#### **Big Cat Conservation**

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#### Abstract

This project questions how similar or dissimilar are the human posed threats faced across all seven large bodied cat species based on data from the large non-governmental organizations. The study looks at tigers, lions, leopards, jaguars, pumas, cheetahs, and snow leopards through a google search to find cat specific and wildlife specific conservation organizations and reviewing their work to see what they claim is the biggest threat these cats face. An excel sheet was created to keep all relevant information organization by cat species and other crucial sections. Poaching is the biggest threat to tigers, lions and snow leopards while habitat loss is the biggest threat to jaguars, pumas, cheetahs, and leopards. The two largest cats and a sister species had poaching as the largest threat, while other cat species, the cat species closer in size, had habitat loss as their main threat.

Keywords: Big cat conservation, threats, conflicts, solutions, big cats

# Introduction

There are seven large bodied extant cats (Turner, 1997). For the purpose of this paper and project the seven large bodied cats will be referred to as big cats from here on out. The seven big cats are the tiger, lion, leopard, jaguar, puma, cheetah and snow leopard. Out of these seven, five are in trouble, in terms of their conservation status, with another one heading towards trouble. The International Union for Conservation of Nature's (IUCN) Red List of Threatened Species is the world's most comprehensive source of information on the global extinction risk status of animal, fungus, and plant species (IUCN Background, 2020). Although the IUCN Red List is not always up to date they are still a reliable source for how species are doing across their range, however, some populations may face more serious concerns in specific locations of their total range. As of August 2020, the IUCN Red List labels jaguars as near threatened and pumas as least concern (IUCN Jaguar, 2020; IUCN Puma, 2020). Lions, leopards, cheetahs and snow leopards are listed as vulnerable under the IUCN Red List (IUCN Cheetah, 2020; Leopard, 2020; IUCN Lion, 2020; IUCN Snow leopard, 2020). Tigers are the only big cat listed under the IUCN Red List as endangered (IUCN Tigers, 2020).

Human behavior is driving ecosystem and species decline (Cowling, 2014; Inskip, et al., 2014; Verissimo, 2013). These apex predators play a very important role because as carnivore populations decrease the ecosystem in which they are in begin to function differently and are not as resiliente to becoming increasingly compromised (Inskip, et al., 2014). It is no secret that humans are altering, affecting and impacting every aspect of nature. From poaching to climate change humans have made an impact, and not always for the best. In California alone between 95% and 97% of fires are human caused (Syphard et al., 2007; Balch et al., 2017). As of October 5, 2020 California has had 8,320 wildfires resulting in an estimated 4,040,935 acres burned just this year, and the fire season has not even started yet (CalFire Incident Archive, 2020). One study believes that climate change and human-caused mortality of carnivores is the most significant anthropogenic impact on nature (Inskip, et al., 2014; Ripple, et al., 2014). Wildfires can change the landscape, vegetation and the connectivity between habitats (Engstrom, 2010).

cause injury or death among wildlife.

My master plan focuses on big cat conservation through mitigation of human-big cat conflict. My mission is to drive action to further conservation to ensure human and big cat coexistence, while my vision is big cat conservation through public collaboration, environmental education, and biodiversity preservation. My passion is to mitigate human-big cat conflict. I want to end, or at least decrease, human-big cat conflict! Human-big cat conflict negatively impacts big cat populations worldwide, which trickles down the food chain and spreads problems through the environment. Dr. Jane Goodall's quote, "what you do makes a difference, and you have to decide what kind of difference you want to make" really impacted me. I have decided I want to make a difference for the big cats and ensure their survival in the wild while using conservation messaging through accredited zoos.

This project has allowed me to focus on a comparative research question. My question is, *how similar or dissimilar are the human posed threats faced across all seven large bodied cat species based on data from the large non-governmental organizations*? By focusing on big cat organizations it will be clear as to which conflicts they deem most important and to see if these big cat organizations agree on what the biggest threat is facing the different big cat species.

### Methods

To find how similar or dissimilar the threats facing the big bodied cat species are a google search was conducted to research different big cat organizations. The organizations were found through a generic google search, knowledge of certain organizations and through organizations that had partnerships and collaborations with other organizations I found through the google search. The most common keywords used to search were "big cat organizations", "big cats", "big cat conservation", and "big cat conservation organizations". Once organizations were found a look through their website was done to see if there was any partnership or collaboration done with similar organizations that focus on specifically one or two big cats and organizations that focus on all felines and all wildlife. This variety of organizations allowed a full comprehensive view of how different organizations that focus on wildlife, felines and individual big cats

compare to one another. Specific big cat species organizations were researched as well as multiple big cat species organizations. Some big cat species, like leopards, did not have a lot of single cat species organizations, which shows how important it is that conservation efforts towards that species is since there is not a lot of focus. In order to keep track of the different organizations that were researched, an excel sheet was created. The excel sheet took note of the name of the organization, what cat species they focus on, their website link, their mission, the projects they are working on, their point of contact and any other important information that would benefit this project. This excel sheet had all the different organizations and became the master list that assisted in creating other excel sheets, in total twelve excel sheets were created.

