

Species Status Assessment

Class: Birds
Family: Scolopacidae
Scientific Name: *Limnodromus griseus*
Common Name: Short-billed dowitcher
Species Code: 68

Species synopsis:

Long-billed dowitcher and short-billed dowitcher were designated as separate species in 1950. Three subspecies of short-billed dowitcher breed in North America: *L. caurinus* occurs on the Pacific Coast, *L. griseus* on the Atlantic Coast, and *L. hendersoni* in central Canada. The nominate *griseus* breeds in northern Canada and occurs in New York during migration, although a few specimens of *hendersoni* have also been taken in New York. Exposed mudflats are used as stopover points in New York, available on the Coastal Lowlands of Long Island and along the Great Lakes, as well as the large national wildlife refuges, Montezuma and Iroquois.

The U.S. Shorebird Conservation Plan and the International Shorebird Survey note significant declines in short-billed dowitcher populations since the mid-1970s. Declines are attributed to habitat loss on breeding grounds and on wintering grounds. Trends in New York are not available.

I. Status

a. Current and Legal Protected Status

- i. **Federal** Not Listed **Candidate?** Yes
- ii. **New York** SGCN

b. Natural Heritage Program Rank

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

Other Rank:

U.S. Shorebird Conservation Plan: Species of High Concern
IUCN Red List Category: LC - Least Concern

Status Discussion:

Short-billed dowitcher is a common to abundant migrant on coastal areas of New York during spring and fall. During spring migration, it is uncommon inland.

II. Abundance and Distribution Trends

a. North America

i. Abundance

declining increasing stable unknown

ii. Distribution:

declining increasing stable unknown

Time frame considered: Since 1970s

b. Regional

i. Abundance

declining increasing stable unknown

ii. Distribution:

declining increasing stable unknown

Regional Unit Considered: Atlantic Coast

Time Frame Considered: Since 1970s

c. Adjacent States and Provinces

CONNECTICUT **Not Present** _____ **No data** _____

i. Abundance

_____ **declining** _____ **increasing** _____ **stable** _____ **X** **unknown**

ii. Distribution:

_____ **declining** _____ **increasing** _____ **stable** _____ **X** **unknown**

Time frame considered: _____

Listing Status: _____ **Not Listed** _____ SGCN? No

MASSACHUSETTS **Not Present** _____ **No data** _____

i. Abundance

_____ **X** **declining** _____ **increasing** _____ **stable** _____ **unknown**

ii. Distribution:

_____ **declining** _____ **increasing** _____ **X** **stable** _____ **unknown**

Time frame considered: 1995-97

Listing Status: _____ **Not Listed** _____ SGCN? Yes

NEW JERSEY **Not Present** _____ **No data** _____

i. Abundance

_____ **X** **declining** _____ **increasing** _____ **stable** _____ **unknown**

ii. Distribution:

_____ **declining** _____ **increasing** _____ **X** **stable** _____ **unknown**

Time frame considered: 1995-97

Listing Status: _____ **Not Listed** _____ SGCN? No



Figure 1. Range of the short-billed dowitcher in North America (Birds of North America Online).

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	_____	_____	_____

Details of historic occurrence:

Maximum counts summarized in Sherony (1998): 8,000 in May 1939 at Jamaica Bay Wildlife Refuge.

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

Details of current occurrence:

Maximum counts summarized in Sherony (1998): 3,500 in July 1992 at Line Islands, Nassau County.

New York's Contribution to Species North American Range:

% of NA Range in New York	Classification of New York Range
<u> X </u> 0-5%	<u> </u> Core
<u> </u> 6-10%	<u> </u> Peripheral
<u> </u> 11-25%	<u> X </u> Disjunct
<u> </u> 26-50%	Distance to core population:
<u> </u> >50%	_____

IV. Primary Habitat or Community Type:

1. Estuarine, Brackish Intertidal, Tidal Wetland
2. Maritime Intertidal Gravel/Sand Beach

3. Estuarine, Brackish Intertidal, Benthic Geomorphology, Tidal Flat

Habitat or Community Type Trend in New York:

Declining Stable Increasing Unknown

Time frame of decline/increase: _____

Habitat Specialist? Yes No

Indicator Species? Yes No

Habitat Discussion:

During migration short-billed dowitcher prefers saltwater habitat, whereas long-billed dowitcher prefers freshwater ponds and marshes. During migration, short-billed dowitchers are common on tidal flats, beaches, salt marshes, sewage ponds, and flooded agricultural fields (Jehl et al. 2001).

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:

Knowledge of the life history of short-billed dowitcher is limited because of its insect-rich muskeg breeding habitat, the difficulty in locating nests, and its history of being lumped with similar-looking long-billed dowitcher.

Age at first breeding is not known, probably 1–2 yr. First-year short-billed dowitchers frequently summer in small numbers south of breeding grounds. One brood is normally raised per season. Longest documented life span 13 yr 3 mo (Klimkiewicz and Fitcher 1989). By analogy to other similarly sized shorebirds, maximum expected about 20 yr (Marks et al. 1990). No data on survivorship. Predation by raptors apparently the major cause of death during migration and winter.

