident

Anadromous

Non-breeder in New York

Summer Resident

Winter Resident

Catadromous

Migratory only

Unknown

Species Demographics and Life History Discussion:

Both females and males can breed in the first spring after hatching and breeding occurs annually thereafter. A skewed sex ratio may prevent some immature males from breeding in their first year. Maximum longevity is 26 yr, 5 mo for male banded at unknown age (Clapp et al. 1982). Black ducks have one clutch of 7-10 eggs per season, re-nesting occurs when nest fails. Fledged young disperse from a few to several hundred kilometers in any direction, often northward, from natal wetlands.

Predators on adults include northern goshawk, snowy owl, great horned owl, red-shouldered hawk, raccoon, red fox, mink, and coyote. Eggs are taken by American and fish crows, raccoon, black rat snake, red fox, and mink. Snapping turtle is a major predator on ducklings (Longcore et al. 2000).

In an assessment of vulnerability to predicted climate change conducted by the New York Natural Heritage Program, American black duck was identified as a second-priority species whose sensitivity should be assessed in the future (Schlesinger et al. 2011).

VI. Threats:

Habitat loss is a concern for populations nesting in coastal marshes where erosion and development are issues. Elsewhere in the state habitat loss is not a concern; Swift (2008) notes that mallard and wood duck populations have been stable or increasing, and that increasing forest acreage and beaver impoundments should create more habitat for black duck. Changes to hunting regulations in 1983 resulted in stabilization of mid-winter counts in the Atlantic Flyway, though populations remain about half of 1950s numbers. Increasing mallard populations (five times more numerous than in the 1960s) may have affected black duck populations through competitive exclusion and hybridization. This species is wary, and therefore more susceptible to human disturbance than mallard.

Are there regulatory mechanisms that protect the species or its habitat in New York?

No Unknown

Yes

American black duck is a game bird with an open season. The hunting season length and daily bag limit could be modified or the season could be closed. For 2013, the hunting season length in New York is 60 days and 1 black duck may be harvested per day.

The Freshwater Wetlands Act provides protection for wetlands greater than 12.4 acres in size under Article 24 of the NYS Conservation Law. The Tidal Wetlands Act protects all tidal wetland habitats and adjacent areas under Article 25 of the NYS Conservation Law.

Knowledge of management/conservation actions that are needed for recovery/conservation, or to eliminate, minimize, or compensate for the identified threats:

Conservation actions following IUCN taxonomy are categorized in the table below.

Conservation Actions	
Action Category	Action
Land/Water Protection	Site/Area Protection
Land/Water Protection	Resource/Habitat Protection
Land/Water Management	Site/Area Management
Land/Water Management	Invasive/Problematic Species Control
Law & Policy	Policies & Regulations

The Comprehensive Wildlife Conservation Strategy (NYSDEC 2005) includes recommendations for the following actions for breeding waterfowl, and for American black duck in particular.

Habitat management:

- ___ Maintain or increase abundance and suitability of emergent marsh habitats for breeding black ducks in the Adirondack region of the NE Lake Ontario-St. Lawrence, Lake Champlain, and Upper Hudson watersheds.
- ___ Maintain or enhance approximately 25,000 acres of potential black duck breeding habitat in coastal areas of Lower Hudson/Long Island watershed, including protection and management of upland buffer areas.

Habitat research:

- ___ Conduct field studies to document critical habitats for black ducks breeding in the Lower Hudson/Long Island watershed.

Life history research:

- ___ Investigate potential impacts of captive-reared mallard releases by shooting preserves and game bird breeders on black duck populations.

Modify regulation:

- ___ Establish hunting regulations that will not adversely affect long-term status of waterfowl species breeding in New York.

Population monitoring:

- ___ Conduct annual statewide breeding waterfowl surveys to derive breeding pair estimates ($\pm 25\%$) for black ducks and other more common breeding waterfowl species.

Statewide baseline survey:

- ___ Conduct more intensive surveys for breeding black ducks in appropriate regions of New York to estimate overall abundance, document habitat use and design a long-term monitoring program (e.g., every 5 years).

VII. References

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