Hylocichla mustelina Gmelin — Wood thrush

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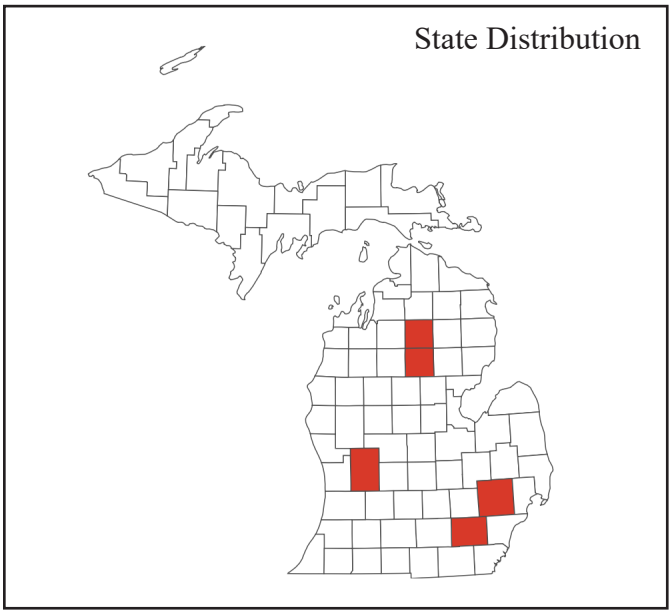

Best Survey Period

Status: State special concern

Global and state rank: G4/S4

Family: Turdidae

Total Range: Breeds from eastern Minnesota, west through southern Ontario and Quebec to western Nova Scotia; south through northern Florida and the Gulf Coast of Alabama and Mississippi; west through northeast Texas, and eastern Oklahoma, Kansas and Nebraska, with some populations in central South Dekota. Winters along the Gulf Coast of central Mexico, south throughout Central America as far as eastern Panama (Evans et al. 2020).

State Distribution: Breeds throughout Michigan. More common in the southern and central portions of the Lower Peninsula, and more rare and local in the Upper Peninsula. (Craves 2013).

Recognition: A medium sized thrush, measuring 7.5-8 in (19-21 cm) in length. Reddish-brown crown and nape fading to brownish-olive across the back, wings and tail. Large, dark speckles sharply contrast with a white breast, belly, and sides. Males and females similar. Juveniles with tawny streaks on the back, neck and wings. The wood thrush is distinguished from other thrushes by the combination of its dark and clearly defined spotting and its ruddy brown coloring. It may be confused with the ovenbird, but the ovenbird is smaller, with streaks instead of spots, and dark streaks running down its head and back. The brown thrasher is also similarly colored, but has white wing bars and is larger than the wood thrush with a longer tail and bill. (National Geographic Society 1999, Evans et al. 2020)

Best survey time/phenology: The wood thrush arrives in Michigan in late April and usually departs by mid-September. This double brooded bird initiates its first nest in May, and its second in June or July. This makes the start of May through the end of June the best period to survey for breeding individuals. (Craves 2013, eBird 2025)

Habitat: Wood thrushes inhabit upland mesic deciduous forests throughout their breeding range (Craves 2013). They have preference for a well-developed understory with moist soils and a diversity of tree and shrub species (Evans et al. 2020). They forage in litter, making an open forest floor with

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substantial litter ideal foraging habitat (Williams 2018). Wintering habitat is generally the interior understory of a variety of forest types (Evans et al. 2020).

Biology: Wood thrushes begin to arrive in Michigan in late April (Kaiser 2004). Males establish a territory, but it is presumed that the female selects the nest site, as she is the primary builder (COSEWIC 2012, Evans et al. 2020). Nest sites are found in areas with high tree and shrub densities (Hoover and Brittingham 1998). Nests are built in forks of trees or shrubs, or on branches where small twigs can provide support (Evans et al. 2020). Nests are generally located 8-16 feet (2.5-5 meters) above the ground (Artman and Downhower 2003, Evans et al. 2020). Nests are cups of grass and grass stems woven around a layer of mud or dead leaves, lined with rootlets and more dead leaves (Baicich and Harrison 1997).

