Common Name: Two-spotted lady beetle SGCN – High Priority

Scientific Name: Adalia bipunctata

Taxon: Beetles

Federal Status: Not Listed Natural Heritage Program Rank:

New York Status: Not Listed Global: Not Ranked New York: Not Ranked

Tracked: No

Synopsis:

Adalia bipunctata can be found in a variety of habitats as long as aphids or other small, soft-bodied insects are present (Street 2001). The Lost Ladybug Project (Cornell University 2013) reported A. bipunctata in gardens, yards/backyards, and woods/trees (non-orchard) in New York.

A. bipunctata is the only Adalia species in North America and was once considered the second most common lady beetle. It is also found in Europe and remains common there. Surveys since the 1980s indicate a population decline for this species, as with several other native lady beetles (Harmon et al. 2007, The Lost Lady Bug Project 2013). Stephens and Losey (2003) stated that this species has rarely been collected in recent years.

Distribution (% of NY where species occurs)		Abundanc (within NY distrib		NY Distribution Trend	NY Abundance Trend
0% to 5%	X	Abundant			
6% to 10%		Common			
11% to 25%		Fairly common		Moderate Decline	Moderate Decline
26% to 50%		Uncommon			
> 50%		Rare	X		

Habitat Discussion:

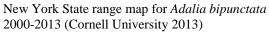
A. bipunctata can be found in a variety of habitats as long as there are soft-bodied insects present, especially aphids. In New York, A. bipunctata have been found in gardens, yards/backyards, and woods/trees (non-orchard) in New York between 2000 and 2013 (Cornell University 2013). Agricultural land has been declining in New York since the 1880s. Between 1940 and 1997, there was a 57% decline in farmed land in New York (Harmon et al. 2007). This species is also known to use wooded habitats. "Stable" was selected above because one habitat type is decreasing (farmland) while the other is increasing (wooded areas).

Primary Habitat Type			
Cultivated Crops			
Developed; Urban/Suburban			

Distribution:

There are six known locations where approximately 25 individuals have been documented in Erie, Monroe, and Kings counties (Cornell University 2013).







A. bipunctata range map (Gordon 1985) prior to decline

Threats to NY Populations						
Threat Category	Threat	Scope	Severity	Irreversibility		
1 Invasive & Other Problematic Species & Genes	Invasive Non-Native/Alien Species (<i>C. septempunctata</i> (C-7) and Asian species, such as <i>Harmonia axyridis</i>)	P	Н	Н		
2 Natural System Modifications	Other Ecosystem Modifications (loss of agricultural land/open habitats)	Р	М	М		
3 Pollution	Agricultural and Forestry Effluents (pesticide use)	Р	М	M		

References Cited:

Cornell University. 2013. "The Lost Ladybug Project." www.lostladybug.org. (Date accessed: December 29, 2013).

Gordon, R. 1985. The Coccinellidae (Coleoptera) of America north of Mexico. Journal of the New York Entomological Society, 93: 1-912.

Harmon, J.P., E. Stephens, and J. Losey. 2007. The decline of native coccinellids (Coleoptera: Coccinellidae) in the United States and Canada. Journal of Insect Conservation. 11: 85-94.

Common Name: Appalachian tiger beetle SGCN – High Priority

Scientific Name: Cicindela ancocisconensis

Taxon: Beetles

Federal Status: Not Listed Natural Heritage Program Rank:

New York Status: Not Listed Global: G3

New York: S2 Tracked: Yes

Synopsis:

The Appalachian tiger beetle is a riparian species of hilly and low mountainous regions (Knisley and Schultz 1997, Leonard and Bell 1999, Pearson et al. 2006). It occurs in the eastern United States and southeastern Canada. This beetle persists in the three main regions from which it was known historically: the Catskills, Adirondacks, and western New York. However, it was not detected in most of the historical locations or in the great majority of new sites within and outside of these regions that were recently surveyed. Whether these results stem from the beetle's extreme rarity or low detectability, or our lack of understanding of suitable habitat, remains to be determined (Schlesinger 2010). The New York Natural Heritage Program database lists 16 occurrences for this species within the state. It is difficult to assess population trends for this species, as historical data gives little sense of population sizes and as new locations probably represent populations that were always present, but had not yet been documented (NYNHP 2013). Short-term trends are also difficult to assess as survey efforts in the past 10 years have focused on the discovery of new locations rather than periodic visits to know sites to determine population level changes (NYNHP 2013).

