

## EEB 2208: INTRODUCTION TO CONSERVATION BIOLOGY – Midterm

### PART ONE

Here are the answers: A means that the statement was true, B means it was not.

1	B	31	A	61	B
2	B	32	B	62	B
3	A	33	A	63	B
4	B	34	A	64	B
5	A	35	A	65	A
6	B	36	A	66	B
7	A	37	B	67	B
8	B	38	A	68	B
9	B	39	B	69	A
10	B	40	A	70	A
11	B	41	A	71	B
12	B	42	A	72	A
13	B	43	B	73	B
14	A	44	B	74	A
15	A	45	B	75	B
16	A	46	B	76	A
17	B	47	B	77	B
18	A	48	B	78	A
19	B	49	A	79	A
20	A	50	B	80	A
21	B	51	B	81	B
22	B	52	B	82	A
23	B	53	A	83	A
24	B	54	B	84	A
25	B	55	A	85	B
26	A	56	A	86	B
27	B	57	A	87	B
28	B	58	A	88	B
29	B	59	A	89	A
30	A	60	B	90	B

### PART TWO

**91. On 21<sup>st</sup> September 2003, NASA intentionally crashed the Galileo space craft into Jupiter. Why did they do this, and what does it have to do with conservation biology? (2 points)**

*To avoid the risk of organisms from Earth invading Europa – a moon with water on it. This is an example of a preemptive move to avoid the problems caused by invasive species.*

**92. Give an example of (3 points):**

*For species not discussed in class we marked answers wrong if we could find no evidence that you were right. But, in these case, if you have evidence that you actually were right, bring it to me and I will reconsider.*

**A keystone species:** *Examples given in class included beaver, sea otter (1/2 point for “otter” because most species are not), etc. but we accepted anything that we could verify fit the definition.*

**An invasive species found in Connecticut:** *Examples given in class included Phragmites (common reed), purple loosestrife, European starling, West Nile virus, Chestnut blight, etc., but we accepted anything that we could verify fit the definition.*

**A species that has been extirpated from Connecticut since European settlement:** *Examples given in class included passenger pigeon, heath hen, etc., but we accepted anything that we could verify fit the definition. Chestnut is not extirpated (see my notes); nor are sugar maples and chickadees (I see both in my yard most mornings), though there are predictions that they will disappear in the future due to climate change.*

**93. Compare the effects of hunting on mourning doves and passenger pigeons. What are the likely biological reasons for any differences or similarities? (3 points)**

*Hunting of mourning doves is sustainable and well managed, despite a very heavy harvest. Hunting of passenger pigeons, by contrast, was not sustainable and was a contributing factor in the extinction of the species. The exact reasons for the differences are uncertain, but they probably arise from some combination of the following things: (a) it is likely that mourning doves have a high reproductive rate, (b) the lack of regulation on passenger pigeon hunting, (c) the simultaneous loss of habitat that passenger pigeons underwent, and (d) the need for social stimulation in passenger pigeons. For all three points you needed to describe the difference and mention at least two of the possible explanations to demonstrate that you understand that there is uncertainty and that multiple factors were probably at play.*

**94. Name one thing that I could do to help you understand the material better (presenting less information, or saying that there is nothing I can do, are not acceptable answers☺). (2 points)**

*Thanks for all your suggestions – I really do pay attention to these answers, and will try to use as many as I can. Here are a few notes to explain why I do things the way I do, and why I may not follow all of your suggestions.*

*First, I don't post most figs on-line due to copyright issues. This is one reason my PowerPoint presentations are not on-line. (Another is that even fewer people come to lecture if I post everything ... and this shows on test scores.) But, I will slow down in my explanations to give*

*you more time to copy figures for yourselves. [But, PLEASE tell me if I'm still going too fast!!! This is why I ask you about it in class. When I ask and no one says anything I assume that the pace is OK. You can tell me by email – or even an anonymous note in my department mailbox (no letters clipped from newspapers though) – if you really don't want to say anything in front of everyone.] Also, note that many of the figures from my slides are in the textbook or in the supplemental reading papers listed in my notes.*

*Several people said that they there were things I should spend more time explaining. I am happy to spend more time on things, either with the whole class or with individual students. But, once again, there is no way for me to know what you don't understand if you don't ask questions. I know it's a big intimidating, but I strongly encourage you to ask more questions in class. If you really can't bring yourself to do that, I am nearly always present 10-15 minutes before the lecture starts, and stay as long as people need me to be after lectures. And I'm happy to answer questions by email, or set up a meeting at some other time. If you know that lots of people are having trouble with something, let me know and I'll go back over it in lecture.*

*Short videos can be useful to emphasize points, but unlike some other courses (e.g., ornithology, mammalogy) I don't know of a good source for them that would work for this class (I'm open to suggestions if you know of any). I have started putting links to video reporting of current issues relating to conservation biology on the "Conservation Biology in the News" web site as additional material that might be helpful.*

*A couple of people suggested posting discussion paper questions on huskycyct - this is a good idea. I don't do it ahead of time because I think it is important for people to learn to think on their feet, and to learn to be prepared for whatever is asked of you. My experience is that students who have never had to deal with situations like this do much worse in things like job interviews – so even though it may make you feel uncomfortable, I think that there is a good reason to do it. But, I can post the questions after each discussion so that you can look back at them.*

*Someone also suggested that I ask what people found surprising about the discussion papers in the lectures – this is a really good idea. I'll try to remember to do this, but if I don't someone else should ask about it – the discussions are for you to ask questions (of me, and of your fellow students) as well as to answer mine.*

*Review sessions - unfortunately they are impossible to schedule for the entire class when there are this many people. I had planned to spend half of the lecture before the exam taking questions about the material, but the snow day made that impossible. I did spend much of the day before the exam checking the chat site on huskycyct but only one question was posted. If there is interest (i.e., if people ask me about it), I will run an on-line Q&A session one day before the final.*