

**Table 1. Here**  $g = g(x) = f(\mathcal{D} \star a)(x)$  **and**  $m = m(x) = \mu + \alpha(\mathcal{C} \star a)(x)$ .

Variable	No change	Death	Birth
$a(x)$	$k/dx$	$k/dx$	$k/dx$
$a(x, t + dt)$	$k/dx$	$(k - 1)/dx$	$(k + 1)/dx$
$da(x)$	0	$-1/dx$	$1/dx$
$P(\text{event})$	$1 - [km + gdx]dt$	$kmdt$	$gdxdt$
$E[da(x)]$	$[-km/dx + g]dt$	$[-km/dx + g]dt$	$[-km/dx + g]dt$
$d\eta(x)$	$[km/dx - g]dt$	$-1/dx + [km/dx - g]dt$	$1/dx + [km/dx - g]dt$