This beetle does not appear to be threatened with extirpation from the state given its broad distribution across New York and its presence in multiple pristine streams and rivers. However, as a riparian specialist it is vulnerable to recreational activities, cobble and gravel mining, and altered flood regimes from damming (Schlesinger 2010).

Distribution (% of NY where species occurs)		Abundanc (within NY distrib		NY Distribution Trend	NY Abundance Trend
0% to 5%	X	Abundant			
6% to 10%		Common			
11% to 25%		Fairly common		Unknown	Unknown
26% to 50%		Uncommon	X		
> 50%		Rare			

Habitat Discussion:

The Appalachian tiger beetle is a riparian species of hilly and low mountainous regions (Knisley and Schultz 1997, Leonard and Bell 1999, Pearson et al. 2006). It typically inhabits the edges of forested streams and rivers where it occupies sand bars, shaded sand beaches, and gravel areas or cobble bars, but has also been found on dirt roads in the proximity of streams and rivers (Gordon 1939, Knisley and Schultz 1997, Leonard and Bell 1999, Pearson et al. 2006, NYNHP 2011). Areas supporting this species in New York tend to have a substrate mixture of sand, cobble, and some larger rocks with sparse to moderate vegetation of various herbaceous species and saplings of cottonwood (*Populus deltoides*), willow (*Salix* sp.) or sycamore (*Platanus occidentalis*) (NYNHP 2013).

With the exception of Neversink Gorge and some sites on the Cattaraugus Creek, this species has typically been recorded in small numbers of five or fewer individuals. Mawdsley (2007) suspects that this species is likely more common than it appears to be from field surveys. One possible explanation he puts forth is that *C. ancocisconensis* commonly occupies the vegetated zone at the edge of cobble bars rather than the open, sandy spots frequented by other riparian specialists.

Primary Habitat Type				
Floodplain Forest				
Lake and River Beach				
Riparian				

Distribution:

There are 14 recorded occurrences from 1997-2009 and populations are currently known from 10 creeks or rivers in three different regions of the state (Schlesinger 2010, NYNHP 2011).



New York locations for *Cicindela ancocisconensis* (light green: approximate historical locations; dark green: extant locations) and *C. marginipennis* (light blue: approximate historical locations). Gray triangles are locations surveyed where neither species was detected (Schlesinger 2010).

Threats to NY Populations							
Threat Category	Scope	Severity	Irreversibility				
1. Natural System Modification	Dams & Water Management/Use (alteration of natural flooding regimes)	W	М	Н			
2. Energy Production & Mining	Mining & Quarrying (gravel mining)	N	L	L			
3. Human Intrusions & Disturbance	Recreational Activities (off road vehicle use)	W	L	Н			
4. Climate Change & Severe Weather	Storms & Flooding	P	L	V			
5. Natural System Modifications	Other Ecosystem Modifications (channelization as response to increased storms)	W	М	Н			

References Cited:

Gordon, W.M. 1939. The Cicindelidae of New York with reference to their ecology. M.S. thesis, Cornell University, Ithaca, N.Y. 136 pp.

Knisley, C.B. and T.D. Schultz. 1997. The Biology of Tiger Beetles and a Guide to the Species of the South Atlantic States. Virginia Museum of Natural History Special Publication Number 5. Virginia Museum of Natural History: Martinsville, Virginia. 210 pp

Leonard, J.G. and R.T. Bell. 1999. Northeastern tiger Beetles: A Field Guide to tiger Beetles of New England and Eastern Canada. CRC Press. NY, NY. 176 pp.

