

STUDY GUIDE: ENHANCE BIRDING BY EAR SKILLS TO IDENTIFY THE SHRUBLAND NESTING BIRDS IN THE BCN DATABASE

THE STATISTICS UNDERLYING THE BCN POPULATION TRENDS DATA FROM 1999-2020

<u>Trend</u>: Average annual population change (up or down) over the 22 year study period

<u>% Error</u>: When this # is larger than the Trend average #, the latter is uncertain

<u>Points</u>: # of individual points where the species was recorded at least once

<u>Records</u>: Total # of birds of a specific species, seen across all survey points

<u>Frequency</u>: % of survey points where a species was seen at least once; assesses overall abundance - more common species show approx 30-50% frequency

<u>Credibility</u>: Informed method of assessing the accuracy of the population Trend #; Higher % error reduces Credibility of the Trend value

The links to species songs and calls are from xeno-canto.org

In most cases, the recordings are from Illinois or nearby states, to avoid 'dialects' (many species songs vary with geography). Be sure to read the <u>terms of use</u> and the <u>FAQs</u>. Click on <u>advanced search</u> and type in a species name should you want to explore the available recordings for a particular species

Cautionary Note: The almost 30 species contained in this study guide breed primarily in shrublands, yet likely will be observed in other habitats (notably woodland and grasslands) while monitoring. This will be also true for species that primarily nest in other habitat types. Why? Many species have adapted, breeding in different habitats, Red-winged Blackbirds and Common Yellowthroats, for example. Shrubland species also will widely forage for food for their nestlings during the breeding season. Non-native plants in shrubland habitat tend to be 'insect poor', so shrubland nesters must extend their search. Various studies have shown that 'insect poor' habitats reduce nesting success.

The other factor influencing occupancy overlap: Fragmentation of habitat types – aka edge effects. BCN monitoring counts birds at points within 'natural areas' (approx 10% of the land area across the CW region) there is a significant edge effect – shrubland birds heard/seen from a woodland point, for example.

Regular (and rare) BCN shrublandland breeding birds - in alphabetical order



| Species | Trend | % Error | Credibility | Points | Records | Frequency | Trend Status | | | |
|-------------------------------|--------------------------------|---------|-------------|--------|---------|-----------|-------------------------|---------------------------|--|--|
| Alder Flycatcher | | | Poor | 19 | 23 | 1% | Poorly Known | compare Willow Flycatcher | | |
| American Goldfinch | -2.96% | 0.56% | Good | 1602 | 13791 | 65% | Moderate Decline | | | |
| American Redstart | -8.14% | 5.54% | Mod | 34 | 57 | 1% | Moderate Decline | | | |
| Bell's Vireo | | | Poor | 26 | 87 | 1% | Poorly Known | • | | |
| Black-billed Cuckoo | -1.70% | 4.26% | Good | 58 | 66 | 2% | Uncertain | | | |
| Blue Grosbeak | | | Poor | 14 | 20 | 1% | Poorly Known | | | |
| Blue Jay | 3.68% | 0.62% | Good | 1261 | 7386 | 51% | Moderate Increase | | | |
| Blue-gray Gnatcatcher | 1.61% | 1.22% | Good | 585 | 2016 | 24% | Moderate Increase | soft, high pitched | | |
| Blue-winged Warbler | 0.10% | 3.70% | Good | 69 | 144 | 3% | Stable | | | |
| Brown Thrasher | 0.32% | 1.25% | Good | 536 | 1360 | 22% | Stable | | | |
| Cedar Waxwing | -0.29% | 1.25% | Good | 665 | 3476 | 27% | Stable | | | |
| Chestnut-sided Warbler | 2.12% | 4.70% | Good | 53 | 95 | 2% | Uncertain | | | |
| Chipping Sparrow | -0.67% | 3.01% | Good | 152 | 247 | 6% | Stable | compare Pine Warbler | | |
| Common Grackle | -0.31% | 0.88% | Good | 1108 | 8196 | 45% | Stable | | | |
| Eastern Towhee | 4.42% | 0.97% | Good | 622 | 3038 | 25% | Moderate Increase | | | |
| Gray Catbird | 0.84% | 0.64% | Good | 1111 | 6907 | 45% | Moderate Increase | listen for the meow | | |
| Loggerhead Shrike | | | Poor | 15 | 22 | 1% | Poorly Known | highly variable | | |
| Northern Cardinal | 0.39% | 0.49% | Good | 1496 | 8461 | 61% | Stable | | | |
| Orchard Oriole | 3.45% | 1.79% | Good | 328 | 828 | 13% | Moderate Increase | | | |
| Prairie Warbler | may appear; breeding further N | | | | | | | | | |
| Ruby-throated Hummingbird | 6.40% | 2.90% | Good | 157 | 260 | 6% | Moderate Increase | | | |
| Warbling Vireo | 5.40% | 1.35% | Good | 407 | 1527 | 17% | Moderate Increase | | | |
| White-eyed Vireo | 1.30% | 5.57% | Mod | 40 | 62 | 2% | Uncertain | | | |
| Willow Flycatcher | -3.43% | 0.93% | Good | 507 | 3045 | 21% | Moderate Decline | compare Alder Flycatcher | | |
| Yellow Warbler | -0.75% | 0.93% | Good | 679 | 4285 | 28% | Stable | | | |
| Yellow-breasted Chat | 0.52% | 3.00% | Good | 95 | 293 | 4% | Stable | | | |

