

# Species Status Assessment

**Common Name:** Bar-winged Skimmer      **Date Updated:** 2024-08-08  
**Scientific Name:** *Libellula axilena*      **Updated By:** Erin L. White  
**Class:** Insecta  
**Family:** Libellulidae

## Species Synopsis

*(a short paragraph which describes species taxonomy, distribution, recent trends, and habitat in New York):*

Bar-winged Skimmers are on the northern edge of their range extent in NY. They are currently known to occur from Texas eastward and up the Atlantic coast to New York and Massachusetts (NatureServe 2024).

Bar-winged Skimmers are known to inhabit vegetated ponds, vernal pools and wooded slow streams and sloughs (Nikula et al. 2003, Paulson 2011).

The number of new records in recent years since 2005 could reflect heightened interest and survey effort. The species has been observed in southern NY since at least the mid 1990s (NYNHP 2024). The trend is likely stable for NY, though could be increasing as it has been observed in three to nine counties in the last 14 years (Abbott 2024, iNaturalist 2024). Since the mid 1990s, it does not appear to be expanding in range northward in the state and the known distribution is fairly restricted in NY.

## I. Status

### a. Current legal protected Status

i. **Federal:** Not Listed      **Candidate: No**  
ii. **New York:** Not Listed      Unprotected

### b. Natural Heritage Program

i. **Global:**      G5  
ii. **New York:**      S1      **Tracked by NYNHP?**      On Active Tracking List

**Other Ranks:**

NYS 2025 SGCN Status: High Priority Species of Greatest Conservation Need

COSEWIC: Not listed in Canada

IUCN Red List: Least Concern

Northeast Regional SGCN: Not listed; R4 vulnerability, Shared responsibility

**Status Discussion:**

The two sites with breeding behavior confirmed are Duck Pond and Sandy Pond West on Long Island (NYNHP 2024).

Based on new information since 2010 from Odonata Central and iNaturalist, the species likely occurs in three to nine counties in southern NY (Abbott 2024, iNaturalist 2024). Once records from iNaturalist can be confirmed, it is possible the rank might be revised, but it does appear to have remained restricted to southern NY and Long Island since the mid-1990s.

**II. Abundance and Distribution Trends**

Region	Present?	Abundance	Distribution	Time Frame	Listing status or S-Rank	SGCN?
North America	Yes	Unknown	Unknown	Unknown		
Northeastern US	Yes	Unknown	Unknown	Unknown		No
New York	Yes	Unknown	Unknown	Unknown	S1	No
Connecticut	Yes	Unknown	Unknown	Unknown		
Massachusetts	Yes	Unknown	Unknown	Unknown	SNA	
New Jersey	Yes	Unknown	Unknown	Unknown	SNR	
Pennsylvania	Yes	Unknown	Unknown	Unknown	S1S2	Yes
Vermont	No	-	-	-		
Ontario	No	-	-	-		
Quebec	No	-	-	-		

