Appendix A: Birds

Black-billed Cuckoo
_Coccyzus erythropthalmus_

<table>
<thead>
<tr>
<th>Federal Listing</th>
<th>N/A</th>
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<tbody>
<tr>
<td>State Listing</td>
<td></td>
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<tr>
<td>Global Rank</td>
<td>S5</td>
</tr>
<tr>
<td>State Rank</td>
<td>S4</td>
</tr>
<tr>
<td>Regional Status</td>
<td>Very High</td>
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</tbody>
</table>

Photo by Jason Lambert

Justification (Reason for Concern in NH)

Populations of many shrubland birds are in strong decline, both in the Northeast and sometimes across larger portions of their continental ranges. For this reason, most species were included in the Northeast list of SGCN, with those that occur regularly in NH retained for the NH WAP revision. Based on BBS data (Sauer et al. 2014), Brown Thrasher populations in New Hampshire show a stable trend (non-significant decline of -0.56%/year) since 1966, with a non-significant increase of 9.75%/year from 2003-2013. Trends are equally variable in regional data. Both BCR 14 and BCR 30 showed significant declines from 1966 to 2013 (-3.13%/year and -4.22%/year, respectively), but non-significant trends in 2003-2013 (0.77 and -1.78, respectively). At larger scales (Eastern US, entire range), BBS data show consistent trends of -2 to -3% year in both time periods. Data from repeated Breeding Bird Atlases in the northeast show stable or slightly increasing occupancy (Cadman et al. 2007, McGowan and Corwin 2008), relatively small declines (8%, MassAudubon 2014), or large declines (23%, Renfrew 2013).

Distribution

The Black-billed Cuckoo breeds from southern Alberta and Oklahoma east to Nova Scotia and North Carolina, and winters in South American. It occurs throughout New Hampshire although it is uncommon and irregular in occurrence from the White Mountains north.

Habitat

Black-billed Cuckoos use a different mix of habitats than most species considered early successional specialists. In addition to shrub- or sapling-dominated habitats (regrowing cuts, rights-of-way, old fields), cuckoos also nest in shrubby wetlands and open woodlands/forest edges with limited early-successional features (e.g., golf courses, woodlots, orchards, and fencerows) (Hughes 2001). Nests are built higher above the ground (1-2 meters, but as high as 13) than other shrubland species.


**Current Species and Habitat Condition in New Hampshire**

Significant population declines rangewide, but data from New Hampshire and elsewhere in the Northeast are unequivocal. The tendency is toward a decline, but it is not as strong or consistent as for many other early-successional species.

**Population Management Status**

Management is not currently in place for this species.

**Regulatory Protection (for explanations, see Appendix I)**

- Migratory Bird Treaty Act (1918)

**Quality of Habitat**

Highly variable – see shrubland habitat profile

**Habitat Protection Status**

Highly variable – see shrubland habitat profile
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Habitat Management Status

Habitat management has not been implemented specifically for this species, although management does occur for other species (American Woodcock, New England Cottontail) that often use the same habitats. See also shrubland habitat profile

Threats to this Species or Habitat in NH

Threat rankings were calculated by groups of taxonomic or habitat experts using a multistep process (details in Chapter 4). Each threat was ranked for these factors: Spatial Extent, Severity, Immediacy, Certainty, and Reversibility (ability to address the threat). These combined scores produced one overall threat score. Only threats that received a “medium” or “high” score have accompanying text in this profile. Threats that have a low spatial extent, are unlikely to occur in the next ten years, or there is uncertainty in the data will be ranked lower due to these factors.

Habitat conversion due to development and impacts from fragmentation (Threat Rank: High)

Ongoing residential and commercial development results in permanent loss of habitats for wildlife. Because many of the habitats used by shrubland birds are already embedded in developed landscapes (e.g., right-of-way, old fields) or viewed as “undesirable” or “waste” habitats, they may be more vulnerable to this threat.

Habitat degradation and conversion due to natural succession or lack of active management (Threat Rank: High)

In the absence of disturbance or management, the early successional and edge habitats preferred by this species generally revert to closed forest systems that are not heavily used, and as a result forest maturation is generally considered the most significant threat facing birds that use shrublands and young forests. See shrubland habitat profile for more information.

Habitat degradation from aspects of right-of-way management (Threat Rank: Medium)

Rights-of-way need to be maintained as short vegetation so as to reduce risks associated with trees and powerlines. As a result these corridors are regularly treated by mechanical (rarely chemical) means to remove or cut back vegetation. In general, such practices create habitat suitable for shrubland birds, although in extreme cases a site may be rendered unsuitable for 1-2 years large areas of vegetation are completely removed. If management occurs during the breeding season, reproductive success will be reduced. See also shrubland habitat profile.

Habitat and species impacts from introduced or invasive plants (Threat Rank: Medium)

Non-native plants, particularly shrubs, have been demonstrated to have several negative effects on birds using shrubland habitats. Insect prey (particularly caterpillars) are usually less common on non-native shrubs (Burghardt et al. 2008, Fickenscher et al. 2014), while data on the nutritional value of fruit are more equivocal (e.g., Davis 2011). In some cases, birds experience lower reproductive success in non-native shrubs, although there is considerable variation (Rodewald et al. 2010, Schlossberg and King 2010), and local predator communities play an important role as well. In all cases, the effects of invasives on shrubland birds depend to a large extent on their relative abundance. If plant diversity is high, the negative effects are diluted and less likely to impact bird populations. However, if the habitat tends toward a monoculture, reduced insect supplies and/or higher predation may reduce reproductive success to the extent that the habitat becomes a sink.
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List of Lower Ranking Threats:
Species impacts from pesticide use causing prey declines (hairy caterpillars)

Actions to benefit this Species or Habitat in NH
No actions identified, but see the shrubland habitat profile for actions that would likely benefit this species.

References, Data Sources and Authors

Data Sources
Trend data from Breeding Bird Survey (Sauer et al. 2014, above).
NH distribution data from NHBR/NH eBird

Data Quality
Cuckoos are irruptive, and show seasonal variation in when irruptions occur. As a result they are not necessarily well-tracked by either BBS or Atlases. It is perhaps for these reasons that trends available for the Northeast are inconsistent

2015 Authors:
Pamela Hunt, NHA

2005 Authors:

Literature


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