

In contrast with the fundamental ecological expectation that similarity induces competition and loss of species, temporal dynamics allow similar species to co-occur. In fact, the coexistence of similar species contributes significantly to species diversity and could affect ecosystem response to climate change. However, because temporal processes take place over time, they have often been a challenge to document or even to identify.

Temporal Dynamics and Ecological Process brings together studies that have met this challenge and present two specific aspects of temporal processes: reproductive scheduling and the stable coexistence of similar species.

By using plants to extract general principles, these studies uncover deep ties between temporal niche dynamics and the above central ecological issues, thereby providing a better understanding of what drives temporal processes in nature.

Written by leading scientists in the field, this title will be a valuable source of reference to research ecologists and to those interested in temporal ecology.

'This important and interesting book shows that... the coexistence of similar species can greatly enrich the diversity of communities, and also can help in responding to, or recovering from, environmental disturbance. ... The book deserves a wide audience.'

Robert M. May, OM FRS, University of Oxford

'This well-crafted book, containing chapters by many distinguished ecologists... should be on the shelves of all ecologists who care deeply about the factors governing ecological communities, and about the preservation of biodiversity in our ever-changing world.'

Robert D. Holt, University of Florida, and co-editor of *Trait-Mediated Indirect Interactions* (Cambridge, 2012)



Cover illustration (front): *Plantago patagonica* (central), *Eriastrum diffusum* (left) and *Erodium cicutarium*, an exotic species (background). Photographed by Peter Chesson in the San Simon Valley, on the bajada of Cave Creek, southeastern Arizona. These plants belong to the winter annual plant guild studied in Chapter 2 and discussed in Chapter 7; (back – top): *Monoisporon belliioides*, photographed by D. Lawrence Venable at the Desert Laboratory, Tucson, Arizona; (back – bottom): four species of *Bursera*, all in their second year, which grow as intermingled populations at Chamela Biological Station, Jalisco, México. Photographed by Colleen Kelly.

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