Column options

**Present?:** Yes; No; Unknown; No data; (blank) or Choose an Item

**Abundance and Distribution:** Declining; Increasing; Stable; Unknown; Extirpated; N/A; (blank) or Choose an item

**SGCN?:** Yes; No; Unknown; (blank) or Choose an item

## Monitoring in New York

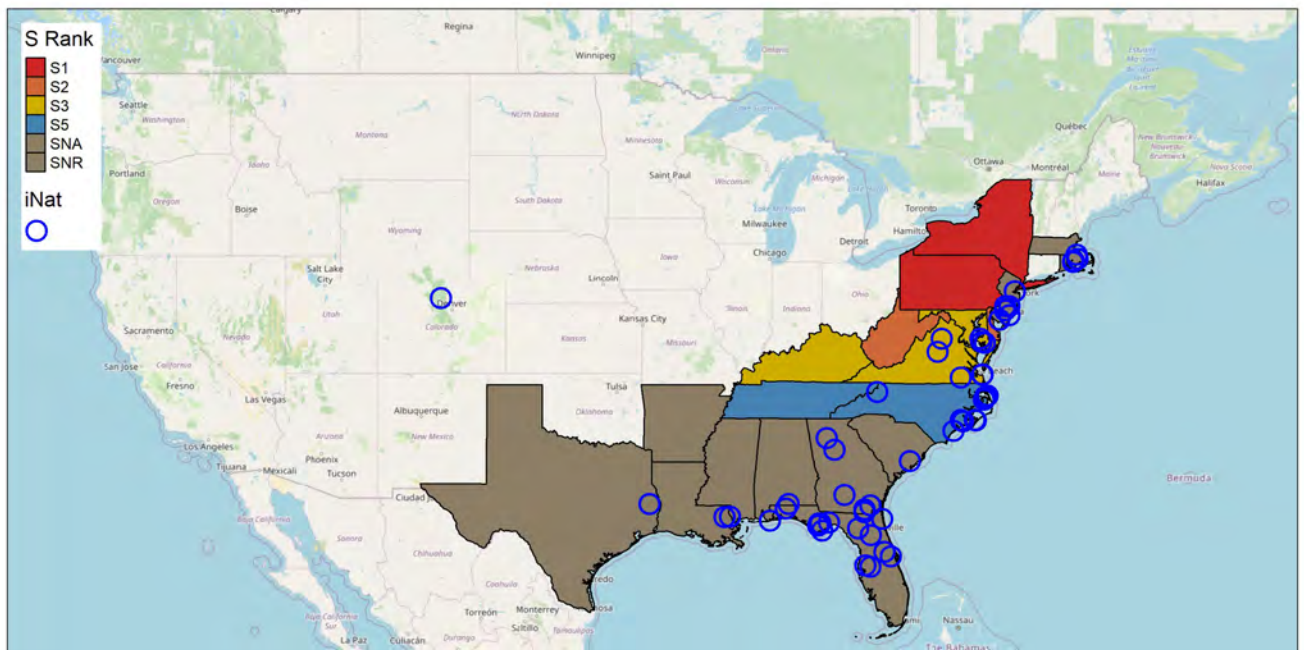
*(specify any monitoring activities or regular surveys that are conducted in New York):*

The New York State Dragonfly and Damselfly Survey was conducted from 2005-2009, but there are no organized, regular monitoring or survey activities directed toward this species or to sites where it has been documented.

## Trends Discussion

*(insert map of North American/regional distribution and status):*

The number of new records in recent years since 2005 could reflect heightened interest and survey effort. The species has been observed in southern NY since at least the mid 1990s (NYNHP 2024). The trend is likely stable for NY, though could be increasing as it has been observed in three to nine counties in the last 14 years (Abbott 2024, iNaturalist 2024). Since the mid 1990s, it does not appear to be expanding in range northward in the state and the known distribution is fairly restricted in NY.



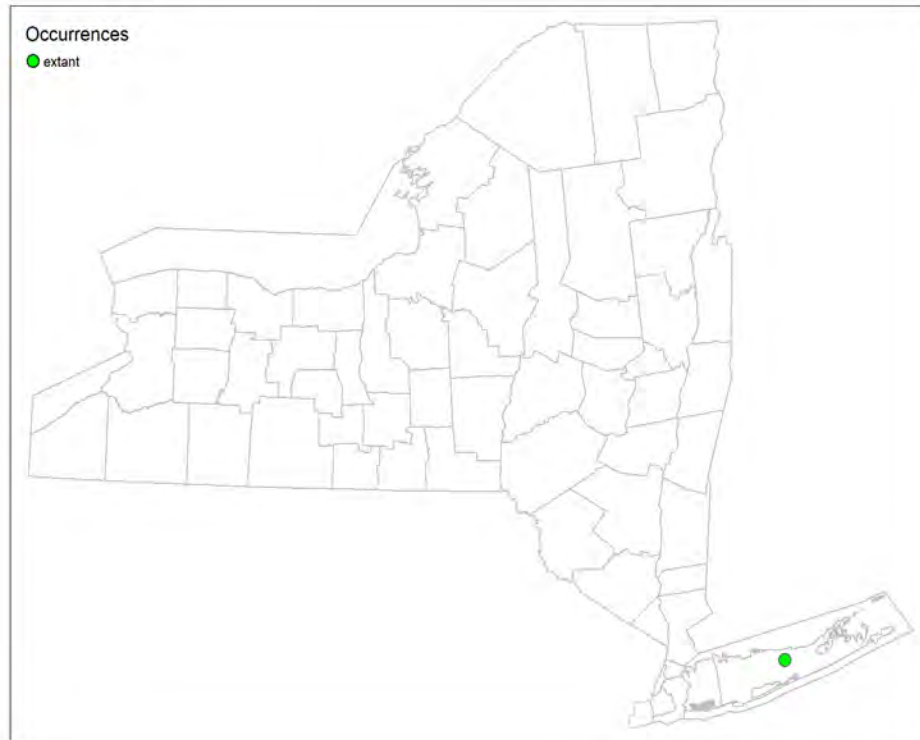
**Figure 1:** *Libellula axilena* North American distribution. Points show research-grade iNaturalist observations.



