

Rate of secondary succession in forest bird communities

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The rate of secondary succession in forest birds has been quantified on the basis of the Jaccard, Sørensen, and Renkonen indices, and of an index derived from Shannon's measure of diversity. All indices give very similar results. In the Polish oak-hornbeam forest the rate of succession (TR) decreases monotonously with time, but in Finnish coniferous forests (spruce and pine) the TR curves have a peak after 5–25 years from the beginning. The climax characteristically has a turnover rate of less than 10 per cent from that of the initial stages. The logarithms of TR can be expressed satisfactorily as linear functions of time. This is probably not true of TR curves for primary succession, owing to a lengthy period of soil development in primary succession.

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