

## Species Status Assessment

**Class:** Birds  
**Family:** Picidae  
**Scientific Name:** *Melanerpes erythrocephalus*  
**Common Name:** Red-headed woodpecker

### Species synopsis:

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 and Legal Protected Status

- i. **Federal** Not Listed **Candidate?** No
- ii. **New York** Special Concern; SGCN

#### b. Natural Heritage Program Rank

- i. **Global** G5
- ii. **New York** S2?B **Tracked by NYNHP?** Yes

#### Other Rank:

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**

**a. North America**

**i. Abundance**

declining     increasing     stable     unknown

**ii. Distribution:**

declining     increasing     stable     unknown

**Time frame considered:** 2000-2010

**b. Regional**

**i. Abundance**

declining     increasing     stable     unknown

**ii. Distribution:**

declining     increasing     stable     unknown

**Regional Unit Considered:** Eastern BBS

**Time Frame Considered:** 2000-2010

**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: \_\_\_\_\_ Endangered \_\_\_\_\_                      SGCN? Yes \_\_\_\_\_

**MASSACHUSETTS**                      **Not Present** \_\_\_\_\_                      **No data** \_\_\_\_\_

**i. Abundance**

\_\_\_\_ declining    \_\_\_\_ increasing                      \_\_\_\_ stable                        X   unknown

**ii. Distribution:**

  X   declining    \_\_\_\_ increasing                      \_\_\_\_ stable                      \_\_\_\_ unknown

Time frame considered: 1975-79 to 2007-11 \_\_\_\_\_

Listing Status: \_\_\_\_\_ Not Listed \_\_\_\_\_                      SGCN? No \_\_\_\_\_

**NEW JERSEY**                      **Not Present** \_\_\_\_\_                      **No data** \_\_\_\_\_

**i. Abundance**

  X   declining    \_\_\_\_ increasing                      \_\_\_\_ stable                      \_\_\_\_ unknown

**ii. Distribution:**

  X   declining    \_\_\_\_ increasing                      \_\_\_\_ stable                      \_\_\_\_ unknown

Time frame considered: 2000-2010 \_\_\_\_\_

Listing Status: \_\_\_\_\_ Threatened \_\_\_\_\_                      SGCN? Yes \_\_\_\_\_



**VERMONT**

Not Present \_\_\_\_\_

No data \_\_\_\_\_

**i. Abundance**

X  declining    \_\_\_ increasing    \_\_\_ stable    \_\_\_ unknown

**ii. Distribution:**

X  declining    \_\_\_ increasing    \_\_\_ stable    \_\_\_ unknown

Time frame considered:  1976-81 to 2003-07

Listing Status:  Not Listed       SGCN?  No

**d. NEW YORK**

No data \_\_\_\_\_

**i. Abundance**

X  declining    \_\_\_ increasing    \_\_\_ stable    \_\_\_ unknown

**ii. Distribution:**

X  declining    \_\_\_ increasing    \_\_\_ stable    \_\_\_ unknown

Time frame considered:  Severe Decline from 1980-85 to 2000-05

**Monitoring in New York.**

None.

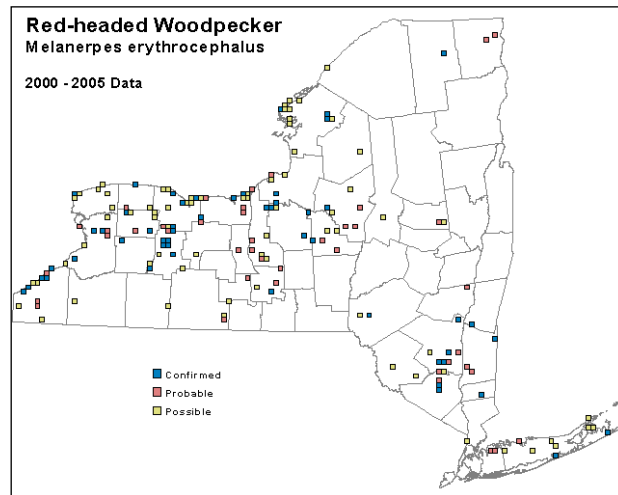
**Trends Discussion:**

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).