Mawdsley, J. R. 2007a. Comments on conservation status of the tiger beetle *Cicindela ancocisconensis* T.W. Harris (Coleoptera: Carabidae: Cicindelinae). Proceedings of the Entomological Society of Washington 109:721-724.

New York Natural Heritage Program. 2011. Online Conservation Guide for *Cicindela ancocisconensis*. Available from: http://www.acris.nynhp.org/guide.php?id=7564. Accessed January 5th, 2012. New York Natural Heritage Program. 2013. Element Occurrence Database. Albany, N.Y. Pearson, D.L., C.B. Knisley, and C.J. Kazilek. 2006. A field guide to the tiger beetles of the United States and Canada. Oxford University Press. NY, NY. 227 pp.

Schlesinger, M.D. 2010. Rare Tiger Beetles of New York: Status and Conservation. New York Natural Heritage Program Report.

Common Name: Hairy-necked tiger beetle SGCN – High Priority

Scientific Name: Cicindela hirticollis

Taxon: Beetles

Federal Status: Not Listed Natural Heritage Program Rank:

New York Status: Not Listed Global: G5

New York: S1S2 Tracked: Yes

Synopsis:

The hairy-necked tiger beetle has declined in many parts of its range, mainly due to habitat alteration and recreational pressure on its sandy habitats. This beetle occurs on sandy beaches associated with large lakes (Ontario and Champlain) and the ocean. Beaches can be narrow or wide, with varying amounts of dune vegetation, but usually with some associated dunes intact. This species has a limited state distribution, narrow habitat requirements, and is declining in much of its range, including New York, due to beach front development and overuse of beaches.

Approximately 13 of 40 historical occurrences on Long Island appear still to be occupied, with most having been surveyed recently. Three occurrences along Lake Ontario and two along Lake Champlain are known. No historical information is available for New York's Great Lakes populations.

A primary research need is further description of the morphology, habitat use, and distribution of *C. h. hirticollis* and *C. h. rugifrons*, which apparently overlap at several locations in New York (Schlesinger and Novak 2011, Mawdsley et al. 2013).

Distribution (% of NY where species occurs)		Abundanc (within NY distrib	~	NY Distribution Trend	NY Abundance Trend
0% to 5%	X	Abundant			
6% to 10%		Common			
11% to 25%		Fairly common		Severe Decline	Unknown
26% to 50%		Uncommon	X		
> 50%		Rare			

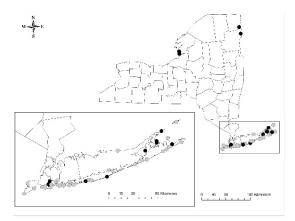
Habitat Discussion:

This beetle occurs on sandy beaches associated with large lakes (Ontario and Champlain) and the ocean. Beaches can be narrow or wide, with varying amounts of dune vegetation, but usually with some associated dunes intact.

Primary Habitat Type
Lake and River Beach
Maritime Dunes

Distribution:

Approximately 13 of 40 historical occurrences on Long Island appear still to be occupied, with most having been surveyed recently. No historical information is available for New York's Great Lakes populations (Schlesinger 2010, Schlesinger and Novak 2011, Mawdsley et al. 2013).



Map source: Schlesinger and Novak (2011). Current (black dots) and approximate former (gray dots) distribution of *Cicindela hirticollis* in New York.

