

# Species Status Assessment

**Common Name:** Red-headed woodpecker **Date Updated:** January 18, 2024

**Scientific Name:** *Melanerpes erythrocephalus* **Updated By:** Jed Hayden

**Class:** Aves

**Family:** Picidae

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

Red-headed woodpeckers occur in the eastern two-thirds of the United States; some populations are sedentary while others migrate. They use a variety of open deciduous woodlands with groves of decaying trees. Bull (1964) noted two distinct habitat types in New York: open woods with a park-like character, and open wooded swamps and bottomlands.

Though red-headed woodpeckers have exhibited substantial increases and decreases in population size over the past 200 years, their sharp and severe decline over the last 20 years is alarming. In New York, the second Breeding Bird Atlas documented a 76% decline in occupancy from 1980-85 to 2000-05. Breeding Bird Survey data for New York show declining trends of 9.1% per year since 1980. Trends in the Eastern U.S. are less severe though significant, at 2.4% per year since 1980.

## I. Status

### a. Current legal protected Status

i. **Federal:** None **Candidate:** No

ii. **New York:** Special Concern

### b. Natural Heritage Program

i. **Global:** G5

ii. **New York:** S2?B **Tracked by NYNHP?:** Yes

### Other Ranks:

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

-IUCN Red List: Secure

-Northeast Regional SGCN: Not listed

-Partners in Flight – Priority I

### Status Discussion:

The red-headed woodpecker is a locally uncommon resident and breeder in New York; some individuals migrate, and others are sedentary. Red-headed woodpecker is ranked as Critically Imperiled in Quebec, Vermont, Massachusetts, and Connecticut. It is ranked as Imperiled in New York and New Jersey, and as Apparently Secure in Pennsylvania and Ontario.

## II. Abundance and Distribution Trends

Region	Present?	Abundance	Distribution	Time Frame	Listing status	SGCN?
North America	Yes	Declining	-	2000-2010	None	No
Northeastern US	Yes	Declining	Declining	2000-2010	None	No
New York	Yes	Declining	Declining	1980-2005	Special Concern	Yes
Connecticut	Yes	Declining	Declining	1965-2020	Endangered	Yes
Massachusetts	Yes	Declining	Unknown	1975-2011	None	No
New Jersey	Yes	Declining	Declining	2000-2010	Threatened	Yes
Pennsylvania	Yes	Declining	Declining	1984-2008	None	Yes
Vermont	Yes	Declining	Declining	1976-2007	None	No
Ontario	Yes	Declining	Declining	1981-2005	Special Concern; Threatened Nationally	No
Quebec	Yes	Declining	Declining	1984-2012	Special Concern; Threatened Nationally	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*):

Breeding Bird Atlas

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

Drastic changes in red-headed woodpecker populations have been noted during the past 200 years, with periods of great abundance and periods when extinction seemed imminent (Smith et al. 2000). Breeding Bird Survey data for the Eastern region show a significant decline of 0.8% per year from 2001 to 2011 and a significant decline of 2.4% per year since 1980 (Sauer et al. 2012).

Breeding Bird Survey data for New York show a non-significant decline of 8.8% per year from 2001 to 2011 and a significant decline of 9.1% per year since 1980. The second Breeding Bird Atlas in New York documented a change in occupancy of 76% from 1980-85 to 2000-05. Losses occurred in every ecozone except the Coastal Lowlands, but the broad distribution remained essentially the same.

