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Topic #9: *Wolbachia* versus Gene Drives

Pre-discussion questions. Answer briefly. Use only the space provided. Do not exceed one page.

1. What point was Bill Gates trying to make by releasing mosquitos during his TED talk?
Do you think he should have done it? Why? (2-3 sentences)
2. What is special about inheritance under a gene drive mechanism?
3. What does the gene that you are "driving" need to do if your goal is to eliminate all mosquitos? How many mosquitos would you need to release to accomplish this?
4. What is *Wolbachia*?
5. How is *Wolbachia* used to fight tropical diseases? Explain at least ***two ways*** that it differs from a gene drive in how it affects mosquitos, how it is released into wild populations, etc.
6. Do you think society is ever justified driving a species to extinction (e.g., the *Aedes aegypti* mosquite that is the vector for malaria)? Why or why not? (2-3 sentences)