

**Table 24.1. Life table for the Dall mountain sheep constructed from the age at death of 608 sheep in Mount McKinley (now Denali) National Park**

Age Interval (Years) ( $x$ )	Number Dying During Age Interval ( $d_x$ )	Number Surviving at Beginning of Age Interval ( $n_x$ )	Number Surviving as a Proportion of Newborn ( $l_x$ )	Expectation of Further Life ( $e_x$ )
0-1	121	608	1.000	7.1
1-2	7	487	0.801	7.7
2-3	8	480	0.789	6.8
3-4	7	472	0.776	5.9
4-5	18	465	0.764	5.0
5-6	28	447	0.734	4.2
6-7	29	419	0.688	3.4
7-8	42	390	0.640	2.6
8-9	80	348	0.571	1.9
9-10	114	268	0.439	1.3
10-11	95	154	0.252	0.9
11-12	55	59	0.096	0.6
12-13	2	4	0.006	1.2
13-14	2	2	0.003	0.7
14-15	0	0	0.000	0.0

Source: Based on data in Murie (1944), quoted by Deery (1947).

**Table 24.3. Some of the correlates of  $r$ - and  $K$ -selection**

	$r$ -Selection	$K$ -Selection
<b>Climate</b>	Variable or unpredictable; uncertain	Fairly constant or predictable; more certain
<b>Mortality</b>	Often catastrophic, nondirected, density independent	More directed, density dependent
<b>Survivorship</b>	Often type III	Usually types I and II
<b>Population size</b>	Variable in time, nonequilibrium; usually well below carrying capacity of environment; unsaturated communities or portions thereof; ecologic vacuums; recolonization each year	Fairly constant in time, equilibrium; at or near carrying capacity of the environment; saturated communities; no recolonization necessary
<b>Intra- and interspecific competition</b>	Variable, often lax	Usually keen
<b>Selection favors</b>	1. Rapid development 2. High maximal rate of increase, $r_{max}$ 3. Early reproduction 4. Small body size 5. Single reproduction 6. Many small offspring	1. Slower development 2. Greater competitive ability 3. Delayed reproduction 4. Larger body size 5. Repeated reproduction 6. Fewer, larger progeny
<b>Length of life</b>	Short, usually less than a year	Longer, usually more than a year
<b>Leads to</b>	Productivity	Efficiency
<b>Stage in succession</b>	Early	Late, climax

Source: From E. R. Pianka, "On  $r$ - and  $K$ -selection" in American Naturalist, 104: 592-597, 1970. Copyright © 1970 University of Chicago Press, Chicago, IL. Reprinted with permission.