Threats to NY Populations						
Threat Category	Threat	Scope	Severity	Irreversibility		
1. Natural System Modifications	Other Ecosystem Modifications (beach grooming)	R	L	М		
2. Natural System Modifications	Other Ecosystem Modifications (beach stabilization)	R	L	Н		
3. Human Intrusions & Disturbance	Recreational Activities (beach recreation)	P	L	М		
4, Human Intrusions & Disturbance	Recreational Activities (beach driving)	W	Н	Н		
5. Climate Change & Severe Weather	Storms & Flooding (severe storms)	P	L	Н		

References Cited:

Mawdsley, J. R., M.D. Schlesinger, T. Simmons, and O.J. Blanchard. 2013. Status of the tiger beetle Cicindela hirticollis Say (Coleoptera: Cicindelidae) in New York City and on Long Island, New York, USA. Insecta Mundi.Paper 822. http://digitalcommons.unl.edu/insectamundi/822

Schlesinger, M., and P. Novak. 2011. Status and conservation of an imperiled tiger beetle fauna in New York State, USA. Journal of Insect Conservation 15:839-852.

Schlesinger, M.D. 2010. Rare tiger beetles of New York: status and conservation. New York Natural Heritage Program. New York State Department of Environmental Conservation. Albany, NY. 118 pp.

Common Name: Cobblestone tiger beetle SGCN – High Priority

Scientific Name: Cicindela marginipennis

Taxon: Beetles

Federal Status: Not Listed Natural Heritage Program Rank:

New York Status: Not Listed Global: G2
New York: S1

Tracked: Yes

Synopsis:

Isolated populations of cobblestone tiger beetle occur throughout the eastern United States as well as in New Brunswick, Canada. Cobblestone tiger beetles are found on sandy cobble beaches on the upstream sides of islands and along the banks of small to medium sized rivers with swift-flowing water (Dunn 1981, Nothnagle 1993, Leonard and Bell 1999, Pearson et al. 2006). This beetle is extant in 9 rivers in 11 states (NatureServe 2011). Its current range in New York includes portions of the Genesee River and Cattaraugus Creek (Schlesinger 2010). Sites in at least two states have been lost to dams or waterway construction, however not all habitats are currently threatened.

Distribution (% of NY where species occurs)		Abundanc (within NY distrib	~	NY Distribution Trend	NY Abundance Trend
0% to 5%	X	Abundant			
6% to 10%		Common			
11% to 25%		Fairly common		Stable	Unknown
26% to 50%		Uncommon	X		
> 50%		Rare			

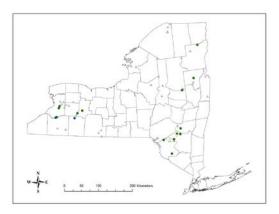
Habitat Discussion:

Cobblestone tiger beetles concentrate in the middle of the cobbled shoreline, 20-50 m away from the water's edge (Nothnagle 1993, 1995; TNC 1995). This area is not heavily scoured or subject to heavy sedimentation and the vegetation is not dense (TNC 1995). The minimum required habitat size is approximately 0.08 ha (0.2 ac) with a sand and vegetation cover of 20-50% and cobble-sized stones ranging in diameter from 2.5-7.6 cm (1-3 in) (Nothnagle 1995). Cobblestone tiger beetles do not typically inhabit gravel or areas with large stones and boulders (Nothnagle 1995).

Primary Habitat Type
Lake and River Beach

Distribution:

Cicindela marginipennis was known historically from three locations in New York: Cattaraugus Creek in Cattaraugus County, the Delaware River at Callicoon in Delaware County (Leng in Leonard 1928), and New York City (Gordon 1939). The Callicoon location has been searched multiple times without success and appears to be extirpated. It is unclear where the New York City record came from and it does not appear to be substantiated by a specimen. It currently occurs in Cattaraugus Creek in Cattaraugus and Erie Counties, and in the Genesee River in Allegheny, Livingston, and Wyoming counties.



New York locations for *Cicindela ancocisconensis* (light green: approximate historical locations; dark green: extant locations) and *C. marginipennis* (light blue: approximate historical locations). Gray triangles are locations surveyed where neither species was detected. Map from Schlesinger (2010).