Presumably susceptible to avian botulism (Type C), as 4 sick dowitchers (spp.) seen during outbreak at Delta Marsh, Manitoba in 1964 (Manuwal 1967).

VI. Threats:

Migrant shorebirds are susceptible to the effects of oil spills and to habitat loss from development of coastal areas. Climate change could alter availability of exposed mudflats in coastal areas.

Short-billed dowitcher is one of the six species that make up 95% of migrating birds feeding on horseshoe crab eggs at Delaware Bay in the spring. Numbers there have declined in response to reduced availability of this rich food resource.

Global warming may have especially strong impacts on this species. Anticipated climate change will be greatest at polar and temperate latitudes, where short-billed dowitcher breed and winter. All known major migration staging sites, and most of the major wintering range, are on temperate coastlines of both the New and Old World, where sea level change is predicted to be greatest.

In March 2006, Global Forest Watch Canada reported that the boreal breeding grounds of the short-billed dowitcher have been seriously degraded and fragmented in areas where energy and logging companies have commercial access (Audubon website).

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

No Unknown

Yes

Short-billed dowitcher is protected under the Migratory Bird Treaty Act. Two inland areas where migrants congregate are national wildlife refuges.

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

Protection of coastal habitat. Reduction of recreational disturbance at beach habitats. Conservation actions following IUCN taxonomy are categorized in the table below.

Conservation Actions	
Action Category	Action
Education & Awareness	Awareness & Communications (educational materials)
Land/Water Protection	Site/Area Protection (acquisition, easements)
Land/Water Protection	Resource/Habitat Protection
Land/Water Management	Site/Area Management (posting or fencing)
Law & Policy Actions	Policy/Regulations (establish seasonal use restrictions, adjust state land unit mgmt plans)
External Capacity Building	Alliance & Partnership Development (support and participate in international shorebird conservation efforts)

The Comprehensive Wildlife Conservation Strategy (NYSDEC 2005) includes recommendations for the following actions for transient shorebirds, which includes short-billed dowitcher.

Fact Sheet:

- ___ Develop educational materials about conservation needs of shorebirds in New York, and promote habitat protection measures.

Habitat Management:

- ___ As important foraging areas become known, identify potential threats and protect those habitats (ex- beaches, tidal flats, shoals, etc.) from permanent alteration, degradation, or adverse human disturbances. Management may include acquisition, easements, establishing seasonal use restrictions, and posting or fencing, etc. as is currently done for beach-nesting birds.

Habitat Research:

- ___ Conduct field studies to document ecology of transient shorebirds on Long Island, including important food items, habitat use (ex- importance of tidal flats) and time/activity budgets.
- ___ Compile data and input from birders to derive a map showing important shorebird foraging and resting areas in New York.

Other Action:

- ___ Provide technical support, funding, or political support as needed, to further international shorebird conservation efforts.

Population monitoring:

- ___ Identify specific locations, procedures, and observers (volunteer or other) for conducting annual shorebird surveys at 5-10 locations in New York, and initiate surveys as soon as possible.

State Land Unit Management Plan:

- ___ On state-owned or other public lands, ensure that management plans consider shorebird needs and appropriately restrict site development and seasonal uses that may adversely affect critical shorebird foraging areas.

Statewide Management Plan:

- ___ Develop a conservation plan for transient (non-breeding) shorebirds that regularly occur in New York, to include objectives and actions that we can assist with both inside and out of New York State.

VII. References

Howe, M. A., P. H. Geissler, and B. Harrington. 1989. Population trends of North American shorebirds based on the International Shorebird Survey. *Biol. Conserv.* 49:185-199.

Jehl, Jr., J.R., J. Klima and R.E. Harris. 2001. Short-billed Dowitcher (*Limnodromus griseus*), *The Birds of North America Online* (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/564doi:10.2173/bna.564>

Klimkiewicz, M. K. and A. G. Futcher. 1989. Longevity records of North American birds. *Suppl. 1. J. Field Ornithol.* 60:469-494.

Manuwal, D. A. 1967. Observations on a localized duck sickness in the Delta Marsh; summer 1964. Wilson Bull. 79:219-222.

Marks, J. S., R. L. Redmond, P. Hendricks, R. B. Clapp, and R. E. Gill, Jr. 1990. Notes on longevity and flightlessness in Bristle-thighed Curlews. Auk 107:779-781.

Morrison, R. I. G., C. Downes, and B. Collins. 1994. Population trends of shorebirds on fall migration in eastern Canada 1974-1991. Wilson Bull. 106:431-447.

Sherony, D.F. 1998. Short-billed dowitcher, *Limnodromus griseus*. Pages 264-65 in Bull's birds of New York State (E. Levine, ed.). Cornell University Press, Ithaca, NY.

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