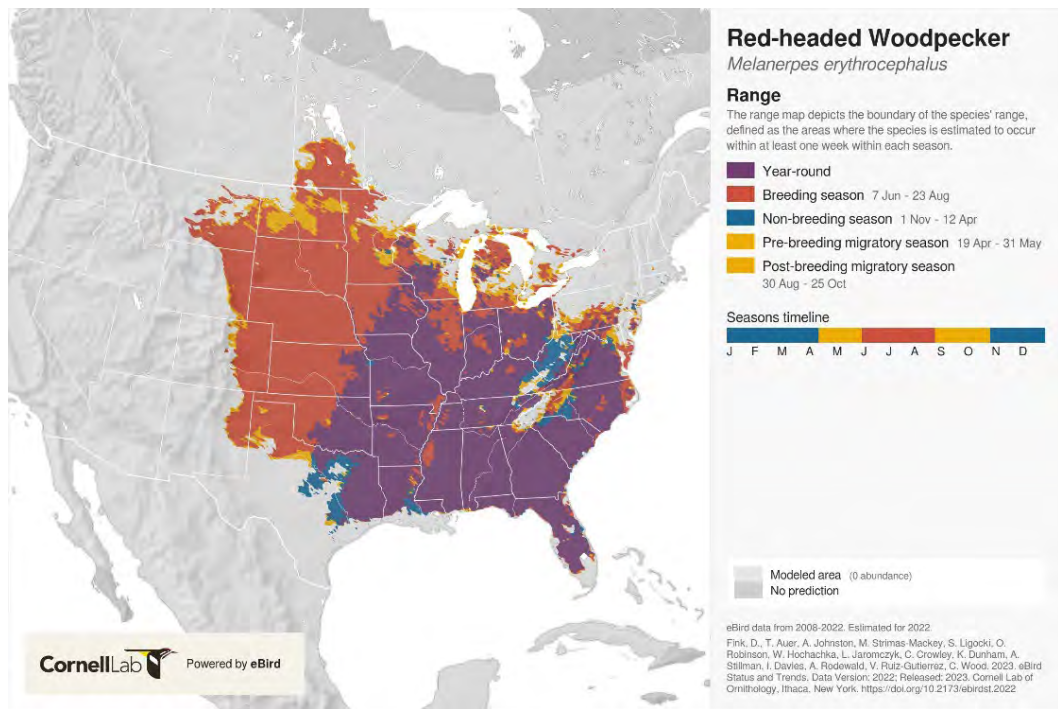
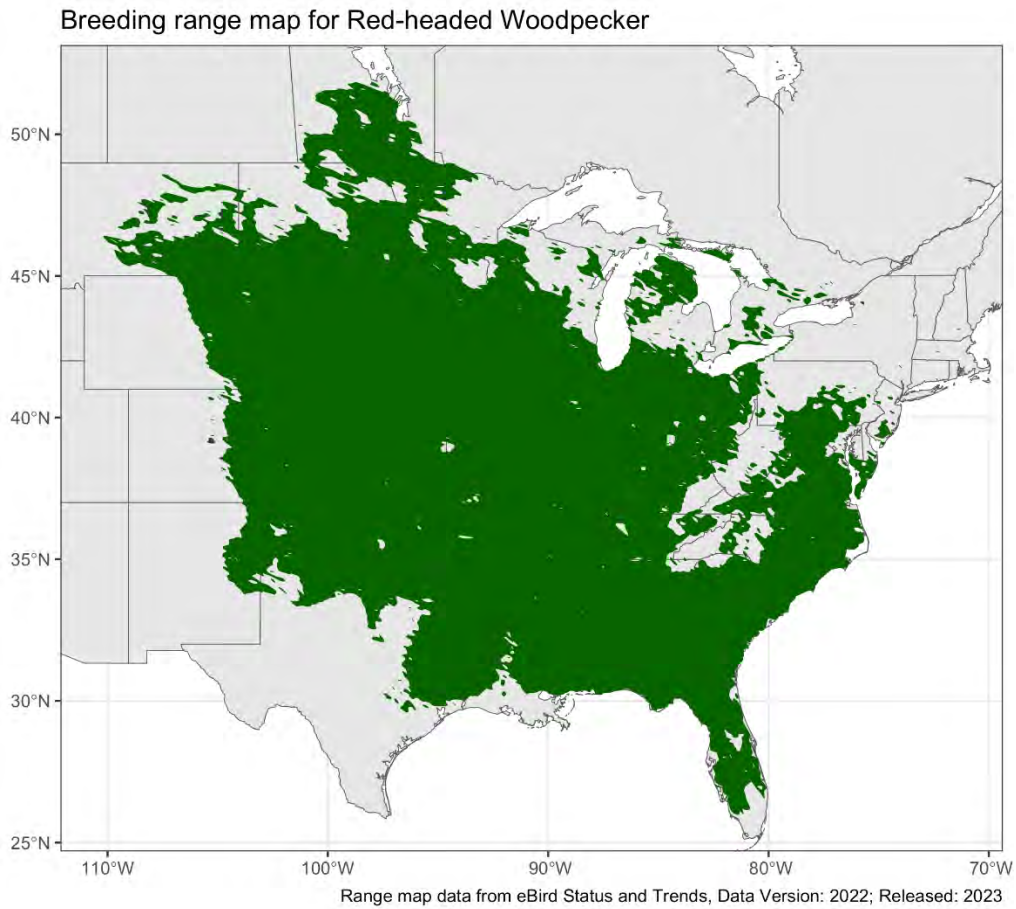