Threats to NY Populations							
Threat Category	Threat Category Threat			Irreversibility			
1. Natural System Modification	Dams & Water Management/Use (alteration of natural flooding regimes)	W	М	Н			
2. Energy Production & Mining	Mining & Quarrying (gravel mining)	N	L	L			
3. Human Intrusions & Disturbance	Recreational Activities (off road vehicle use)	W	L	Н			
4. Climate Change & Severe Weather	Storms & Flooding	W	L	V			
5. Natural System Modifications	Other Ecosystem Modifications (channelization as response to increased storms)	W	М	Н			
6.Biological Resource Use	Hunting & Collecting Terrestrial Animals (collecting)	P	L	Н			

References Cited:

Dunn, G. 1981. The tiger beetles of New Hampshire. Cicindela 13(1/2):1-28.

Gordon, W.M. 1939. The Cicindelidae of New York with reference to their ecology. M.S. thesis, Cornell University, Ithaca, N.Y. 136 pp.

New Hampshire Wildlife Action Plan. Species Profile: Cobblestone Tiger Beetle. http://www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/WAP_species_PDFs/Invertibrates/Cobblestone%20Tiger%20Beetle.pdf.

Leonard, J. G. and R. T. Bell. 1999. Northeastern tiger beetles: a field guide to tiger beetles of New England and Eastern Canada. CRC Press, Boca Raton, Florida, USA.

NatureServe. 2011. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available http://www.natureserve.org/explorer. (Accessed: January 5, 2011).

Nothnagle, P. 1993. Status survey of New Hampshire/Vermont populations of the cobblestone tiger beetle (*Cicindela marginipennis*). Report submitted to the U. S. Fish and Wildlife Service, Concord, New Hampshire, USA.

Nothnagle, P. 1995. Survey of the White River for the cobblestone tiger beetle (*Cicindela marginipennis*). Prepared for the Vermont Fish and Wildlife Department, Waterbury, Vermont, USA and the U. S. Fish and Wildlife Service, Hadley, Massachusetts, USA.

The Nature Conservancy. 1995. Conservation plan for Burnaps, Chase, Hart, Johnston, and Walpole Islands, New Hampshire. The Nature Conservancy, Concord, New Hampshire, USA.

Common Name: Northern barrens tiger beetle SGCN – High Priority

Scientific Name: Cicindela patruela patruela

Taxon: Beetles

Federal Status: Not Listed Natural Heritage Program Rank:

New York Status: Not Listed Global: G3T3

New York: S1 Tracked: Yes

Synopsis:

The nominate form of the northern barrens tiger beetle (*Cicindela patruela patruela*) occurs at inland pine barrens in the Midwest, extending southward to Georgia, and northward into southern New England (Pearson et al. 2006). There are only a handful of records from New England (Leonard and Bell 1999). This subspecies was presumed extirpated from New York until its rediscovery in 2004 at Sam's Point Preserve in the Shawangunk Mountains (Ulster County). Although this beetle has not been observed for decades in other reported localities, additional populations may be present elsewhere in the state (NYNHP 2011). Several historic sites were recently surveyed but, despite the presence of apparently suitable habitat at some locations, this species was not found (Schlesinger 2010). The single occurrence of this species in New York makes it highly vulnerable to extirpation, hence its Critically Imperiled state rank (Schlesinger 2010).

Distribution (% of NY where species occurs)		Abundanc (within NY distrib		NY Distribution Trend	NY Abundance Trend
0% to 5%	X	Abundant			
6% to 10%		Common			
11% to 25%		Fairly common		Severe Decline	Severe Decline
26% to 50%		Uncommon			
> 50%		Rare	X		

Habitat Discussion:

This tiger beetle is a habitat generalist throughout the species' range, although it appears to be a specialist within a given geographic region. It has been found in open deciduous woodlands where open ground exists, such as along trails, on outcrops, scree, or talus slopes, or on ridge summit openings dominated by lichens and dry mosses. Willis (2000) reviews habitats for the species as a whole and concludes "one nearly constant soil condition... is consolidated sandy soil nearby, usually covered by mosses" but much of his "oak-pine forest" (probably all in New Jersey) is actually woodlands (NatureServe 2013). Several references note an association with sandstone (Knisley and Schultz 1997).

