We estimated occupancy of forest owls as a function of habitat characteristics and examined change in occupancy of 3 owl species from historical (1986—1992) and current (2005—2008) surveys in Southeast Alaska. We conducted 1,238 point count surveys at 346 independent sites across Southeast Alaska from 1 April—15 May 2005—2008 and tallied 253 detections of 7 owl species. Detection probabilities (p ± SE) were lowest for Western Screech-Owl (p = 0.13 ± 0.10) and Northern Saw-Whet Owl (p = 0.19 ± 0.06), and highest for Barred Owl (p = 0.29 ± 0.06) across all surveys. Occupancy (ψ ± SE) of Barred Owls was the lowest (ψ = 0.12 ± 0.04), followed by Western Screech-Owl (ψ = 0.31 ± 0.16), and then Northern Saw-Whet Owl (ψ = 0.45 ± 0.18). Occupancy of Barred Owls was positively associated with percent of productive forest. Western Screech-Owl occupancy was primarily influenced by site location (mainland vs. island); a higher proportion of sites on the mainland were occupied. Occupancy of Northern Saw-Whet Owl was best predicted by survey year. Across all of Southeast Alaska, the proportion of sites occupied by Barred Owls doubled from historical to current surveys, while Western Screech-Owl and Northern Saw-Whet Owl occupancy remained relatively stable. However, Western Screech-Owl and Northern Saw-Whet Owl distribution narrowed over the 2 time periods, especially in the southern portion of Southeast Alaska where Barred Owls now commonly occur.