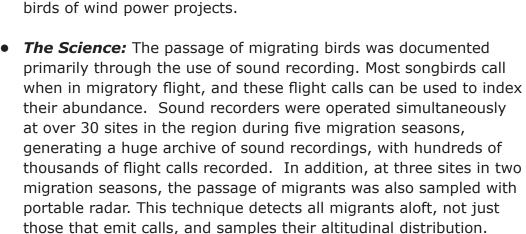


Patuxent Wildlife Research Center

Nocturnal Bird Migration through the Central Appalachians







The Challenge: Concerns have arisen about the potential impacts

of wind power development in the Appalachians on migrating birds, creating a critical need for information on their distribution and flight characteristics as they pass through the region. This study focuses on the spatial and temporal distribution of nocturnally migrating birds in the Central Appalachians (MD, VA, WV). The overall objective is to increase our understanding of bird migration in this area, so that informed and scientifically sound recommendations can be made to reduce the risk to migrating



• **The Future:** In both spring and fall, roughly 30% of the migrants detected by the radar were flying less than 200 m above ground, the altitudinal zone that wind turbines occupy. The flight call data document the temporal distribution of low-flying migrants through both nights and seasons, as well as their spatial distribution. The relationship of migrant abundance to location, topography, and weather variables is being modeled to identify where and when migrants might be abundant in the lower airspace. This information will aid decisions on the siting of wind turbines in the region, and provide guidelines on their operation to reduce the risk to migrating birds.

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