





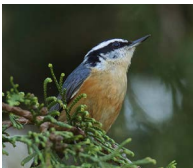










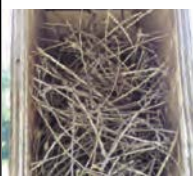














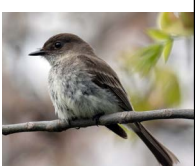





# WHAT & WHERE BENEFICIAL SONGBIRDS EAT & NEST IN MINNESOTA/WISCONSIN\*

Beneficial Birds	Crop Pests Eaten by Birds**	Foraging Areas <sup>32</sup>	Preferred Nesting Habitat <sup>33, 34, 35</sup>	Nest Box Spacing <sup>36</sup>	Eggs	Nesting Material <sup>37</sup>	Nests
NATIVE BIRDS THAT USE EASTERN BLUEBIRD BOXES							
<b>EASTERN BLUEBIRD</b>		Caterpillars, grasshoppers, crickets, cankerworms, cutworms, <sup>1</sup> beetles <sup>2</sup>	Ground gleaner & forager, lower-canopy gleaner	Prefers semi-open grasslands and scattered trees; vineyards, orchards, diverse farmscapes, riparian, forests	300'	 Fine grasses and /or pine needles	
<b>BLACK-CAPPED CHICKADEE</b> (Carolina)		<b>Black-capped:</b> Codling moths, <sup>3</sup> tent caterpillars, <sup>4</sup> pear psylla, <sup>5</sup> cankerworms. <sup>6</sup> <b>Carolina:</b> Caterpillars, aphids, scale, <sup>7</sup> true bugs, ants, aphids, tree-hoppers, leaf hoppers <sup>8</sup>	Lower-canopy gleaner & forager	Prefers deciduous and mixed deciduous-coniferous forests, swamps, open woods and parks in urban & suburban areas	<b>Black-capped:</b> 650' <b>Carolina:</b> 30'	 Moss, bark and/or lichen lined with fur, hair or plant fibers	
<b>NUTHATCH</b> (& White-breasted & Red-breasted)		True bugs, scale, aphids, bark beetles, tent caterpillars, & spongy moths, cankerworms, leafrollers, <sup>9</sup> pear psylla <sup>10</sup>	Upper canopy, bark gleaner	Generally, likes more wooded locations than E. Bluebird. Orchards, open woodland, forest edges, deciduous &/or coniferous woodlands	<b>White-breasted:</b> 1040' <b>Red-breasted:</b> 150'	 Fur, bark, grass and/or dirt, lined with fine grasses, shredded bark & feathers	
<b>TREE SWALLOW</b> (& Violet-green)		Flies, true bugs, sawflies, ants, beetles, moths, <sup>11</sup> mosquitoes, cankerworms, cabbage butterfly flies <sup>12</sup>	Air screener, lower canopy gleaner	Prefers wetlands, lakes, creeks, & water/mud for nest building. <b>Tree:</b> Diverse farmscapes, vineyards, marshes, wooded swamps. <b>Violet-green:</b> Open woodlands, forest edges	<b>Tree:</b> 35' <b>Violet-green:</b> 30'	 Grasses lined with many feathers	
<b>TITMOUSE</b> (Tufted)		Caterpillars, sawflies, ants, beetles <sup>13</sup>	Lower-canopy gleaner & forager	Prefers deciduous and ever-green forests, suburban yards, parks & orchards	580'	 Leaves, moss, grasses, & bark strips lined with hair, fur, wool & cotton	
<b>BEWICK'S WREN</b> (& House)		<b>Bewick's:</b> Leaf bugs, true bugs, weevils, caterpillars. <sup>14</sup> <b>House:</b> Caterpillars, beetles, true bugs, ants, <sup>15</sup> grubs, grasshoppers, spongy moths, millers <sup>16</sup>	Lower canopy gleaner, ground gleaner	Prefers more wooded locations than E. Bluebird. <b>Bewick's:</b> Hedgerows, shrubs, open woodlands, riparian. <b>House:</b> Farmyards, open woodlands, riparian, forests	<b>Bewick's:</b> 450' <b>House:</b> 100'	 Sticks, with an inner cup lined with plant fibers	
<b>PROTHONOTARY WARBLER</b>		Caterpillars, flies, midges, <sup>17</sup> beetles, ants, leafhoppers, snails, grasshoppers <sup>18</sup>	Lower-canopy gleaner, bark gleaner	Prefers wooded swamps, bottomland forests and marsh habitat	235'	 Moss, rootlets, plant down, grape plants or cypress bark, lined with grasses, sedges, leaves, poison ivy tendrils	