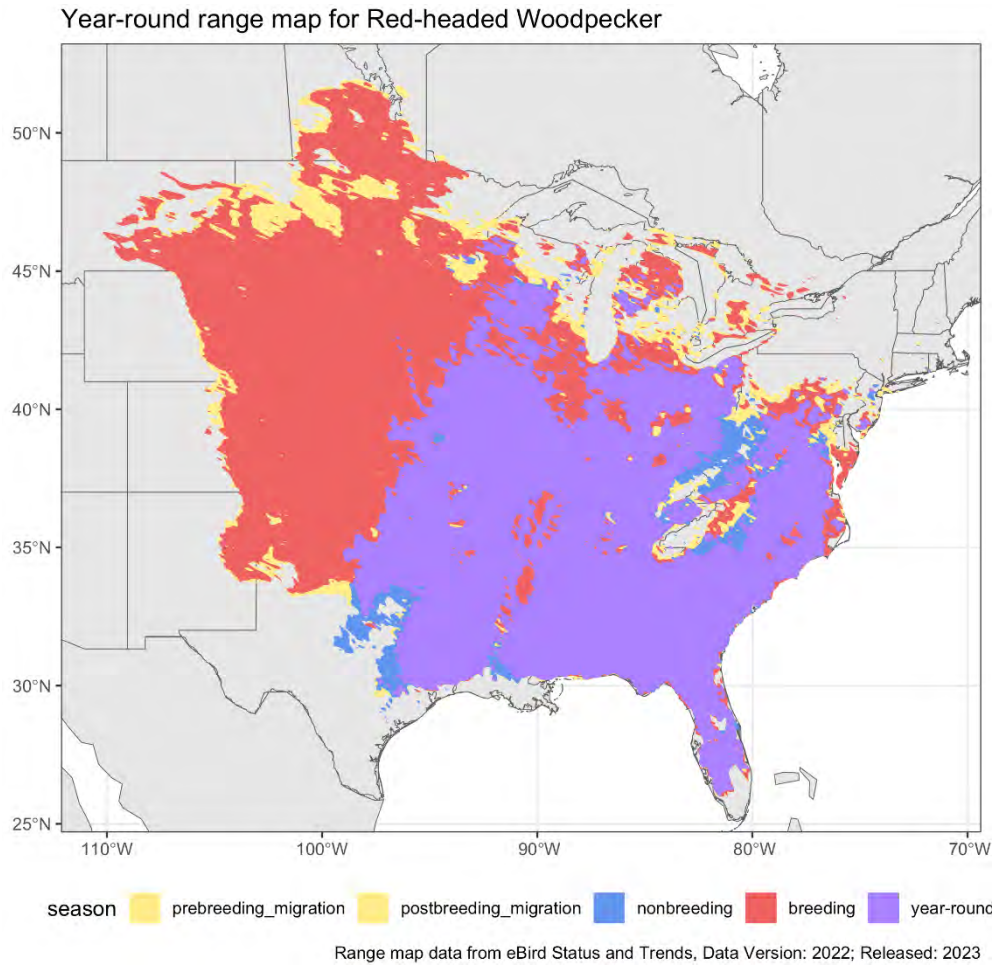