Regular (and rare) BCN shrubland birds - ranked by abundance

| Species | Trend | % Error | Credibility | Points | Records | Frequency | Trend Status | NETWORK | | |
|---|-------|---------|-------------|--------|---------|-----------|------------------------------------|---------------------------|--|--|
| American Goldfinch | -3.0% | 0.56% | Good | 1602 | 13791 | 65% | Moderate Decline | | | |
| Northern Cardinal | 0.4% | 0.49% | Good | 1496 | 8461 | 61% | Stable | | | |
| Common Grackle | -0.3% | 0.88% | Good | 1108 | 8196 | 45% | Stable | | | |
| Blue Jay | 3.7% | 0.62% | Good | 1261 | 7386 | 51% | Moderate Increase | | | |
| Gray Catbird | 0.8% | 0.64% | Good | 1111 | 6907 | 45% | Moderate Increase | listen for the meow | | |
| Yellow Warbler | -0.8% | 0.93% | Good | 679 | 4285 | 28% | Stable | | | |
| Cedar Waxwing | -0.3% | 1.25% | Good | 665 | 3476 | 27% | Stable | | | |
| Willow Flycatcher | -3.4% | 0.93% | Good | 507 | 3045 | 21% | Moderate Decline | compare Alder Flycatcher | | |
| Eastern Towhee | 4.4% | 0.97% | Good | 622 | 3038 | 25% | Moderate Increase | | | |
| Blue-gray Gnatcatcher | 1.6% | 1.22% | Good | 585 | 2016 | 24% | Moderate Increase | soft, high pitched | | |
| Warbling Vireo | 5.4% | 1.35% | Good | 407 | 1527 | 17% | Moderate Increase | | | |
| Brown Thrasher | 0.3% | 1.25% | Good | 536 | 1360 | 22% | Stable | | | |
| Orchard Oriole | 3.5% | 1.79% | Good | 328 | 828 | 13% | Moderate Increase | | | |
| Yellow-breasted Chat | 0.5% | 3.00% | Good | 95 | 293 | 4% | Stable | | | |
| Ruby-throated Hummingbird | 6.4% | 2.90% | Good | 157 | 260 | 6% | Moderate Increase | mostly silent; twitters | | |
| Chipping Sparrow | -0.7% | 3.01% | Good | 152 | 247 | 6% | Stable | compare Pine Warbler | | |
| Blue-winged Warbler | 0.1% | 3.70% | Good | 69 | 144 | 3% | Stable | | | |
| <u>Chestnut-sided</u> <u>Warbler</u> | 2.1% | 4.70% | Good | 53 | 95 | 2% | Uncertain | | | |
| Bell's Vireo | | | Poor | 26 | 87 | 1% | Poorly Known | | | |
| Black-billed Cuckoo | -1.7% | 4.26% | Good | 58 | 66 | 2% | Uncertain | | | |
| White-eyed Vireo | 1.3% | 5.57% | Mod | 40 | 62 | 2% | Uncertain | | | |
| American Redstart | -8.1% | 5.54% | Mod | 34 | 57 | 1% | Moderate Decline | | | |
| Alder Flycatcher | | | Poor | 19 | 23 | 1% | Poorly Known | compare Willow Flycatcher | | |
| Loggerhead Shrike | | | Poor | 15 | 22 | 1% | Poorly Known | highly variable | | |
| Blue Grosbeak | | | Poor | 14 | 20 | 1% | Poorly Known | | | |
| Prairie Warbler | | | | | | | may appear; now breeding further N | | | |

Shrubland Birds - the 'Regulars' - sounds and mnemonics notes, pitfalls, other species to consider or rule out



Warbling Vireo 'when I see you I will seize you and I'll squeeze you till you squirt'

Blue-gray Gnatcatcher wheezy high-pitched song and call; song may include partial birdsong of other species

Gray Catbird primary scratchy song, "mew" and "eerie" calls; note also wren-like "ratchet call"

Brown Thrasher primary song is paired phrases; note Churr call; be aware whistle resembles **Red-winged Blackbird**

Willow Flycatcher RITZbew song and "whit" call

Cedar Waxwing trilled single notes; alarm call is similar to **American Robin**

American Goldfinch varioable song includes other birds' sounds; note "potato chip" flight call, toowee call and fledgling "feed me" calls

Eastern Towhee 'drink, drink your, drink your teeee', loud chewee call

Orchard Oriole (compare with Baltimore Oriole) rich, lively warbling song with a wide pitch range

Yellow Warbler 'sweet sweet you're so sweet' and 'pleased to meet you' (learn both song types, compare with **Chestnut-sided Warbler**)

Northern Cardinal primary song 'purDEE purDEE'; one song variation resembles Carolina Wren

Priority shrubland species of conservation concern

LEVEL 1 - HIGHEST CONCERN

LEVEL 1: Black-billed Cuckoo

LEVEL 2: Brown Thrasher, Field

Sparrow, Willow Flycatcher,

Northern Bobwhite

LEVEL 3: Blue-winged Warbler, Loggerhead Shrike, Yellow-breasted Chat, Bell's Vireo, Eastern Towhee, Prairie Warbler (rare), Goldenwinged Warbler (rare)

For certain species on this list, BCN's monitoring area represents a core/important breeding area, significant for sustaining the individual species' population; other BOC species listed here are currently rare or casual breeders only