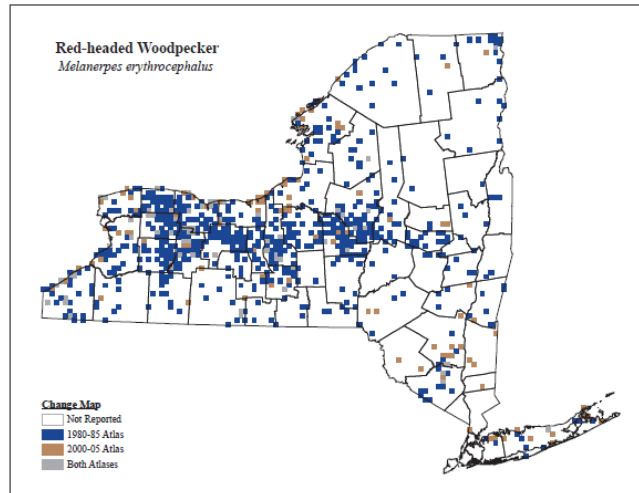
Breeding Bird Survey data for New York show a non-significant decline of 8.8% per year from 2001 to 2011 and a significant decline of 9.1% per year since 1980. The second Breeding Bird Atlas in New York documented a change in occupancy of 76% from 1980-85 to 2000-05. Losses occurred in every ecozone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



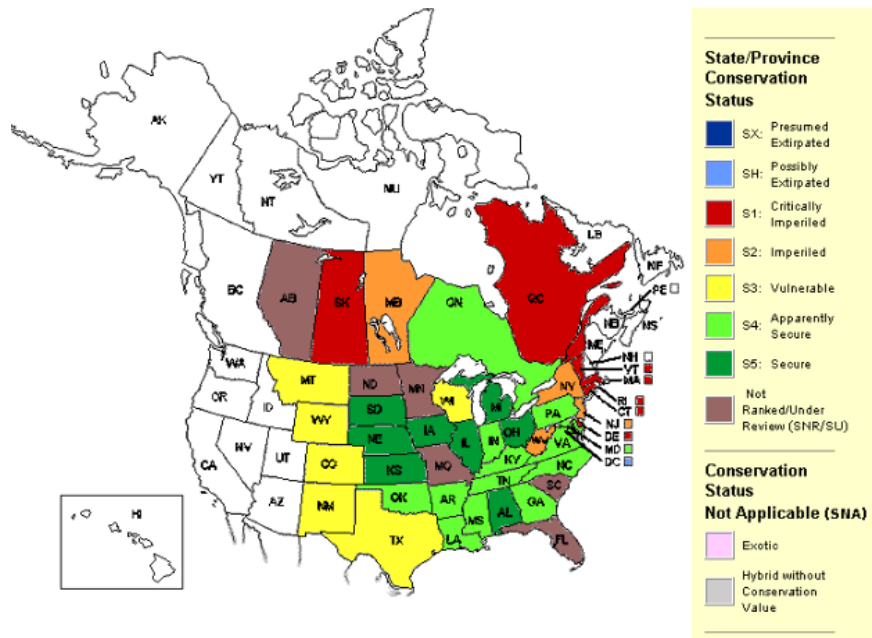
**Figure 1.** Range of the red-headed woodpecker in North America (Birds of North America Online 2013).



**Figure 2.** Red-headed woodpecker occurrence in New York State during the second Breeding Bird Atlas (McGowan and Corwin 2008).



**Figure 3.** Change in red-headed woodpecker occurrence in New York State between the first Breeding Bird Atlas and the second Breeding Bird Atlas (McGowan and Corwin 2008).



**Figure 4.** Conservation status of the red-headed woodpecker in North America (NatureServe 2012).

**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	_____	<u>691 blocks</u>	<u>13%</u>

**Details of historic occurrence:**

The first Breeding Bird Atlas (1980-85) documented red-headed woodpecker occupancy in 691 survey blocks statewide (13%).

Current	<u># of Animals</u>	<u># of Locations</u>	<u>% of State</u>
	_____	<u>167 blocks</u>	<u>3%</u>

**Details of current occurrence:**

The second Breeding Bird Atlas (2000-05) documented red-headed woodpecker occupancy in 167 survey blocks statewide (3%), a decline of 76%. See Figure 3; blue blocks indicate a loss between atlas periods.

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

**Distribution** (percent of NY where species occurs)

- 0-5%
- 6-10%
- 11-25%
- 26-50%
- >50%

**Abundance** (within NY distribution)

- abundant
- common
- fairly common
- uncommon
- rare

**NY’s Contribution to North American range**

- 0-5%
- 6-10%



11-25%

26-50%

>50%

**Classification of New York Range**

Core

Peripheral

Disjunct

**Distance to core population:**

\_\_\_\_\_

**IV. Primary Habitat or Community Type:**

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:**

Declining       Stable       Increasing       Unknown

**Time frame of decline/increase:** \_\_\_\_\_

**Habitat Specialist?**                       Yes       No

**Indicator Species?**                       Yes       No

**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. 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:**

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:

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?**

No       Unknown

Yes

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.

<b>Conservation Actions</b>	
<b>Action Category</b>	<b>Action</b>
Land/Water Protection	Site/Area Protection
Land/Water Protection	Resource/Habitat Protection
Land/Water Management	Site/Area Management
Land/Water Management	Invasive/Problematic Species Control
Education & Awareness	Awareness & Communications

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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