Primary Habitat Type
Alpine
Oak Forest
Oak-Pine Forest
Pine Barrens
Rocky Outcrop

Distribution:

An apparently substantial population exists at Sam's Point in Ulster County and is likely more widespread than surveys would indicate (Schlesinger 2010). Recent occurrence records are from: Hogencamp Mountain (2008); Lake Awosting (2006); Schunnemunk Mountain (2007); Shawangunk Mountains (2008)- all locations in Orange County; and numerous locations at Sams Point (Sams Point Overlook, West Carriageway Rock Outcrops, East Carriageway 1 and East Carriageway 2, Lake Maratanza Path, Old Carriageway (2004-2007).



New York locations for *Cicindela patruela patruela* (light green: approximate historical locations; dark green: extant location) and *C. unipunctata* (light blue: approximate historical locations) (Schlesinger 2010).

Threats to NY Populations						
Threat Category	Threat	Scope	Severity	Irreversibility		
1. Human Intrusions & Disturbance	Recreational Activities (hiking and biking)	P	L	L		
2. Natural System Modifications	Fire & Fire Suppression (too much or too little fire)	Р	М	М		

References Cited:

Knisley, C.B. and T.D. Schultz. 1997. The Biology of Tiger Beetles and a Guide to the Species of the South Atlantic States. Virginia Museum of Natural History Special Publication Number 5. Virginia Museum of Natural History: Martinsville, Virginia. 210 pp

Leonard, J.G. and R.T. Bell. 1999. Northeastern tiger Beetles: A Field Guide to tiger Beetles of New England and Eastern Canada. CRC Press. NY, NY. 176 pp.

NatureServe. 2013. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available http://www.natureserve.org/explorer. (Accessed: January 4, 2012).

Pearson, D.L., C.B. Knisley, and C.J. Kazilek. 2006. A field guide to the tiger beetles of the United States and Canada. Oxford University Press. NY, NY. 227 pp.

Schlesinger, M.D. 2010. Rare Tiger Beetles of New York: Status and Conservation. New York Natural Heritage Report.

Willis, Harold L. 2000. Collecting notes for *Cicindela patruela* in central Wisconsin. Cicindela 32(3-4): 49-54.

Common Name: Nine-spotted lady beetle SGCN – High Priority

Scientific Name: Coccinella novemnotata

Taxon: Beetles

Federal Status: Not Listed Natural Heritage Program Rank:

New York Status: Not Listed Global: G2

New York: Not Ranked

Tracked: No

Synopsis:

Coccinella novemnotata is a small, oval-shaped insect that ranges from 4.7 to 7 mm. The head is broad with a pale spot between the eyes. Key characteristics for identifying *C. novemnotata* (also known as C-9) include a large ventral pale trapezoidal spot that extends posteriorly as far as the dorsal spot. The elytra have black spots that get smaller in size and in number until the scutellar spot. Typically, there are a total of nine spots, but the number can vary. Sexes are similar.

C. novemnotata is typically found in open landscapes, especially agricultural land. Aphids are a preferred food. Historically, its range included the Nearctic Region of the United States and southern Canada. It was once considered the most common lady beetle in New York and was named the state insect in 1989. Populations have sharply declined since the 1980s. While it's difficult to assign numbers concerning the historical range, there were small studies in the last 100 years that give some indications of the population status. In 1924, a study in Ithaca found that C-9 made up 13% of the Coccinellidae. Another study in 1971 shows a decline with a maximum of one C-9 per 100 stems counted (weekly). Another study on Long Island from 1956-1958 found C-9 represented 19% of the Coccinellidae population in a potato crop. USDA records show that C-9 was not common in the Northeast in the 1980s or early-1990s (Harmon et al. 2007). It has not been found in any Northeastern state except New York in recent years.