In Michigan, the wood thrush lays her first clutch of the year, consisting of three to four eggs, in May (Craves 2013, Evans et al. 2020). This clutch is incubated by the female for 12-14 days (Baicich and Harrison 1997). The male will perch on or near the nest when the female is absent (Nolan 1974, Evans and Stutchbury 2012). Once hatched, both parents bring food to the altricial young, and the female continues brooding until the young have fledged (Evans et al. 2020). Fledging occurs 12-15 days after hatching (COSEWIC 2012). Both parents continue to care for the young after fledging (Baicich and Harrison 1997). The female will do so for about 2 weeks before leaving to start her second clutch (Evans et al. 2020).

Wood thrushes are a host species for brown-headed cowbirds (*Molothrus ater*). Unlike other, smaller host species, wood thrushes can often fledge both their own young and the cowbird young, though conspecific fledging success is lowered by the presence of a cowbird in the nest (Dowell et al. 2000). Parasitism rates appear to be dependent on the relative abundances of both species, as well as surrounding land use and habitat quality (Hoover and Brittingham 1993, Dowell et al. 2000, Etterson et al. 2014). Forest fragmentation also plays a roll in wood thrush nesting success, though this may be driven more by differences in predation rather than parasitism (Hoover et al. 1995).

Hatch-year birds engage in long distance (>5km) pre-migration movements, which is likely to help them relocate the area when they return the following year (Hayes et al. 2024). Individuals begin fall migration between the end of August and the middle of October, with juveniles leaving earlier than adults (Boyd et al. 2025).

Wood thrush forage in the litter layer, primarily feeding on insects, spiders, millipedes, and isopods (Ladin 2015). During late summer, fall, and winter they will also eat fruits (Evans et al. 2020). Wood thrushes are known to occasionally eat earthworms, mollusks, and salamanders (Evans et al. 2020).

Conservation/management: Wood thrush populations are declining across their range (Craves 2013). The largest threat is habitat loss (COSEWIC 2012). Nesting success is often lower in smaller fragments compared to larger tracts (e.g. Hoover et al. 1995, Weinberg and Roth 1998). This is usually attributed to higher rates of depredation or nest parasitism at forest edges (Craves 2013). However, not all studies have found this correlation between edges and parasitism or predation (e.g. Hoover et al. 1995, Dowell et al. 2000). Edge effects are moderated by landscape context, including degree of development (Heide et al. 2023), proximity to agriculture (Etterson et al. 2014), predator abundance, and wood thrush density (Driscoll and Donovan 2004).

Additionally, nest concealment is important for nesting success (Hoover and Brittingham 1998, Israel et al. 2023). Forest management practices should ensure the existence of areas with well-developed understories to support this need.

Conservation on the winter range is an important part of managing wood thrush populations. Given

the distribution of suitable habitat, a disproportionate number of wood thrushes overwinter in the eastern portion of their range, which is also undergoing increased deforestation (Stanley et al. 2015). Fortunately, wood thrushes require much smaller areas to meet foraging needs in the non-breeding season (Roberts 2011).

Research needs: While some research has been initiated regarding range-wide patterns of movement (e.g. Stanley et al. 2021), this is only the start of connecting patterns observed on breeding grounds to changes occurring in wintering habitat. The severity of nest parasitism and impacts of fragmentation vary dramatically across the breeding range (e.g. Hoover and Brittingham 1993), so location specific research on these topics is important for informing local conservation plans. While a body of work does already exist, this also means that any management actions taken should be evaluated to ensure they are having the intended results (Evans et al. 2020).

Related abstracts: Mesic southern forest, mesic northern forest, Kirtland's warbler, red-shouldered hawk, prothonotary warbler, Blanding's turtle, goldenseal, ginseng, pine-drops, showy orchis

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Abstract citation

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