

# Species Status Assessment

**Common Name:** a leafcutter bee      **Date Updated:** 2024-06-28  
**Scientific Name:** *Megachile georgica*      **Updated By:** Erin L. White  
**Class:** Insecta  
**Family:** Megachilidae

## Species Synopsis

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

*Megachile georgica* is currently known to be distributed from Texas eastward in the United States and also northward to New York (NatureServe 2024, DiscoverLife 2024).

*Megachile georgica* is known from a single location in Saratoga County (White et al. 2022). Recent survey efforts have expanded the known range of this species northward to New York. This probably indicates a recent range expansion, but could also simply have been due to increased attention with our ESNPS efforts. There may be additional locations in the state, but the species is rare and currently confirmed from one location.

In the southern coastal part of its range, it is known from pine and scrub barrens habitat (NatureServe 2024). In NY, it is known from a location with grassland and hardwood swamp habitat nearby (Gawler 2008, White et al. 2022).

## I. Status

### a. Current legal protected Status

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

### b. Natural Heritage Program

- i. **Global:**      G4  
ii. **New York:**      S1      **Tracked by NYNHP?**      On Active Tracking List

### Other Ranks:

-New York 2025 SGCN status: High Priority Species of Greatest Conservation Need

- COSEWIC: Not listed in Canada
- IUCN Red List: Not assessed by IUCN Red List
- Northeast Regional SGCN: Not listed

**Status Discussion:**

*Megachile georgica* is known from a single location in Saratoga County (White et al. 2022).

**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		
New York	Yes	Unknown	Unknown	Unknown	S1	No
Connecticut	No	-	-	-		
Massachusetts	No	-	-	-		
New Jersey	No	Unknown	Unknown	Unknown	SNR	
Pennsylvania	No	-	-	-		
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**

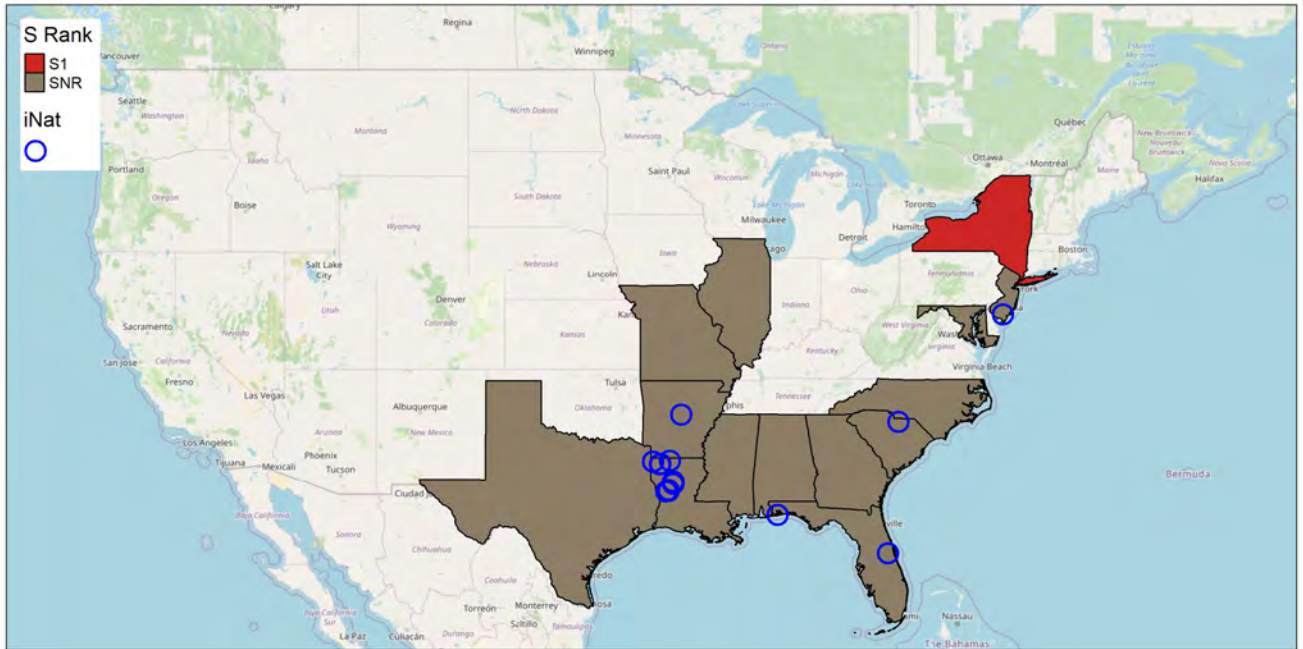
*(specify any monitoring activities or regular surveys that are conducted in New York):*