Distribution (% of NY where species occurs)		Abundanc (within NY distrib	~	NY Distribution Trend	NY Abundance Trend
0% to 5%	X	Abundant			
6% to 10%		Common			
11% to 25%		Fairly common		Severe Decline	Severe Decline
26% to 50%		Uncommon			
> 50%		Rare	X		

Habitat Discussion:

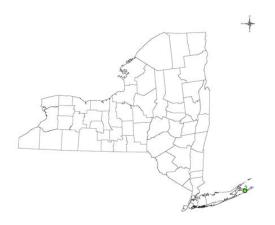
The preferred habitat is open landscape such as grasslands and agricultural land. Preferred agricultural crops include: alfalfa, clover, corn, potatoes, and soybeans. Suburban areas and wooded habitats have also been reported as suitable habitat. The Lost Ladybug Project (Cornell University 2013) reported the following habitats across North America: yard/backyard, woods/trees, garden (fava bean), meadow (non-agricultural- grass/weed), bushes/shrubs, wetland, and soil/rock/sand (not shore).

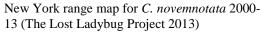
Agricultural land has been declining in New York since the 1880s. Between 1940 and 1997, there was a 57% decline in farmed land in New York (Harmon et al. 2007).

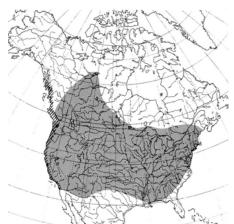
Primary Habitat Type
Cultivated Crops
Native Barrens and Savanna

Distribution:

There is one known location where approximately 21 individuals have been found on a farm in Amagansett in Suffolk County (Cornell University 2013).







North American range map prior to decline (Gordon 1985)

Threats to NY Populations							
Threat Category	Threat	Scope	Severity	Irreversibility			
Invasive & Other Problematic Species & Genes	Invasive Non-Native/Alien Species (<i>C. septempunctata</i> , C-7)	P	М	Н			
Natural System Modifications	Other Ecosystem Modifications (loss of agricultural land/open habitats)	P	М	М			
Pollution	Agricultural and Forestry Effluents (pesticide use)	P	М	М			

References Cited:

Cornell University. 2013. "The Lost Ladybug Project." www.lostladybug.org. (Date accessed: December 29, 2013).

Gordon, R. 1985. The Coccinellidae (Coleoptera) of America north of Mexico. Journal of the New York Entomological Society, 93: 1-912.

Harmon, J.P., E. Stephens, and J. Losey. 2007. The decline of native coccinellids (Coleoptera: Coccinellidae) in the United States and Canada. Journal of Insect Conservation. 11: 85-94.

Common Name: Transverse lady beetle SGCN – High Priority

Scientific Name: Coccinella transversoguttata

Taxon: Beetles

Federal Status: Not Listed Natural Heritage Program Rank:

New York Status: Not Listed Global: Not Ranked New York: Not Ranked

Tracked: No

Synopsis:

Coccinella transversoguttata prefer open habitats, especially old fields, agricultural fields, meadows, and marshes (Graves 2013).

Sharp declines have been noted, especially in the East. At one time this species was common throughout a large portion of North America extending from Labrador to Alaska and south to California. The current range extends from western Canada and western United States into Mexico. It is also found it Europe, Asia (except China,) and Central America. It is absent from the eastern portion of North America with the exception of one 2012 record from Quebec (Cornell University 2013).