Figure 1. Red-headed woodpecker distribution in North America (eBird)



**Figure 2.** Breeding range of red-headed woodpecker in North America (eBird)



**Figure 3.** Year-round range of red-headed woodpecker (eBird).



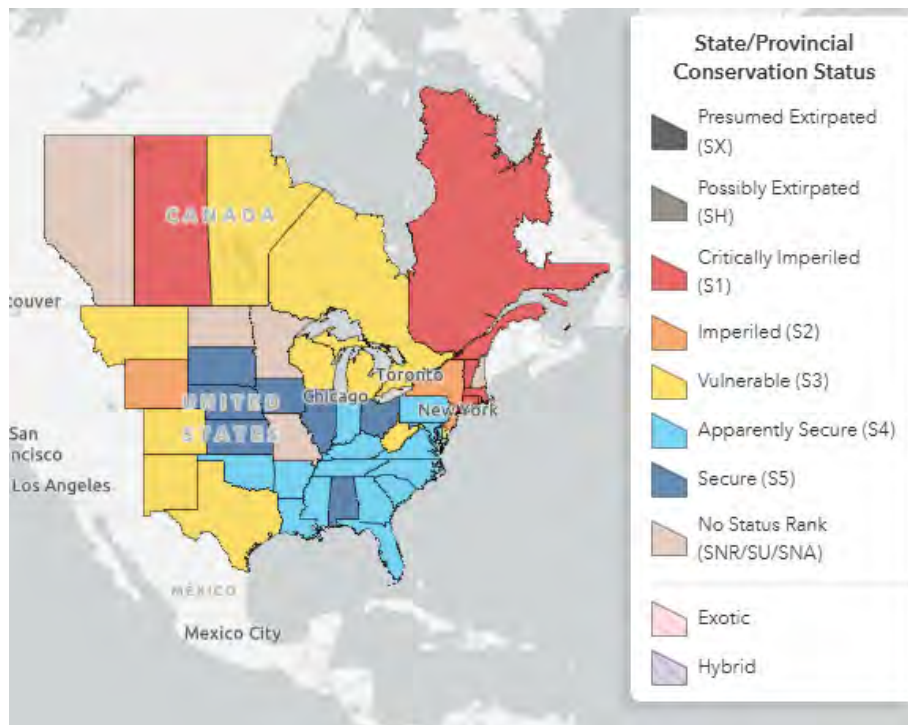


Figure 4. Conservation status of red-headed woodpecker in North America (NatureServe 2024) .

