

Wesołowski T. 1985. The breeding ecology of the Wood Warbler *Phylloscopus sibilatrix* in primaeval forest. *Ornis Scandinavica* 16: 49-60.

This study is based on an analysis of nest-histories of 574 Wood Warbler nests found in three types of climax stands viz. ash-alder, oak-hornbeam and coniferous, in Białowieża National Park, E Poland, in 1976-1979. The nests were built on the ground, usually in shaded places. As a rule they were hidden among low herb vegetation or wedged under branches lying on the ground. The first females arrived between 2 and 7 May in different years, while the first eggs were laid between 8 and 18 May. The majority of clutches were laid within a fortnight of the first eggs laid in the population. On average breeding started earliest in the oak-hornbeam and latest in the coniferous habitat. Few females attempted second broods. First clutches usually contained 6-7 eggs. The average clutch size varied between years, declined over the season, and was highest in the most densely populated oak-hornbeam stands. The birds produced smaller clutches than the number of young which could be reared. It is suggested that variation in clutch size is an adaptation to changing food availability and variation in predation pressure, and that the maximum clutch size is limited by the size of the nests as well as by trade-offs between the amount of investment in one breeding attempt and the chances to reproduce again. On an average over 70% of nests were lost, one of the highest figures recorded in open nesting birds of the temperate zone. Predators were responsible for over 80% of the losses. Nests with young were four times more likely to be predated than nests with eggs. Predation rates were independent of brood size, but late nests had higher rates of predation. The losses were lowest in the ash-alder stands and highest in the coniferous stands. Due to heavy predation, the yearly production of young per female was scarcely one third of the potential production. Varying predation rates were a main factor responsible for variation in production between years and habitats. Mortality of adults in the breeding season was estimated at 4.3% month⁻¹ for females and 4.5% month⁻¹ for males.