Distribution (% of NY where species occurs)		Abundanc (within NY distrib		NY Distribution Trend	NY Abundance Trend
0% to 5%	X	Abundant			
6% to 10%		Common			
11% to 25%		Fairly common		Unknown	Unknown
26% to 50%		Uncommon			
> 50%		Rare	X		

Habitat Discussion:

C. transversoguttata prefer open habitats such as old fields, agricultural fields, meadows, and marshes.

Primary Habitat Type			
Cultivated Crops			
Native Barrens and Savanna			

Distribution:

Prior to the mid to late 1980s, *C. transversoguttata* was considered common in New York. It has not been found in New York in recent years.



The Ladybug Project (Cornell University 2013)

Threats to NY Populations							
Threat Category	Threat	Scope	Severity	Irreversibility			
1 Invasive & Other Problematic Species & Genes	Invasive Non-Native/Alien Species (<i>C. septempunctata</i> and <i>Harmonia axyridis</i> - resource competition, possible inbreeding)	P	М	Н			
2 Natural System Modifications	Other Ecosystem Modifications (loss of agricultural land/open habitats)	Р	М	М			
3 Pollution	Agricultural and Forestry Effluents (pesticide use)	P	М	М			
4 Invasive & Other Problematic Species & Genes	Invasive Non-Native/Alien Species (hybridization with)	Р	Н	V			

References Cited:

Cornell University. 2013. "The Lost Ladybug Project." www.lostladybug.org. (Date accessed: December 29, 2013).

Graves, D. 2013. "Coccinella transversoguttata" (On-line), Animal Diversity Web. Accessed January 16, 2014 at http://animaldiversity.ummz.umich.edu/accounts/Coccinella_transversoguttata/

Common Name: Three-banded lady beetle SGCN – High Priority

Scientific Name: Coccinella trifasciata

Taxon: Beetles

Federal Status: Not Listed Natural Heritage Program Rank:

New York Status: Not Listed Global: Not Ranked New York: Not Ranked

Tracked: No

Synopsis:

Coccinella trifasciata is a small insect that ranges from 4.0 to 5.0 mm. Males have a pale head with the exception of a black band across the base. Females have a black head with two pale spots. The anterior margin of the pronotum is typically pale with a large ventral pale spot that extends posteriorly as far as the dorsal spot. Elytra have three transverse black bands that are interrupted at the suture (Gordon 1985).

Since the beginning of the Lost Ladybug Project, *C. trifasciata* has been found in meadows/fields (non-agricultural), gardens, yards, hayfields, and bramble fruits in New York (Cornell University 2013).

Distribution (% of NY where species occurs)		Abundanc (within NY distrib		NY Distribution Trend	NY Abundance Trend
0% to 5%		Abundant			
6% to 10%	X	Common			
11% to 25%		Fairly common		Moderate Decline	Moderate Decline
26% to 50%		Uncommon			
> 50%		Rare	X		

Habitat Discussion:

Extensive habitat data are not available. Recent observations report the following habitats in New York: meadows/fields (non-agricultural), gardens, yards, hayfields, and bramble fruits (Cornell University 2013).

Primary Habitat Type
Commercial/Industrial and Residential

Distribution:

Twenty *C. trifasciata* have been found at twelve sites in six counties in central/western and northern New York.



New York range map for *C. trifasciata* 2000-13 (Cornell University 2013)

Threats to NY Populations							
Threat Category	Threat	Scope	Severity	Irreversibility			
1 Invasive & Other Problematic Species & Genes	Invasive Non-Native/Alien Species	P	М	Н			
2 Natural System Modifications	Other Ecosystem Modifications (loss of agricultural land/open habitats)	P	М	М			
3 Pollution	Agricultural and Forestry Effluents (pesticide use)	P	M	М			

References Cited:

Cornell University. 2013. "The Lost Ladybug Project." www.lostladybug.org. (Date accessed: December 29, 2013).

Gordon, R. 1985. The Coccinellidae (Coleoptera) of America north of Mexico. Journal of the New York Entomological Society, 93: 1-912.