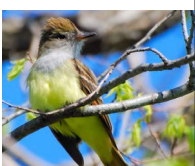


## UNWELCOME NON-NATIVE BIRD THAT USES EASTERN BLUEBIRD NEST BOXES & NEST SHELVES

<b>HOUSE SPARROW</b> (also called English Sparrow)		Fly larvae, aphids, weevils, grasshoppers, caterpillars <sup>19</sup>	Ground gleaner	Holes in buildings, nest boxes in open areas, old Barn Swallow nests	Variable		Tall, sloppy, tunnel nest of grasses, possibly with feathers & trash	
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## NATIVE BIRDS THAT USE NEST SHELVES & BUILDING EAVES

<b>AMERICAN ROBIN</b>		Weevils and beetles, <sup>20</sup> cutworms, white grubs, grasshoppers, tent caterpillars, spongy moths, silkworms, aphids, cankerworms, armyworms, brown tail larvae <sup>21</sup>	Ground gleaner, lower canopy & ground forager	Farmlands, woodlands, gardens & parks	65'		Grasses, twigs, feathers, rootlets or moss with mud	
<b>BARN SWALLOW</b>		Cutworms, mosquitoes, codling moths, cankerworms, leaf-rollers, <sup>22</sup> tarnished plant bugs, seedcorn maggots, <sup>23</sup> cabbage seedpod weevils, pollen beetles, <sup>24</sup> leaf bugs, flies, wasps, beetles <sup>25</sup>	Air screener	Farmlands, grasslands, riparian, & water/mud for nest building	5'		Mud and grass base lined with grass, then feathers	
<b>EASTERN PHOEBE</b>		Ants, beetles, grasshoppers, true bugs, caterpillars, flies, <sup>26</sup> spongy moths, cankerworms, cutworms, mosquitoes, striped cucumber beetles, may beetles, weevils, grasshoppers, wasps <sup>27</sup>	Fly out to catch insects, lower-canopy gleaner	Open woodland, riparian and water/mud for nest building	165'		Mud, moss, leaves mixed with grass stems and hair	
<b>CLIFF SWALLOW</b>		Wasps, leaf bugs, squash bugs, stink bugs, shield bugs, leafhoppers, tree hoppers, psyllids, beetles, flies <sup>28</sup>	Air screener	Farmlands, pastures, riparian, and water resources for mud nest building	Will nest communally		Mud lined with dried grasses	

## OTHER NATIVE BIRDS THAT USE NEST BOXES DIFFERENT THAN EASTERN BLUEBIRDS

<b>PURPLE MARTIN</b>		True bugs, caterpillars, aphids, weevils, moths, <sup>29</sup> flies, rose beetles, may beetles, striped cucumber beetles <sup>30</sup>	Fly out to catch insects	Large open or semi-open areas, especially near water	10'		Twigs, leaves, plant stems, mud, and grass	
<b>GREAT CRESTED FLYCATCHER</b>		Moths, beetles, grasshoppers, true bugs, and flies <sup>31</sup>	Fly out to catch insects, lower-canopy gleaner	Open deciduous or mixed woodlands, forest edges & riparian	6 acres		Grasses, leaves, twigs, fur, shells, feathers, bark, moss, cellophane, onion skin, paper, cloth, snakeskin	

\* References and photo credits available at [www.wildfarmalliance.org/nesting\\_structures](http://www.wildfarmalliance.org/nesting_structures)

\*\* Based on recent and historic studies, but not exhaustive analyses.