	Link to Website	Mission	Contact Person	Contact Email	Country	HWC	Notes	On Website	Instagram
Action for Cheetahs in Kenya	https://www.actio	Our mission is to promote the con	Mary Wykstra	info@actionforcheetahs.org	Salama/ Sambu	Habitat loss,	Livestock conflicts	Yes	Yes
Cheetah Conservation Botswana	https://www.chee	Cheetah Conservation Botswana	Rebecca Klein	info@cheetahconservationbotswa	Ghanzi/ Maun- E	Habitat loss,	Livestock conflicts	Yes	Yes
Cheetah Conservation Fund	https://cheetah.c	CCF's mission is to be the interna	Laurie L. Marker, DPhil., Founder	ccflaurie@cheetah.org	Namibia,	Habitat loss,	Livestock conflicts, Illegal pet tr	Yes	Yes
Cheetah Outreach	http://www.cheet	Promoting the survival of the free	Annie Beckhelling	cheetah@intekom.co.za	Somerset West/	Habitat loss,	Prey loss, Human activity	Yes	Yes
Mara- Meru Cheetah Project	http://marameru.	Mission of the Mara-Meru Cheetah Pr	Dr. Elena V. Chelysheva	mara-cheetah@mail.ru ; meru-che	Mara/ Meru- Kei	Habitat loss,	Prey loss	Yes	No IG
Range Wide Conservation Progra	http://www.cheel	The Range Wide Conservation Pr	Dr. Sarah Durant, Project Leader	sdurant@wcs.org	Africa	Habitat loss,	Prey loss, Livestock conflicts, P	Yes	No IG

#### Image shows the information that was collected during research

In addition to the master list, there were seven excel sheets where each list focused on one specific big cat species. Another excel sheet focused on feline only organizations, but focused on more than one cat species. An excel sheet keeping track of the mixed organizations, organizations that focused on more than one feline or wildlife in general, and what they claimed to be the biggest threat or human-wildlife conflict was. I gathered what the organization claimed was the biggest threat facing the big cats, either from direct wording or wording where it is assumed the threats were having the biggest impact on the big cats. There was one excel sheet of sources labeled 'other sources' that could have been helpful but was not the most important piece of information at the time, but was kept in case their importance increased. Finally there was an excel sheet that focused on their International Union for Conservation Nature's (IUCN) Red List statues with the estimated number of the cat's populations, what the IUCN claimed to be the biggest threat or conflict and when that data was published.

The excel sheets were color coded and each cat species received their own color, so it was clearly identified what cat species was involved on each tab of the excel sheet. Tigers were orange, lions were yellow, leopards were pink, jaguars were green, pumas were blue, cheetahs were red and snow leopards were purple. Each tab or excel sheet listed the organizations in alphabetical order, with the exception of the IUCN tab. The IUCN tab and the order of the tabs went by the size of the cat. From largest to smallest there were tigers, lions, leopards, jaguars, pumas, cheetahs, and snow leopards. Ordering them by size seemed like the best method to determine the similarities and differences between cat species size. Several pieces of misinformation led to the belief that leopards were taller than jaguars, which would be considered as bigger for this project, so leopards were placed before jaguars. Information found later deemed that jaguars should have been placed before leopards, but by the time this was learned both leopard and jaguar action pieces were either in progress or already completed. Due to this it was decided it was best to leave everything as is and explain these findings if questions arose, it was also mentioned in one of the jaguar action pieces that jaguars are in fact larger than leopards in all aspects and should have been placed before leopards.

You can view the <u>IAP- Big Cat Organizations</u> excel sheets. The excel sheets are all on one main document with different tabs for each individual excel sheet. A screenshot of the master list of organizations is shown in Appendix A.

The action component consisted of taking the information from the excel sheets and elaborating on the information. The first part of the action component was the creation of an Instagram account, @big\_cat\_conservation.



Instagram Account Posts

This account is public so anyone can view it. The hashtag #BigCatConservation was used first in every posting to have this project as the focal point. The second action component was a blog posting on the Big Cat Conservation website.