The Empire State Native Pollinator Survey (ESNPS) was conducted from 2017-2021, but there are no organized, regular monitoring or survey activities directed toward this species or to sites where they have been documented. Some regular monitoring may occur at protected sites that Heritage staff revisit if they occur on state properties, as part of OPRHP or State Lands inventory work.

**Trends Discussion**

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

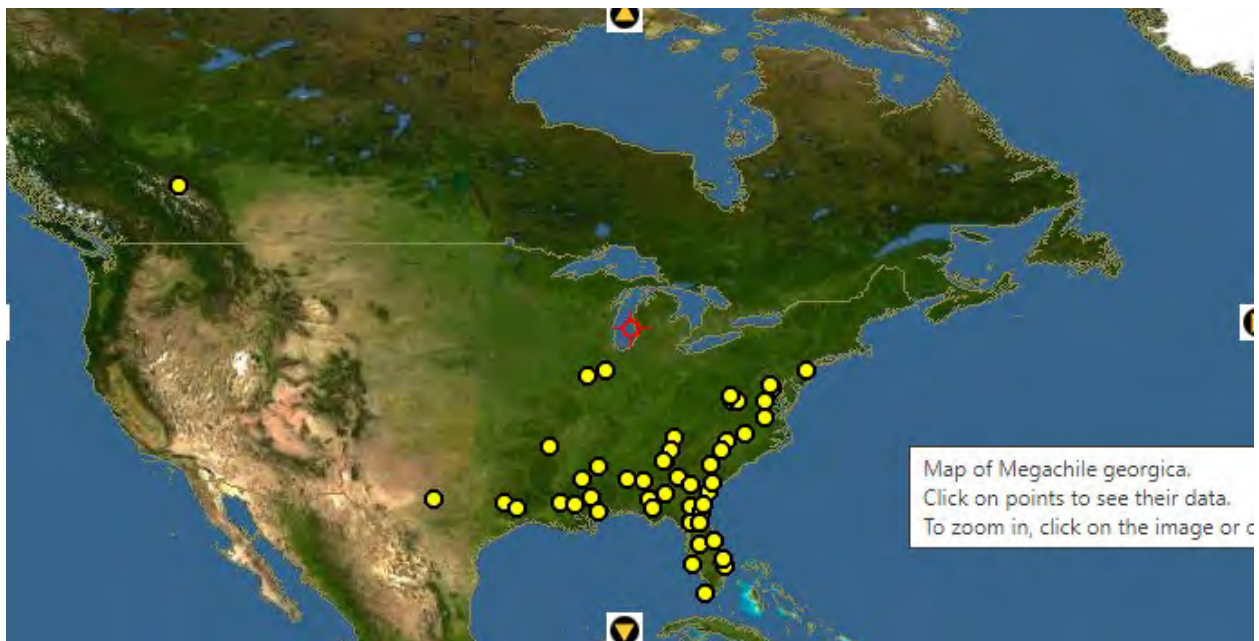
Recent survey efforts have expanded the known range of this species northward to New York. This probably indicates a recent range expansion, but could also simply have been due to increased attention with our ESNPS efforts. There may be additional locations in the state, but the species is rare and currently confirmed from one location.