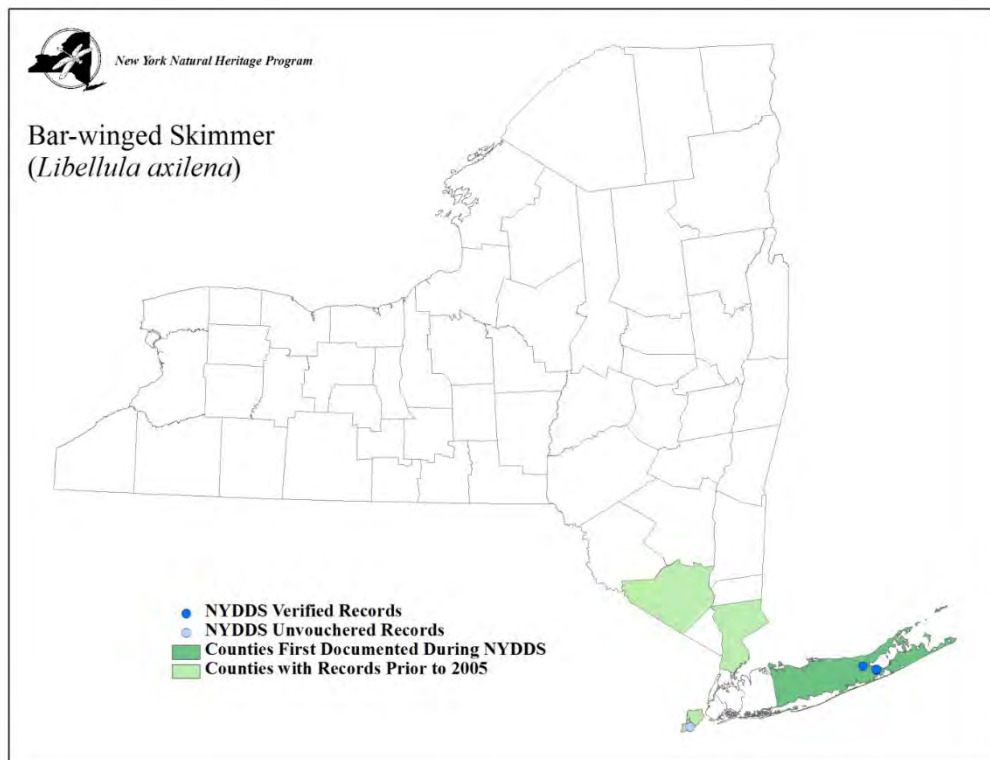
**Figure 2:** *Libellula axilena* regional distribution as reported at <https://northeastwildlifediversity.org/rsgcn> and found in a regional odonate project.

### III. New York Rarity

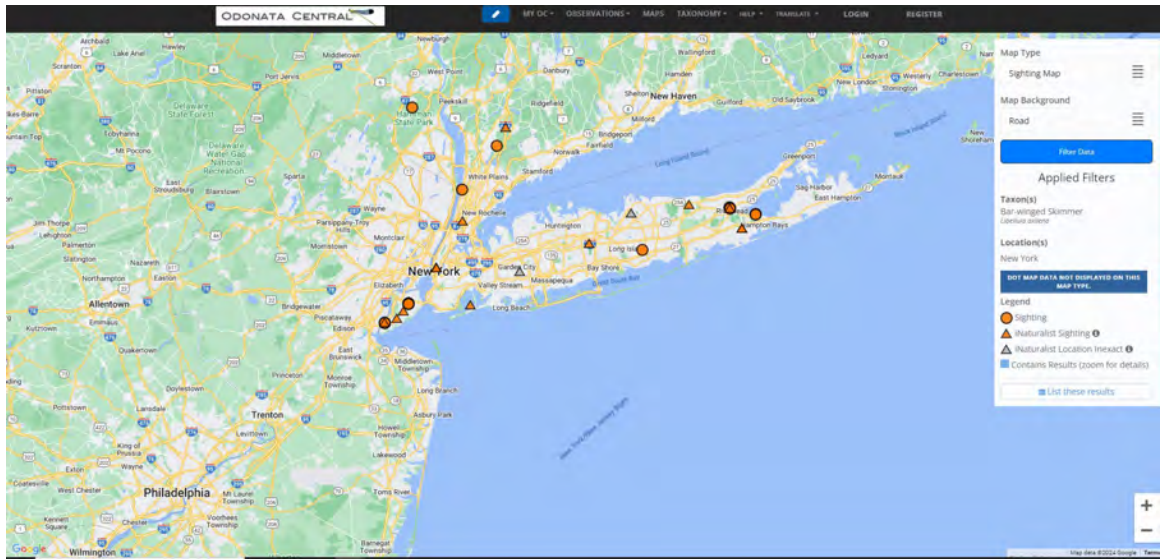
*(provide map, numbers, and percent of state occupied)*



