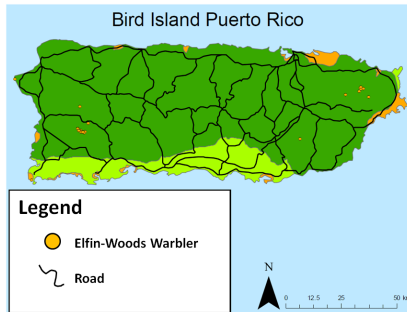




## ‘Habitats’ and ‘Ecological Niches’



**Elfin-Woods Warbler**

3. What is a habitat?

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4. Looking at the map, what are some features of the habitat of the Elfin-Woods Warbler?

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5. Define the term “Ecological Niche” based on the discussion.

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6. Remember from the map that the Warbler lives far from roads. What does this suggest about its habitat needs?

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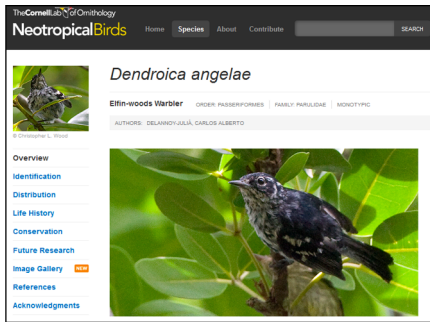
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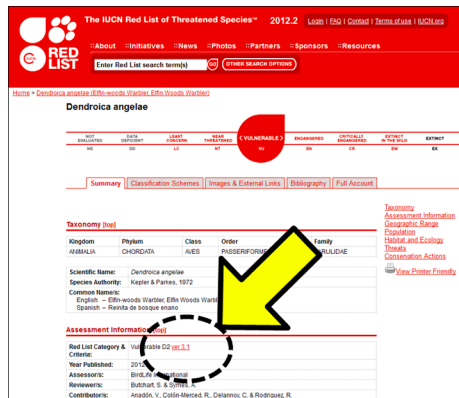
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## Research and Assess Biodiversity



<http://neotropical.birds.cornell.edu/portal/species>



<http://www.iucn.org>

**EX** No reasonable doubt that the last individual has died.

**EW** Known only to survive in captivity.

**CR** Extremely high risk of extinction in the wild.

**EN** Very high risk of extinction in the wild.

**VU** High risk of extinction in the wild.

**NT** Close to being threatened in the near future.

**LC** Widespread and abundant.

7. Reading the Neotropical Birds website, what are the physical characteristics of this species, and what does it prefer to eat?

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8. According to the IUCN website (or class discussion), is this species considered critically endangered (CE), endangered (EN), or vulnerable (VU)?

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9. What are the differences between the CR, EN, and VU classifications?

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## Assessing Impacts to Bird Species as a Wildlife Biologist



Industrial developers propose to clear-cut forests and strip mine approximately one-third of the western end of the island from Mayaguez to Utoado to mine lithium metal for use in cell phones.

A major highway will also be constructed that bisects the island to allow for the transport of lithium cargo to San Juan airport for overseas delivery.

**Working as a team of wildlife biologists, answer the following questions below to help you decide to support or condemn further industrial development in Puerto Rico:**

10. What is the name of your bird species?

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11. In which ecoregions does this species live?

12. Describe the characteristics of these ecoregions.

[illegible]



13. What are the habitat needs of your bird species?

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15. What is the IUCN classification of this species?

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16. How would the proposed strip mine development change the ecoregion in which this species lives?

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17. Based on the habitat needs of your bird species, what impacts do you predict that the proposed strip mine would have on this species, and why?

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18. Do such impacts have the potential to move the bird into a higher IUCN risk category? Why or why not?

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19. If the impact is severe, are there alternatives to halting the mining development (such as another location on the island)?

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20. Can the bird population be safely relocated to another ecoregion to allow for such development? If so which one is compatible?

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**Develop a Three-Minute Public Service Announcement for Puerto Rican officials to present your research.**

- Choose a person in your group to narrate your presentation in Photo Story.
- Introduce your team of wildlife biologists.
- Use the camera to take pictures of yourself and your teammates to include in the presentation.
- Obtain screen shot photos of your bird from the Cornell website and include in Photo Story.
- Introduce the bird along with its habitat needs and ecoregions.
- State your final recommendation to advocate either for or against the industrial development project.
- Support your decision by discussing the impacts and how your group arrived at the decision.
- Discuss any alternative plans that may allow for any potential compromises

Narrator's Name (s):

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Wildlife Biologist Team Members:

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List Pictures and Proper Order:

1. 

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3. 

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4. 

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5. 

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6. 

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7. 

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Bird Species:

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Habitat Needs:

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Ecoregions in which this species lives:

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Decision:

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Alternatives (if any):

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