

ENVIRONMENTAL CORRELATES OF AFRICAN WOOD OWL CALLING ACTIVITY IN KIBALE NATIONAL PARK, UGANDA

N.E. SEAVY

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ABSTRACT: Over a one-year period, I documented the relationship of habitat, season, lunar phase, cloud cover, and wind with patterns of African Wood Owl (*Strix woodfordii*) calling activity in Kibale National Park, Uganda. During ten-minute surveys at ten locations, five in unlogged and five in selectively logged tropical forest, I recorded three indices of unsolicited calling activity: whether or not owls were detected at a station, number of individuals detected, and number of vocalizations detected. African Wood Owls were abundant in the study area and called throughout the year; I detected owls on 232 of 480 (48%) ten-minute surveys. When measured by number of vocalizations detected, calling activity was greater during full moons and on clear nights, and reduced during new moons and on cloudy nights. Lunar phase and cloud cover did not have a significant effect on whether or not owls were detected or on the number of individuals detected, but non-significant trends were consistent using each index. These results demonstrate the importance of considering environmental factors and response variables when designing and interpreting studies that measure calling activity.