Tigers: Survival and Extinction – An Internet Activity

Introduction

Extinction is defined as the disappearance of a species from existence. Eventually, all species become extinct. Extinction is a natural component of evolution, occurring as one form is replaced over time by another, more successful form The fossil record also shows evidence of several abrupt, mass extinctions. Extinctions may be **local** (loss of a species from only part of its range) or **global** (loss of a species from its entire range). Human activities contribute to the extinction of a species in several ways; 1) over-hunting or over-harvesting, 2) disruption or elimination of habitats, 3) introduction of exotic species (parasites, predators, prey, competitors), and 4) pollution of the environment.

This exercise illustrates the survival challenge (and risk of extinction) faced by the endangered Bengal tiger of India. The tigers are threatened by the large human population, the destruction of its habitat, poaching of individuals by humans, reduction in availability of prey, and pollution of its environment.

Procedure

1. Go to the website http://www.5tigers.org/AllAboutTigers/Adventures/habitats/a1.htm.

2. Go to the bottom of the page and click on "Udaipur" as your first place to live.

3. Read this page and at the bottom, click on "Udaipur" to confirm that this is the place you want to live.

4. Read this page and go to the bottom of the page and click on "Hunt!".

5. The next screen gives you the result of your tiger's first month of hunting in Udaipur. In Table 1, record the number of kilograms of meat killed and the number and type of animals killed.

6. As you see, your tiger was captured and placed in a zoo, so your tiger's hunting efforts at this location are over. At the bottom of the page, click on "another habitat".

7. You are returned to the original page of the website. Go to the bottom of the page and click on "Nallamalai Forest".

8.   Read this page and at the bottom, click on "Nallamalai Forest" to confirm that this is the place you want to live.

9.   Read this page and go to the bottom of the page and click on "Hunt!".

10.   You will now see a split screen. At the top are the results from your tiger's first month of hunting in Nallamalai. In Table 1, record the total number of kilograms of meat killed and the number and type of animals killed. Also, in the bottom screen, in the table under "first month", type the total number of kilograms of meat killed this month. Now, go back to the top screen, go to the bottom of the page and click on "Hunt!".

11.   The top screen changes to reflect the results of your tiger's second month of hunting in Nallamalai. In Table 1, record the total number of kilograms of meat killed and the number and type of animals killed. Also, in the bottom screen, in the table under "second month", type the total number of kilograms of meat killed this month. Now, go back to the top screen, go to the bottom of the page and click on "Hunt!".

12.   Again, the top screen changes to reflect the results of your tiger's third month of hunting in Nallamalai. In Table 1, record the total number of kilograms of meat killed and the number and type of animals killed. Also, in the bottom screen, in the table under "third month", type the total number of kilograms of meat killed this month.

13.   Now, in the bottom screen, click on "Add 'em up!". The total number of kilograms of meat killed in the three months of hunting will be displayed. Record this total in Table 1.

14.   Click on "Graph!". No graph appears but the screen that does appear tells you whether or not your tiger survived. Record this in Table 1. Now click on "another habitat" at the bottom of this screen.

15.   You are returned to the original page of the website. Go to the bottom of the page and click on "Kaziranga National Park".

16.   Read this page and at the bottom, click on "Kaziranga"

to confirm that this is the place you want to live.

17. Read this page and go to the bottom of the page and click on "Hunt!".

18. You will now see a split screen. At the top are the results from your tiger's first month of hunting in Kaziranga. In Table 1, record the total number of kilograms of meat killed and the number and type of animals killed. Also, in the bottom screen, in the table under "first month", type the total number of kilograms of meat killed this month. Now, go back to the top screen, go to the bottom of the page and click on "Hunt!".

19. The top screen changes to reflect the results of your tiger's second month of hunting in Kaziranga. In Table 1, record the total number of kilograms of meat killed and the number and type of animals killed. Also, in the bottom screen, in the table under "second month", type the total number of kilograms of meat killed this month. Now, go back to the top screen, go to the bottom of the page and click on "Hunt!".

20. Again, the top screen changes to reflect the results of your tiger's third month of hunting in Kaziranga. In Table 1, record the total number of kilograms of meat killed and the number and type of animals killed. Also, in the bottom screen, in the table under "third month", type the total number of kilograms of meat killed this month.

21. Now, in the bottom screen, click on "Add 'em up!". The total number of kilograms of meat killed in the three months of hunting will be displayed. Record this total in Table 1.

22. Click on "Graph!". No graph appears, but the screen that does appear tells you whether or not your tiger survived. Record this in Table 1.

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Tiger: Survival & Extinction LAB WRITE-UP: Submit pages 5-7

Student Name: **Lab Date:**

Lab Instructor: **Section #:**

Results (Data)

Table 1. Tiger hunting results by location.

	Month:	Location		
		Udaipur	**Nallamalai Forest**	**Kaziranga National Park**
# kilograms of meat killed:	**1**			
	2			
	3			
	Total			
# and type of animals killed:	**1**	Deer: Wild pig: Cows: Other:	Deer: Wild pig: Cows: Other:	Deer: Wild pig: Cows: Other:
	2		Deer: Wild pig: Cows: Other:	Deer: Wild pig: Cows: Other:
	3		Deer: Wild pig: Cows: Other:	Deer: Wild pig: Cows: Other:
Did you survive?				

- continued -

Conclusions (Questions): *For full credit, these questions should be answered thoroughly, in complete sentences, in legible handwriting.*

1. For Udaipur, discuss whether or not you survived and why you did or did not survive.

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2. For Nallamalai Forest, discuss whether or not you survived and why you did or did not survive.

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3. For Kaziranga National Park, discuss whether or not you survived and why you did or did not survive.

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4. In which location do think the tigers are at greatest risk of going extinct and why?

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5. In which location do think the tigers are at least risk of going extinct and why?

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6. Were you more successful at killing prey in one forest as compared to the other two forests? Why do you think this is the case?

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