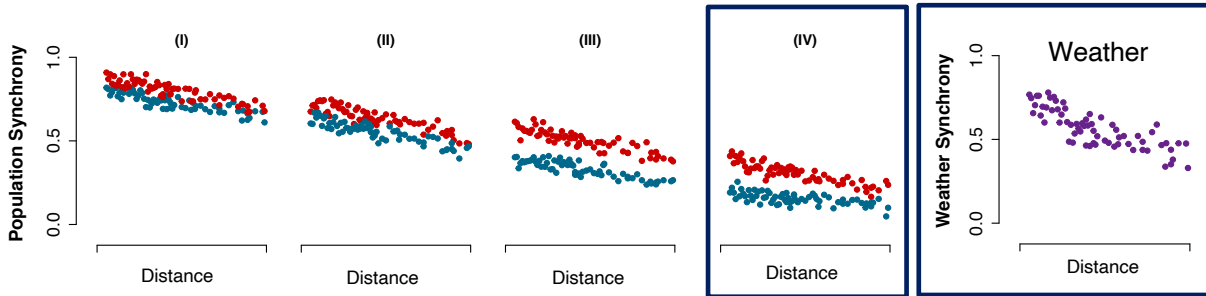


**3. Density-dependence structure**

	(I)	(II)	(III)	(IV)
Spring abundance	$X_t$	$X_t = f(X^{(p)}, \Theta)$	$X_t = f(X^{(p)}, \Theta_{R_X})$	$X_t = f(X^{(p)}, Y^{(p)}, \Theta_{R_X}, \Theta_{R_Y})$
Fall abundance	$Y_t$	$Y_t = f(Y^{(p)}, \Theta)$	$Y_t = f(Y^{(p)}, \Theta_{R_Y})$	$Y_t = f(X^{(p)}, Y^{(p)}, \Theta_{R_Y}, \Theta_{R_X})$

**4. Synchrony (residual decomposition)**



**5. Effects of weather**

