

Sunbathing by an Eastern Wood-Pewee, *Contopus virens*

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On 30 July 2017 at approximately 2:15 p.m. EDT, Gene Scarpulla drew my attention to an Eastern Wood-Pewee (*Contopus virens*) near the bird bath on the wooden back deck of our home in Bowie, Prince George's County, Maryland. Our home is adjacent to woodlands bordering the stream valley of Collington Branch, a tributary of the Patuxent River, and we enjoy an extensive selection of birds on our yard list. Eastern Wood-Pewees are typically present throughout the breeding season. At that time of day, though bordered by woods, our deck, facing southeast, is in full sun.

The pewee did not enter the water to bathe, but instead was using the bird bath, the deck railing, and the deck furniture as perches from which to hawk insects. We watched it move from one point to another over several minutes, and during that time I moved to another viewing point to pick up my binoculars.

From my new position approximately 7.6 m (25 ft) from the pewee, I observed it fly down to the surface of the wooden deck and immediately assumed a prostrate position with its breast and belly fully on the deck surface and its wings outspread and tail fanned. I observed the bird through 10x42 Bausch & Lomb binoculars, and could clearly see that the feathers over its whole body were somewhat ruffled; this was particularly apparent on the head and neck. The wings were spread to such a wide extent that the white edges of the tertials and secondaries were easily seen, as were the bars on the wing coverts. Because the wing bars were dull buff-colored instead of white, I judged the bird to be a juvenile (Pyle et al. 1987). The bird was facing away from me and I could not see if its mouth was agape, as would be expected for an overheated bird in the sunny, warm conditions present on the deck at the time.

I remarked to Scarpulla that the bird was apparently sunbathing on the surface of the deck, similarly as reported for Great Crested Flycatchers (*Myiarchus crinitus*) on the vinyl cover of an outdoor spa in Annapolis, Anne Arundel County, Maryland (Johnson 2017). However, from his vantage point, Scarpulla could not see the bird. I continued to observe the bird through my binoculars.

The bird remained prostrate for approximately 30 to 40 seconds, and then flew up to the deck railing, raised its feathers and shook to settle them, and flew off into the woods. A check of weather conditions showed full sun with an ambient temperature of 25° C (77° F), 43% humidity, and a dew point of 12° C (54° F). The UV index was 8 on a scale of 1 through 10 (AccuWeather 2017).

Although we watched for the bird on subsequent days, we did not observe it returning to the deck for additional sunbathing episodes.

DISCUSSION

Typical sunbathing behavior involves a bird landing on a more-or-less horizontal substrate and pressing its ventral surface against the substrate. The bird splays its wings and tail against the substrate, then it either slides along the substrate, remains stationary, or alternates between sliding and remaining stationary (Johnson 2017). Johnson (2017) refers to the sliding motion as “scooting.” The head of the bird may be cocked upward and the mouth agape.

Sunbathing can be divided into two categories: “voluntary” and “compulsory” (Hauser 1957). In voluntary sunbathing, the bird deliberately seeks the sunlit area; in compulsory sunbathing, the bird is forced into the sunlit area (e.g., on a shiny metal platform feeder [Hauser 1957] or when shielding nestlings [Goodwin 1967]). Kennedy (1969) discussed six possible functions of sunbathing: 1) sunrise thermoregulation, 2) ectoparasite control, 3) plumage drying, 4) vitamin D production, 5) a molting role, and 6) production of the uropygial gland secretion. Horsfall (1984) also discussed these possible functions. Lanyon (1958) observed that sunbathing was initiated by heat and not light. A blog post by Darren Naish (2013) at Scientific American provides an overview of sunbathing behavior in birds, complete with example photos of various birds and a brief discussion of possible purposes of sunbathing.

We surmise that like the Johnson (2017) Great Crested Flycatchers, this Eastern Wood-Pewee was engaging in sunbathing behavior for the likely purpose of controlling ectoparasites. The ambient temperature was much too warm to account for thermoregulatory warming behavior.

SUMMARY OF SUNBATHING IN NORTH AMERICAN AND CENTRAL AMERICAN PEWEES

The American Ornithological Society (AOS 2017) lists four species of *Contopus* in North America: Olive-sided Flycatcher (*C. cooperi*), Greater Pewee (*C. pertinax*), Western Wood-Pewee (*C. sordidulus*), and Eastern Wood-Pewee; and seven species in Central America: Dark Pewee (*C. lugubris*), Ochraceous Pewee (*C. ochraceus*), Tropical Pewee (*C. cinereus*), Cuban Pewee (*C. caribaeus*),

Jamaican Pewee (*C. pallidus*), Hispaniolan Pewee (*C. hispaniolensis*), Lesser Antillean Pewee (*C. latirostris*). However, little is documented about sunbathing (which is considered a self-maintenance type of behavior) in these birds.

