

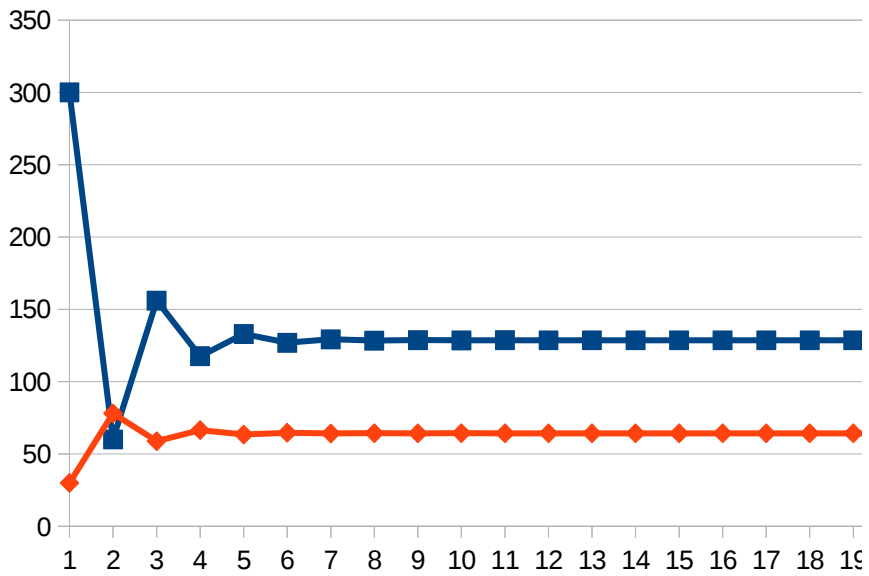
Sheet1

MONT 100N – Modeling the Environment  
 A Structured Population Example  
 11/20/17

Model:  $J(n+1) = (1 - r$   
 $A(n+1) = (1-dA$

n (months)	J(n) = juveniles	A(n) = adults	m
0	300	30	0.2
1	60.0	78.0	
2	156.0	58.8	
3	117.6	66.5	
4	133.0	63.4	
5	126.8	64.6	
6	129.3	64.1	
7	128.3	64.3	
8	128.7	64.3	
9	128.5	64.3	
10	128.6	64.3	
11	128.6	64.3	
12	128.6	64.3	
13	128.6	64.3	
14	128.6	64.3	
15	128.6	64.3	
16	128.6	64.3	
17	128.6	64.3	
18	128.6	64.3	
19	128.6	64.3	
20	128.6	64.3	

$m=.2, b=2, dJ=.8, dA = .4$



$$\lambda - dJ) * J(n) + b * A(n)$$
$$\lambda) * A(n) + m * J(n)$$

b                      dJ                      dA                      0.4

2                      0.8