### III. New York Rarity (provide map, numbers, and percent of state occupied)

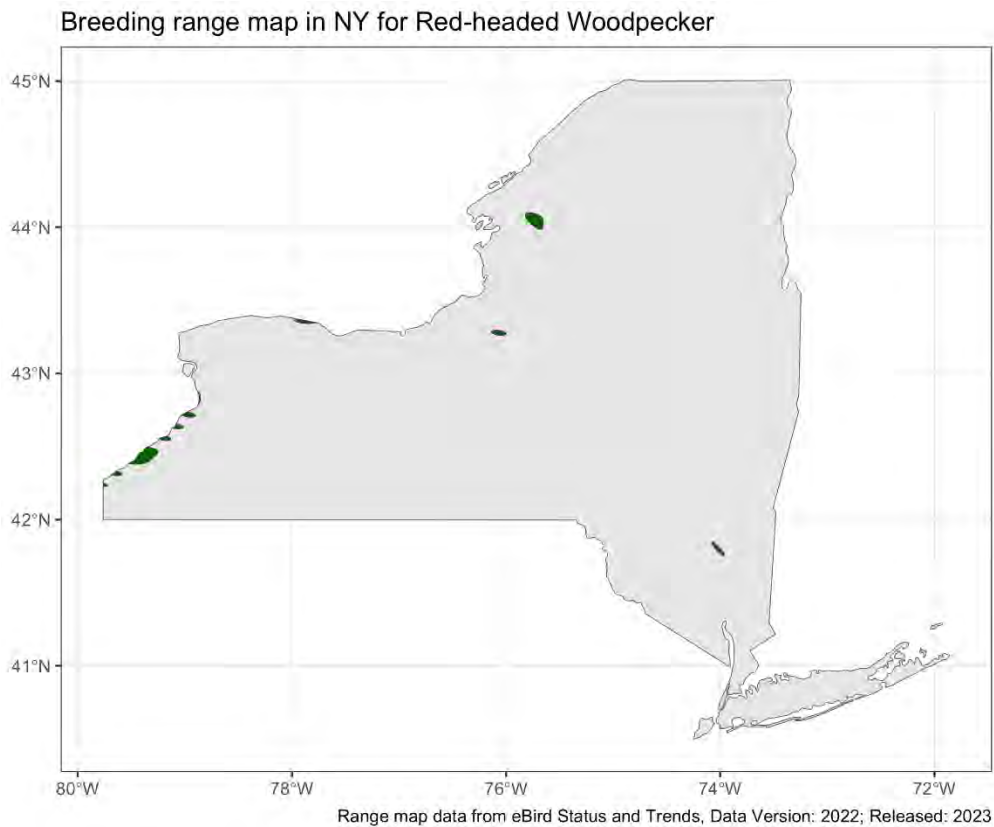
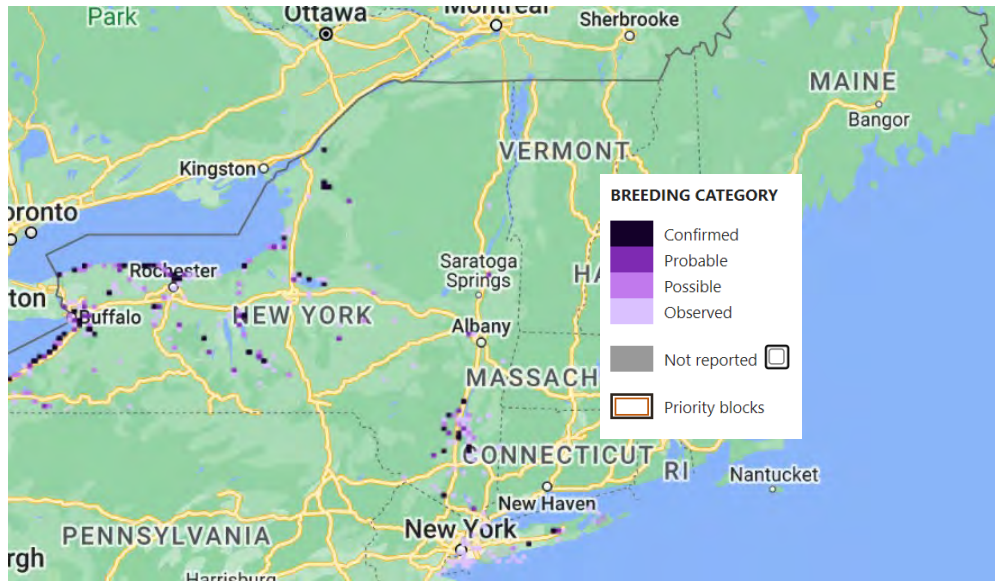
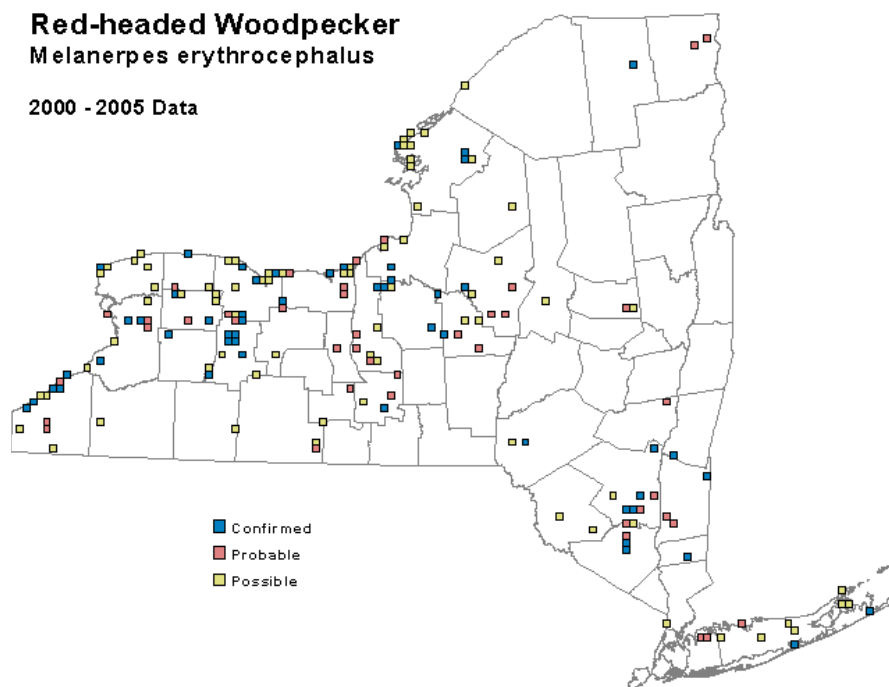