#### Website Blog Postings

Each blog post focused on one of the big cats and a threat or solution. Once the blog post was posted every morning, a brief summary was posted on Instagram. The Instagram account was a brief summary to cut down on words, while the blog posting was able to go into more detail, and share links and videos to more information. Every Instagram posting invited people to visit the blog and website to learn more, and the website link was posted in the bio section of the Instagram account. On every page the website shared a video, links, conservation organizations and action components that anyone can do.



Big Cat Conservation Website Page

# Results

This study takes a qualitative approach by looking at patterns in terms of threats and how they relate to the different big cat species. The results were interesting for this project. The seven tiger conservation organizations agreed that poaching was the biggest threat impacting the tiger population, while the six cheetah conservation organizations agreed that habitat loss was the biggest threat facing cheetahs. The five majority of puma conservation organizations and three jaguar conservation organizations agreed that habitat loss was the biggest threat impacting pumas and jaguars, while the four majority of snow leopard conservation organizations agreed poaching is the biggest threat impacting snow leopard populations. Both lions and leopards have a limited number of conservation organizations, four and two respectively, and they vary in what they believe is the biggest threat, outside of agreeing human impact is the biggest threat. The image below is a mind map showing the biggest threats to each of the big cats. It shows that all big cat species' biggest threat is anthropogenic and then breaks off into direct killings of the big cats or habitat loss.



#### Story-map *image shows the biggest threats that impact the big cats*

Wildlife conservation organizations seemed to follow the same pattern as the big cat species specific conservation organizations in terms of what they claim is the biggest threat facing the big cats. All but one wildlife conservation organization, out of seven, agreed that poaching is the biggest threat to tigers while cheetahs biggest threat is habitat loss, according to three wildlife conservation organizations. Pumas and jaguars both have habitat loss as their biggest threat according to the majority of, two and five respectively, wildlife conservation organizations. Similar to the snow leopard conservation organizations, two wildlife conservation organizations also claim poaching is the biggest threat to snow leopards. Wildlife conservation organizations have mixed claims about the biggest threats to lions and leopards, however killing lions either from direct killings or retaliatory killings are the majority biggest threat, according to four wildlife conservation organizations. Wildlife conservation organizations agree that habitat loss is a major threat to leopards, but it is not clear if they believe this is the biggest threat to leopards, three wildlife conservation organizations agree to this statement.

It is interesting how the biggest big cat, the tiger, and the fastest big cat, the cheetah, conservation organizations and wildlife conservation organizations are firm in their claims to what the biggest threats are to these two cats. It is intriguing to see that pumas have habitat loss as their biggest threat, but the majority of people think wildlife is 'not in their backyard' and it is someone else's problem somewhere else, yet our wildlife in America, like the puma, is being affected by our own actions. This is clear by the fact the biggest threat facing jaguars is also

habitat loss and they are hardly found in the United States, if there are any left (Panthera Jaguar, 2020). The mountain ghost snow leopard is difficult to find in the wild, yet poaching is their biggest threat, agreed on by both snow leopard and wildlife conservation organizations. While the elusive leopards and lions are unknown in what the biggest threat is from lion, leopard, and wildlife conservation organizations. Both leopards and lions have the majority of their populations in Africa with sub populations in Asia (Panthera Leopard Panthera pardus, 2020; Panthera Lion: Panthera leo, 2020).

### Discussion

The data from this project explains that for some big cat species it is very clear to know what threat has the biggest impact while other big cat species it is harder to determine what their biggest threat is. The reasons for this are unknown, but we can speculate some reasons for the inconsistencies.

Tigers are the largest cat in the world and they have the smallest known population size in the wild (IUCN Tiger, 2020). The human-tiger conflict is a growing issue in areas where humans and tigers struggle to coexist. According to the seven tiger and seven wildlife conservation organizations the top five biggest threats, in order from biggest to least big, for tigers are poaching, habitat loss, prey loss, climate change, and the illegal pet trade. It may be easy to determine tiger threats because they are the biggest cat or because their population is the smallest known, or it could be for another reason entirely.

Cheetahs are the fastest land animal in the world, yet they can't outrun their growing threats and shrinking population (IUCN Cheetah, 2020; Sjogren, 2017). The six cheetah and five wildlife conservation organizations agree that the top four biggest threats facing cheetahs, in order from greatest threat to least threat, is habitat loss, poaching, prey loss, and the illegal pet trade. The illegal pet trade is an increasing threat to cheetahs and some people do not see the line between a pet and a wild animal, especially with growing use of social media (Bale, 2016; CCF Illegal Pet Trade, 2020). Unfortunately since cheetahs are diurnal they are more visible to people and often blamed for livestock loss when they are not the culprit, and studies have shown livestock is less than 6% of a cheetahs diet (CCB About Cheetahs, 2020; Sjogren, 2017).

