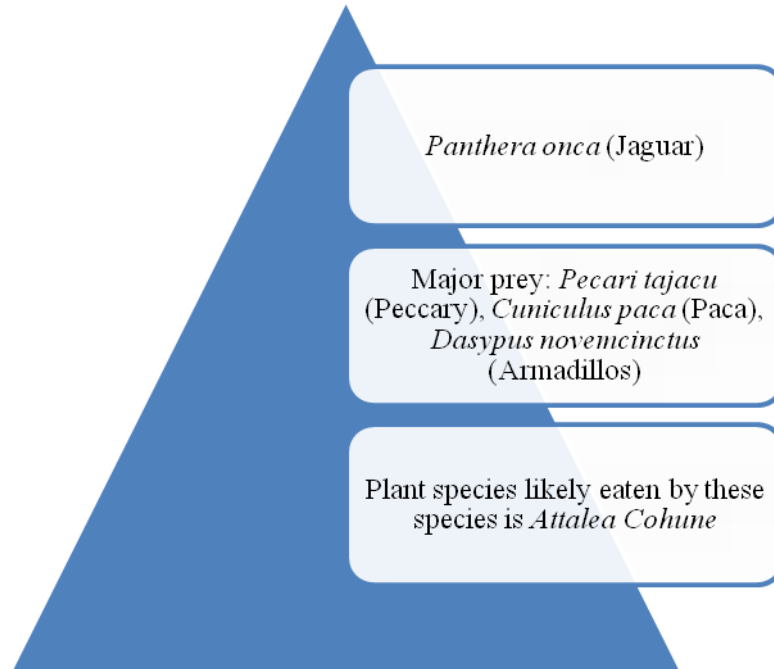


Introduction:



My project will tie into whether or not the area of rain forest we are in can support a jaguar population. I want to find an herbivore that composes the largest portion of the jaguar diet and then find the main plant species that the herbivore eats. After that I want to examine what that plant's population density is and future students can figure out if it will support the herbivore species.

- The Jaguar has a diverse diet so I have selected three of its prey that eat the cohune -*Pecari tajacu* (Peccary), *Cuniculus paca* (Paca), *Dasypus novemcinctus* (Armadillo)
- I have found a palm found in Central America called an *Attalea Cohune*, it has nut that would most likely be eaten by the three herbivores

Material and Methods:

- I will need a field guide for Belize plants and equipment to find the population density of *Attalea Cohune*. This information can be used by others to see if the area can support *Pecari tajacu* (Peccary), *Cuniculus paca* (Paca), *Dasypus novemcinctus* (Armadillos).

Results:

Line Transit	
Line 1	
0 meters	Cohune
2 meters	unknown
4 meters	Vine
6 meters	Cohune
8 meters	Cohune
10 meters	unknown
Line 2	
0 meters	unknown
2 meters	unknown
4 meters	unknown
6 meters	unknown
8 meters	Vine
10 meters	unknown
Line 3	
0 meters	unknown
2 meters	unknown
4 meters	Cohune
6 meters	Cohune
8 meters	unknown
10 meters	unknown
Line 4	
0 meters	Cohune
2 meters	Cohune
4 meters	Bamboo
6 meters	Strangler Fig
8 meters	Strangler Fig
10 meters	Cohune

- The cohune palm occurs 33% of the time in my line transit by the Sleeping Giant Lodge at Caves Branch in Belize.

Conclusion:

After gathering the data on the cohune palm's population density and reviewing my hypothesis I realize that the data gathered in this project is inadequate due to its small sample size. For future exploration on the cohune palm there should be a larger sample size and should take into account the maturity of the individual trees. Then I would recommend monitoring of these palms over a five year period in order to keep track of the survival rate and how many mature nut-bearing cohune palms there are each year. This is meant to determine whether the population density of the cohune palm is maintained at a level that would be enough to support one of the listed herbivores. I recommend that the bio matter production of the mature cohunes should also be calculated so that it is known whether the area is producing enough for the

herbivores. After the data on the cohune palm is all gathered it would then be possible to start examining the herbivores and their populations and whether they can support the Jaguar.

Works Cited

- Caso, A., Lopez-Gonzalez, C., Payan, E., Eizirik, E., de Oliveira, T., Leite-Pitman, R., Kelly, M. & Valderrama, C. 2008. *Panthera onca*. In: IUCN 2011. IUCN Red List of Threatened Species. Version 2011.2. <www.iucnredlist.org>. Downloaded on **07 December 2011**.
- Gongora, J., Reyna-Hurtado, R., Beck, H., Taber, A., Altrichter, M. & Keuroghlian, A. 2011. *Pecari tajacu*. In: IUCN 2011. IUCN Red List of Threatened Species. Version 2011.2. <www.iucnredlist.org>. Downloaded on 07 December 2011.
- Queirolo, D., Vieira, E., Emmons, L. & Samudio, R. 2008. *Cuniculus paca*. In: IUCN 2011. IUCN Red List of Threatened Species. Version 2011.2. <www.iucnredlist.org>. Downloaded on **07 December 2011**.
- Abba, A.M. & Superina, M. 2010. *Dasypus novemcinctus*. In: IUCN 2011. IUCN Red List of Threatened Species. Version 2011.2. <www.iucnredlist.org>. Downloaded on **07 December 2011**.
- William Miller, Robbie Peter, Jennifer Butler, Derrick Gormley, Thomas MacLean. "Jaguars." Southern Kings Consolidated School. Southern Kings Consolidated School, n.d. Web. 06 Dec. 2011
<http://www.edu.pe.ca/southernkings/jaguar.htm>
- Ingmarsson, L. 1999. "Pecari tajacu" (On-line), Animal Diversity Web. Accessed December 06, 2011
http://animaldiversity.ummz.umich.edu/site/accounts/information/Pecari_tajacu.html
- "Lowland Paca." Golden Map. Web. 06 Dec. 2011.
http://en.goldenmap.com/Lowland_Paca#
- McDonald, K., J. Larson and P. Myers. 2009. "Dasypus novemcinctus" (On-line), Animal Diversity Web. Accessed December 06, 2011
http://animaldiversity.ummz.umich.edu/site/accounts/information/Dasypus_novemcinctus.html.
- "Palms: Attalea cohune." PACSOA. Palm and Cycad Societies of Australia. n.d. Web. 06 Dec. 2011.
<http://www.pacsoa.org.au/palms/Attalea/cohune.html>
- R.L. Wood, S.T. Reid, A.M. Reid. "Vegetation of Belize." *Field Guide to Ambergris Caye, Belize, C.A.* Casado Internet Group, Belize, n.d. Web. 06 Dec. 2011.
<http://ambergriscaye.com/fieldguide/bzplants.html>