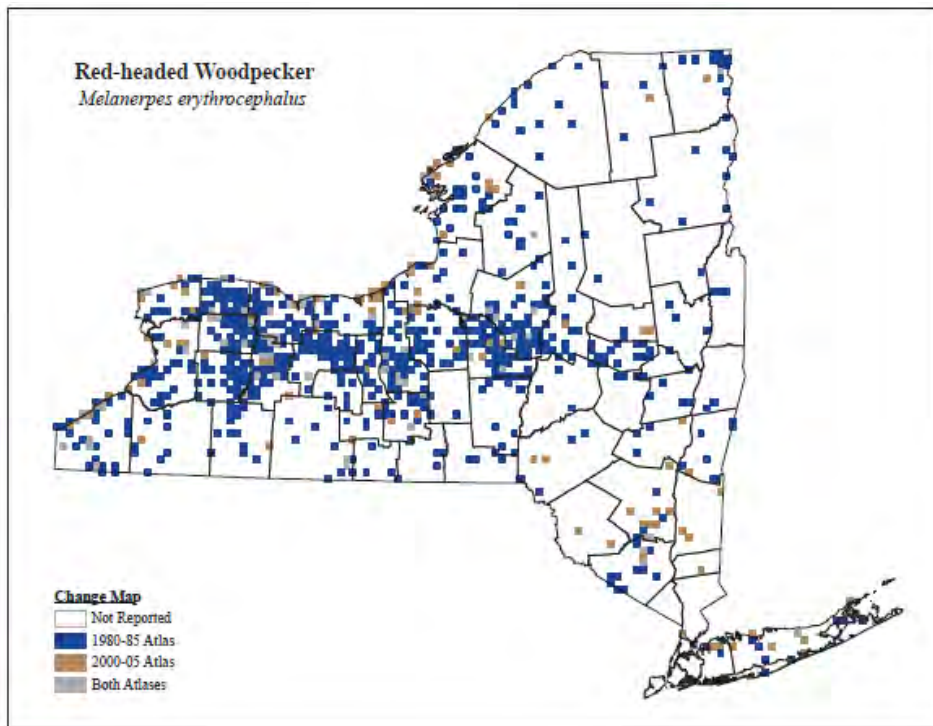
Figure 5. New York breeding range of red-headed woodpecker (eBird).



**Figure 6.** Records of red-headed woodpecker in New York (NYS BBA III Map, 2023)



**Figure 7.** Red-headed woodpecker occurrence in New York State during the second Breeding Bird Atlas (McGowan and Corwin 2008).



**Figure 8.** Change in Red-headed woodpecker occurrence in New York State between the first Breeding Birds Atlas and the second Breeding Bird Atlas (McGowan and Corwin 2008)

**Details of historic and current occurrence:**

The first Breeding Bird Atlas (BBA) (1980-85) documented occupancy in 691 blocks, 13% of the survey blocks statewide (Andrle and Carroll 1988). The second BBA (2000-05) documented occupancy in 167 blocks, 3% of the survey blocks statewide, a decrease of 10% since the first atlas (McGowan and Corwin 2008).

The third BBA (2020-25) is currently underway and utilizes a different number and layout of survey blocks across New York, making direct comparison with the first two Atlases difficult. There were 5,333 blocks in the first and second BBAs, and there are 5,710 blocks in the current BBA, of which 1,815 are considered priority blocks. To date, red-headed woodpecker has been documented in 63 priority blocks, 3.5% of priority blocks statewide during the third BBA (NYS BBA III Overview, 2024).

**New York’s Contribution to Species North American Range:**

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

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):

1. Oak Forest
2. Hardwood Swamp
3. Floodplain Forest
4. Native Barrens and Savanna
5. Mixed Northern Hardwoods
6. Urban and Recreational Grasses

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

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

Column options

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

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

**Habitat Discussion:**

Red-headed woodpeckers are found in a variety of open deciduous woodland habitats where dead and dying trees are available, including groves of beech or oak, orchards, parks, forest edges, and open wooded swamps, as well as parks and open country with scattered trees (Smith et al. 2000).

Bull (1964) notes two distinct habitat types in New York: (1) open woodlands with park-like characteristics such as golf courses and along roadsides with scattered large trees, and (2) open wooded swamps and river bottoms in which dead trees stand in water, such as beaver ponds.

McGowan (2008) noted that the creation of flooded habitat by increasing beaver populations does not appear to have helped populations of red-headed woodpecker.

**V. Species Demographic, and Life History:**

Breeder in NY?	Non-breeder in NY?	Migratory Only?	Summer Resident?	Winter Resident?	Anadromous/Catadromous?
Yes	Choose an item.	Choose an item.	Yes	Yes	Choose an item.