**Figure 3:** NYS distribution for *Libellula axilena* based on element occurrence data.



**Figure 4:** NYS distribution for *Libellula axilena* based on NYDDS (White et al. 2010).



**Figure 5:** NYS distribution for *Libellula axilena* based on OdonataCentral (includes iNaturalist locations (Abbott 2024).

Table 1. Number of observations of *Libellula axilena* grouped by the dates known to be extant (repeat observations (element occurrences) include the years spanning first observation to last observation) and the number and percent of total of counties these observations fall within for New York State.

Years	Observations	# of Counties	% of counties in State
pre-2005	7	4	6.5
2005-2009	5	1	1.6
2010-present	5 vetted	3-9	4.8-14.5

**Details of historic and current occurrence:**

Pre-2005, Bar-winged Skimmer is known from Orange, Westchester, Richmond, and Suffolk Counties. There were three records from Suffolk County during the NYDDS (2025-2029) without confirmed breeding at the sites (Cranberry Pond, Grass Pond, wetland at Rt. 24 and Sears) (White et al. 2010).

Post 2010, they were confirmed breeding at Duck Pond and Sandy Pond West in Suffolk County (NYNHP 2024). There are vetted records post-2010 from Orange, Westchester and Richmond counties as well (Abbott 2024). There are 68 observations in iNaturalist, which I have not confirmed, many of which are not research grade from nine counties in southern NY and Long Island (Bronx, Kings, Dutchess, Nassau, New York, Queens, Richmond, Suffolk, and Westchester, iNaturalist 2024). These should be reviewed as this species could easily be mistaken for a few common species. It is also uncertain whether these represent breeding populations, though the species is likely established in southern NY.

Percent of North American Range in NY	Classification of NY Range	Distance to core population, if not in NY
1-25%	Periferal	~1000 mi

*Column options*

**Percent of North American Range in NY:** 100% (endemic); 76-99%; 51-75%; 26-50% 1-25%; 0%; Choose an item

**Classification of NY Range:** Core; Peripheral; Disjunct; (blank) or Choose an item

## IV. Primary Habitat or Community Type

*(from NY crosswalk of NE Aquatic, Marine, or Terrestrial Habitat Classification Systems):*

Coastal plain ponds

Warm-Cool, Oligo-Mesotrophic, Acidic

### Habitat or Community Type Trend in New York

Habitat Specialist?	Indicator Species?	Habitat/ Community Trend	Time frame of Decline/ Increase
Unknown	Unknown	Unknown	Unknown

*Column options*

**Habitat Specialist and Indicator Species:** Yes; No; Unkown; (blank) or Choose an item

**Habitat/Community Trend:** Declining; Stable; Increasing; Unkown; (blank) or Choose an item

### Habitat Discussion:

Bar-winged Skimmers are known to inhabit vegetated ponds, vernal pools and wooded slow streams and sloughs (Nikula et al. 2003, Paulson 2011).

## V. Species Demographics and Life History

Breeder in NY?	Non-breeder in NY?	Migratory Only?	Summer Resident?	Winter Resident?	Anadromous/ Catadromous?
Yes	Yes	No	Yes	Yes	No

*Column options*

**First 5 fields:** Yes; No; Unknown; (blank) or Choose an item

**Anadromous/Catadromous:** Anadromous; Catadromous; (blank) or Choose an item

### Species Demographics and Life History Discussion

*(include information about species life span, reproductive longevity, reproductive capacity, age to maturity, and ability to disperse and colonize):*

Vetted NY records have been found from May-July (Abbott 2024, NYNHP 2024, White et al. 2010) but the species is known to fly in MA through August (Nikula et al. 2003).