Eastern Wood-Pewee

McCarty (1996) in *Birds of North America* reported no published descriptions of self-maintenance in the Eastern Wood-Pewee. Hauser (1957) observed the Eastern Wood-Pewee in voluntary sunbathing position, but provided no details. My observation is the first known published case that provides even minimal details for this species. While sunbathing has been reported for Western Wood-Pewees (see below), my observation is the first known published case that provides any details for the genus *Contopus*.

Western Wood-Pewee

On the *Birds of North America* (Bemis and Rising 1999), Bemis states that sunbathing is rarely observed in the Western Wood-Pewee. *BirdNote* (2014) shows a photo of a Western Wood-Pewee sunbathing, with no details provided. The photographed bird appears to be AHY (after hatching year) based on the “narrow, indistinct, pale grayish” wing bars (Pyle et al. 1987). Additional online database searches yielded no additional observations.

Olive-sided Flycatcher

Searches on the *Birds of North America* (Altman and Sallabanks 2012) found no sunbathing information for Olive-sided Flycatcher. Additional online database searches yielded no additional information.

Greater Pewee

Searches on the *Birds of North America* (Chace and Tweit 1999) found no self-maintenance information for Greater Pewee. Additional online database searches yielded no additional information.

Central American Pewees

Online database searches found no information on sunbathing by the seven Central American species. It is quite possible that information on these species could be published in small, obscure, and/or foreign journals that might not be easily accessible online.

SUMMARY

Although sunbathing by birds might not be a rare occurrence, this behavior has only been documented for a limited number of species. I encourage others to write up their observations of this phenomenon to further increase our knowledge of this fascinating avian behavior.

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LITERATURE CITED

- AccuWeather. 2017. Bowie, MD Local Weather. Available at: <https://www.accuweather.com/en/us/bowie-md>. Accessed 30 July 2017.
- Altman, B., and R. Sallabanks. 2012. Olive-sided Flycatcher (*Contopus cooperi*), The Birds of North America (P.G. Rodewald, Editor). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America: <https://birdsna.org/Species-Account/bna/species/olsfly>. Accessed 30 July 2017.
- AOS (American Ornithological Society). 2017. Checklist of North and Middle American Birds. Available at: <http://checklist.aou.org/taxa?utf8=%E2%9C%93&search=Contopus>. Accessed 30 July 2017.
- Bemis, C., and J.D. Rising. 1999. Western Wood-Pewee (*Contopus sordidulus*), The Birds of North America (P.G. Rodewald, Editor). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America: <https://birdsna.org/Species-Account/bna/species/wewpew>. Accessed 30 July 2017.
- BirdNote. 2014. Catchin' Some Rays. BirdNote: stories about birds, the environment, and more. Available at: <http://birdnote.org/blog/2014/08/catchin-some-rays>. Accessed 14 August 2017.
- Chace, J.F., and R.C. Tweit. 1999. Greater Pewee (*Contopus pertinax*), The Birds of North America (P.G. Rodewald, Editor). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America: <https://birdsna.org/Species-Account/bna/species/grepew>. Accessed 30 July 2017.
- Goodwin, D. 1967. Some possible functions of sun-bathing in birds. *British Birds* 60(9):363–364.
- Hauser, D.C. 1957. Some observations on sun-bathing in birds. *The Wilson Bulletin* 69(1):78–90.

- Horsfall, J. 1984. Sunbathing: Is it for the birds? *New Scientist* 103(1420):28–31.
- Johnson, B.K. 2017. Sunbathing by Great Crested Flycatchers, *Myiarchus crinitus*. *Maryland Birdlife* 66(1):31–38.
- Kennedy, R.J. 1969. Sunbathing behaviour of birds. *British Birds* 62(7):249–258.
- Lanyon, W.E. 1958. The motivation of sunbathing in birds. *The Wilson Bulletin* 70(3):280.
- McCarty, J.P. 1996. Eastern Wood-Pewee (*Contopus virens*), The Birds of North America (P.G. Rodewald, Editor). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America: <https://birdsna.org/Species-Account/bna/species/eawpew>. Accessed 30 July 2017.
- Naish, D. 2013. It's hot and sunny, so birds lie down and sunbathe. Scientific American: Tetrapod Zoology. Available at: <https://blogs.scientificamerican.com/tetrapod-zoology/sunbathing-birds-2013/>. Accessed 21 August 2017.
- Pyle, P., S.N.G. Howell, R.P. Yunick, and D.F. DeSante. 1987. *Identification Guide to North American Passerines*. Slate Creek Press, Bolinas, CA. 278 pp.