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):

Very little data are available on nesting success (Smith et al. 2000), though the success of fledging at least one young is reported to be 78% (Martin 1995). Studies calculating fledging success reported that 50% to 80% successfully fledged at least one young. The longevity record for red-

headed woodpecker is a bird banded in Michigan that was recovered 9 years, 11 months later (Clapp et al. 1983). Annual adult survivorship has been estimated at 62% (Martin 1995).

**VI. Threats** (from NY 2015 SWAP or newly described):

<b>Threat Level 1</b>	<b>Threat Level 2</b>	<b>Threat Level 3</b>	<b>Spatial Extent</b>	<b>Severity</b>	<b>Immediacy</b>	<b>Trend</b>	<b>Certainty</b>
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.
4. Transportation & Service Corridors	4.1 Roads & Railroads	4.1.2 Railroads	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	7.2 Dams & Water Management/Use	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
7. Natural System Modifications	7.3 Other Ecosystem Modifications	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
8. Invasive & Other Problematic Species	8.2 Problematic Native Plants & Animals	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

**Table 1.** Threats to red-headed woodpecker.

Habitat in urban areas is lost when trees are pruned and dead branches are removed (Pulich 1988). In rural areas, habitat is lost to cutting of firewood, clear-cutting, agricultural development, and channeling of rivers (Ehrlich et al. 1992, Melcher 1998). Other factors contributing to habitat loss in the eastern U.S. include reforestation, the loss of small orchards, the loss of chestnut trees, and the change in agricultural practices that include removal of hedgerows and the use of monoculture.

Bull (1964) noted that the introduced European starling (*Sturnus vulgaris*) is a fierce competitor with red-headed woodpecker for natural nesting cavities, but Smith et al. (2000) noted that red-headed woodpeckers compete successfully with starlings.

Population declines noted during the 19<sup>th</sup> century were attributed to the increased use of automobiles and resulting road kills (Bull 1964), though the impact of this threat on the population is now debated (Smith et al. 2000).

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

Acid rain could be a threat to forest health and therefore, this species suite (NYSDEC 2005).

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

Yes: ü

No: \_\_\_\_\_

Unknown: \_\_\_\_\_

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

Red-headed woodpecker is protected by the Migratory Bird Treaty Act.

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

As with other cavity-nesting birds, availability of snags for nesting and roosting appears to be a factor of prime importance in conservation and management of red-headed woodpeckers, thus programs that focus on the creation or maintenance of snags should be of most benefit. In addition, presence of open area for fly-catching appears important. Fire has positive and negative effects; while burning may create nest snags, it also destroys existing nest snags as well (Smith et al. 2000). Habitat management in the Albany Pine Bush Preserve, which includes burning and cutting, has been beneficial and should be continued.

Low levels of forest management that include patches of light harvesting will benefit ground and shrub nesting species. Some areas of moderate or even aged management would also be beneficial to many species by providing food and cover, although the majority of the forest needs to be in a relatively mature state. Efforts should also include minimizing the effects of fragmentation on habitats due to development, and on implementing population control of white-tailed deer in areas where deer populations are affecting forest regeneration and species composition (NYSDEC 2005).

Research is needed on area-sensitivity and habitat requirements of some species in this suite, and further research should be conducted on the effects of logging on forest interior birds. The public should be educated on the benefits and need for forest management to enhance populations of ground and shrub nesting forest breeding birds on public and private lands (NYSDEC 2005).

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

Action Category	Action	Description
A.1 Direct Habitat Management	A.1.0.0.0 Direct Habitat management	Site/Area management
C.6 Design and Plan Conservation	C.6.5.0.0 Conservation Planning	Site/Area protection 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

**Table 2.** Recommended conservation actions for red-headed woodpeckers

The Comprehensive Wildlife Conservation Strategy (NYSDEC 2005) includes recommendations for the following actions for deciduous/mixed forest birds, which includes red-headed woodpecker.

**Habitat management:**

- \_\_\_\_\_ Minimize the effects of fragmentation of habitats due to human development.
- \_\_\_\_\_ Implement population control of whitetail deer in areas where deer populations are affecting forest regeneration and species composition.

**Habitat research:**

- \_\_\_\_\_ Research effects of logging on "forest interior" birds.

**Other action:**

- \_\_\_\_\_ Educate the public on the benefits and need for forest management to enhance populations of ground and shrub nesting forest breeding birds on public and private lands.
- \_\_\_\_\_ Educate the public on the benefits and need for forest management on public and private lands.

**VII. References**

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