## VI. Threats

Threat Level 1	Threat Level 2	Threat Level 3	Spatial Extent	Severity	Immediacy	Trend	Certainty
7. Natural System Modifications	7.2 Dams & Water Management/Use	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
9. Pollution	9.3 Agricultural & Forestry Effluents	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

**Table 2.** Threats to *Libellula axilena*.

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

**Yes:** ✓

**No:**

**Unknown:**

If yes, describe mechanism and whether adequate to protect species/habitat:

The Freshwater Wetlands Act provides protection for wetlands greater than 12.4 acres in size under Article 24 of the NYS Conservation Law. Possibly take out – not in brackish waters and I don't think any occurrences fall into tidal areas. This only covers a portion of habitat used by this species and does not protect the habitat, nor the species, enough.

This species' coastal plain pond habitat on Long Island is threatened by the introduction of grass carp, alterations to hydrology and water quality, as well as herbicides used to clear aquatic weeds from ponds. The most significant threat to their hydrology comes from commercial and residential development causing increases in the demand for fresh water. This results in drawdowns of the water table, altering the hydroperiod and generally diminishing the pond extent (NYNHP 2024). Upstate, the threats to this species' eutrophic pond habitat appear to be slight, especially because it seems to occupy a variety of different types of ponds.

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

The most important management concern for coastal plain pond habitats is the maintenance of a natural hydrologic regime and good water quality. Water supplies for new development and ditching, draining or impoundment activities should be weighed carefully. Storm water run-off, herbicide and pesticide use should also be minimized or eliminated in the vicinity of ponds. Where practical, wide (> 100') vegetated buffers should be managed to reduce storm-water, pollution, sediment and nutrient run-off and provide shading and roosting sites. Habitat alteration within the wetland and surrounding landscape should be minimized (NYNHP 2024).

The Comprehensive Wildlife Conservation Strategy (NYSDEC 2005) includes recommendations for the following actions for odonates of lakes and ponds, and for comet darter in particular.

**Habitat monitoring:**

\_\_\_\_\_ Support and encourage habitat monitoring efforts that would complete the baseline assessment of habitat quality and threats.

**Habitat research:**

\_\_\_\_\_ Support and encourage research projects that will help define preferred habitat in order to guide future monitoring, restoration and habitat protection efforts.

**Life history research:**

\_\_\_\_\_ In some locations, the comet darter is thought to be either episodic or migratory with many of the sight records being from locations that do not support actual populations where the larvae over winter. However, it is clearly resident in at least one location in Albany County where over-wintering larvae have been documented. Surveys for this species need to take this situation into account and incorporate larval sampling. This will add to our knowledge of the life history of this species.

**New regulation:**

\_\_\_\_\_ Recommendations for official state endangered, threatened, and special concern listing are an anticipated result of the statewide inventory. It is expected that one or more of these species may be recommended for listing and officially adding these species to the list would constitute a specific action.

**Population monitoring:**

\_\_\_\_\_ Conduct surveys to obtain repeatable, relative abundance estimates for these species at known sites and newly discovered sites where access permission to conduct surveys is obtained.

Table 2. Recommended conservation actions for *Libellula axilena*.

Action Category	Action
Land/water protection	1.1. Site/area protection
Land/water protection	1.2. Resource & habitat protection
Land/water management	2.1. Site/area management
Land/water management	2.2. Invasive/problematic species control
Land/water management	2.3. Habitat & natural process restoration
Education & awareness	4.2. Training
Education & awareness	4.3. Awareness & communications
Law & policy	5.2. Policies and regulations

**VII. References**

**This SSA drew heavily from these resources:**

New York Natural Heritage Program, State University of New York College of Environmental Science and Forestry. 2023. Element Occurrence and Element Dataset. Albany, New York. [Exported 12/14/2023].

NatureServe. 2023. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. <http://www.natureserve.org/explorer>. [Accessed 12/14/2023].

Additional references:

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Donnelly, T. W. 1992. The odonata of New York State. *Bulletin of American Odonatology*. 1(1):1-27.

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Lam, E. 2004. *Damselflies of the northeast: A guide to the species of eastern Canada and the northeastern United States*. Biodiversity books, Forest Hills, New York. 96 pp.

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Nikula, B., J. Loose, and M. Burne. 2003. *A field guide to the dragonflies and damselflies of Massachusetts*. Massachusetts Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program.

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White, E.L., J.D. Corser, P.D. Hunt, P. DeMaynadier, and M.D. Schlesinger. 2015. Prioritizing Odonata for conservation action in the northeastern USA. *Freshwater Science* (34): 1079-1093.

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