**Figure 11.** *Megachile georgica* North American distribution. Points show research-grade iNaturalist observations.



**Figure 22.** *Megachile georgica* regional distribution as reported at <https://northeastwildlifediversity.org/rsgcn> .



**Figure 3.** *Megachile georgica* distribution (DiscoverLife 2024).

### III. New York Rarity

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

Years	Observations	# of Counties	% of counties in State
Pre-2000	0	0	0.0
2000-2023	1	1	1.6

Table 1. Number of observations of *Megachile georgica* 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.

#### Details of historic and current occurrence:

The species was first discovered in 2020 in NYS (White et al., 2022). It is known from one location in Saratoga County.

If it occurs in 1/62 counties, that is very roughly about 1.6 % of the state, though the occupied area of those counties is rather small. There are likely additional undocumented populations in NY and the % of the state can be estimated to be 1-2% currently.

Percent of North American Range in NY	Classification of NY Range	Distance to core population, if not in NY
1-25%	Peripheral	~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):

The single NY location indicated grassland and hardwood swamp habitat nearby

#### Habitat or Community Type Trend in New York

Habitat Specialist?	Indicator Species?	Habitat/ Community Trend	Time frame of Decline/ Increase
No	No	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:

In the southern coastal part of its range, it is known from pine and scrub barrens habitat (NatureServe 2024). In NY, it is known from a location with grassland and hardwood swamp habitat nearby (Gawler 2008, White et al. 2022).

## 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):*

*Megachile* bees are generally stem/cavity nesters (NatureServe 2024). *Megachile georgica* has been observed from March to November throughout its range (Discover Life 2024). The NY specimen was observed in mid-August (White et al. 2022).

## VI. Threats

Threat Level 1	Threat Level 2	Threat Level 3	Spatial Extent	Severity	Immediacy	Trend	Certainty
2. Agriculture & Aquaculture	2.1 Annual & Perennial Non-Timber Crops	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
5. Biological Resource Use	5.3 Logging & Wood Harvesting	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
7. Natural System Modifications	7.1 Fire & Fire Suppression	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
8. Invasive & Other Problematic Species	8.1 Invasive Non-Native Plants & Animals	8.1.2 Terrestrial plants	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
8. Invasive & Other Problematic Species	8.4 Pathogens	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
9. Pollution	9.3 Agricultural & Forestry Effluents	9.3.3 Herbicides & pesticides	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
11. Climate Change	11.3 Changes in Temperature Regimes	11.3.3 Gradual temperature change (warmer winters result in fewer bees)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
11. Climate Change	11.4 Changes in Precipitation & Hydrological Regimes	11.4.2 Droughts (solitary bees more sensitive to drought)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

**Table 2.** Threats to *Megachile georgica*.



Action Category	Action	Description
A.2 Direct Species Management	A.2.0.0.0 Direct Species Management	Invasive/problematic species control
B.3 Outreach	B.3.1.4.0 Public outreach and information	Awareness and communications
C.6 Design and Plan Conservation	C.6.0.0.0 Design and Plan Conservation	Site/area protection
C.6 Design and Plan Conservation	C.6.0.0.0 Design and Plan Conservation	Resource & habitat protection
C.6 Design and Plan Conservation	C.6.5.1.3 Develop a conservation, management, or restoration plan for protected private lands	Habitat & natural process restoration
C.7 Legislative and Regulatory Framework or Tools	C.7.0.0.0 Legislative and regulatory framework or tools	Policies and regulations
C.9 Education and Training	C.9.0.0.0 Education and Training	Training

**Table 3.** Recommended conservation actions for *Megachile georgica*.

**VII. References**

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

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Schweitzer, D.F., N.A. Capuano, B.E. Young and S.R. Colla. 2012. Conservation and management of North American bumble bees. NatureServe, Arlington, Virginia, and USDA Forest Service, Washington, D.C. 17 pp.

White, Erin L., Matthew D. Schlesinger, and Timothy G. Howard. 2022. The Empire State Native Pollinator Survey (2017-2021). New York Natural Heritage Program. Albany, NY.

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