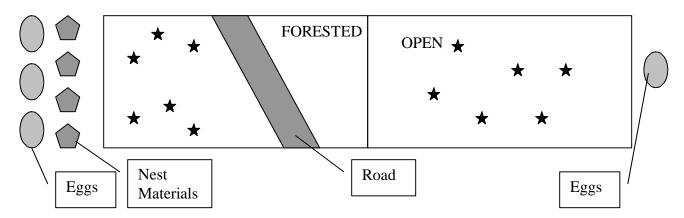
## Example of data sheet.

1		RUN #1	
	Warbl	ers - non-susceptible	6
Names	Candies	Nest Success	Offspring Produced
TOTAL			
		rblers - susceptible	
Names	Candies	Nest Success	Offspring Produced
TOTAL			
TOTAL			
		Cowbirds	
Names	Candies	Nest Success	Offspring Produced
TOTAL			

For the second run change the "forested" area by placing a road across the forest (see diagram). Rerun the game but now the cowbirds are safe from bring caught by the warblers when they are in the road. The rest of the rules apply the same. Record the results the same way. These results can be graphed in excel to graphically show how the populations change over this time. You can also make this an iterative process by changing each dead cowbird into a warbler and each dead warbler into a cowbird in each successive run of the game and determine which population will thrive and which will go extinct. Example of a second run layout:



	War	RUN #2 blers - non-susceptibl	0	
Names	Candies	Nest Success	Offspring Produced	
			· ~ ~	
TOTAL				
N	N N	/arblers - susceptible		
Names	Candies	Nest Success	Offspring Produced	
TOTAL				
TUTAL		Cowbirds		
Names	Candies	Nest Success	Offspring Produced	
TOTAL				

## **QUESTIONS:**

Why did the cowbird need 20 candies versus the warbler's 15 candies?

Did the second run of the game with the warbler habitat fragmented make things easier on the cowbirds or easier on the warblers? Why?

What kinds of management actions would be useful for helping maintain warbler populations?

What other factors besides nest parasitizing may be playing a role in the warbler decline in relationship to habitat fragmentation?

Do small parcels of forest land have value to the organisms that live in the forest or should we focus all our attention on the big chunks of habitat?