Pumas are the big cat known to the United States and Canada where about 4,000 pumas are killed each year (Panthera Puma, 2020). Since they have the largest geographic range of any native terrestrial mammal in the Western Hemisphere, it is difficult for organizations to agree on their biggest threats because different areas have different threats (Panthera Puma, 2020). For the most part five of the six puma organizations and three wildlife conservation organizations agree that habitat loss is the pumas biggest threat, followed by poaching or trophy hunting, and prey loss. For this project habitat loss was looked at and then a special focus was placed on habitat loss caused by human caused wildfires. On average, human-caused wildfires cause 61,375 fires each year (NIFC, 2018). There is an average of 4.6 million acres burned annually by wildfires, with 55% of those being human-caused (Evans, 2018). As of November 19, 2020 California alone has seen 9,279 fires resulting in 4,197,628 acres burned (Cal Fire Incidents Overview, 2020). Losing this much habitat in a state where pumas are already facing other threats could be detrimental to their existence in California.

Jaguars are the largest threat in the western hemisphere, yet they are not big enough to scare away the threats they face. Similar to the puma, jaguars face the same type of threats and they are viewed in the same order by four jaguar organizations and seven wildlife conservation organizations. The biggest threat facing jaguars is habitat loss followed by poaching and prey loss. Just like with pumas, the jaguar habitat loss took a special look at habitat loss due to wildfires. By August of 2019 there were estimated to be around 76,000 fires burning across the Brazilian Amazon alone, this is an 80% increase of the same time period as the year before (Borunda, 2019). Most of the fires are human caused through deforestation (Borunda, 2019). In August 2020 there were 29,307 fires in the Brazilian Amazon (Pedroso, et al., 2020). Around this same time California had 900 wildfires in 22 days resulting in a total of two million acres being burned by September 2020 (Sanchez & Weber, 2020). The increase of wildfires around the world is showing how important it is to discuss climate change and the potential dangers it will have on the planet.

Snow leopards are known as the 'mountain ghost' because they are so elusive and mysterious (Panthera Snow Leopard, 2020). Four of the five snow leopard conservation organizations and five wildlife conservation organizations agree that poaching is the biggest

threat impacting snow leopards, followed by prey loss, habitat loss, and climate change. Since they are so elusive and difficult to find in the wild it is surprising that poaching is their biggest threat, although poaching can occur by using traps as well. It is believed that between 221 and 450 snow leopards have been poached every year since 2008 (GSLEPP Poaching, 2019).

Lions are the second largest cat in the world and the only cats that live in a group, called a pride (Panthera Lion, 2020). There were a lot of different opinions on what the biggest threat to lions is but killing the lion in some way was the greatest threat. Three of the four lion conservation organizations and four of the five wildlife conservation organizations agreed with this statement. For the purposes of this project poaching consisted of poaching, trophy hunting, canned hunting, retaliatory killings, and preemptive killings. This grouping allowed for an agreement on killing lions as the greatest threat. After poaching the biggest threats were habitat loss, livestock conflicts, and the illegal wildlife trade of the bone trade and cub petting.

Leopards are considered the most elusive of all the big cats, and perhaps that is why there is no clear agreement on what the biggest threat is facing leopards (AWF Leopard, 2020). It was agreed that anthropogenic threats are the greatest threat to leopards, and then it becomes less clear as to what the next biggest threats are (IUCN Leopard, 2020). Another thing that cannot be agreed upon or is unknown is the population size of leopards which could aid in the lack of agreement of the biggest threat to leopards (IUCN Leopard, 2020). After anthropogenic threats, two leopard conservation organizations and seven wildlife conservation organizations claim that the remaining threats are habitat loss, poaching, and prey loss.

In terms of how similar or dissimilar the human posed threats across all seven large bodied cat species are, it varies. Tigers, lions and snow leopards all have poaching as their biggest threat. It is interesting because tigers and snow leopards are considered sister species (Davis, Li, & Murphy, 2010). Tigers and lions have the greatest relative brain size of all the cats (Turner, 1997). It is undetermined by this project if either of these facts play a role in why these three big cat species have poaching as their greatest threat. Jaguars, pumas, cheetahs, and leopards, all have habitat loss as their greatest threat, considering leopards second greatest threat for this situation. Lions, leopards, and jaguars are also considered sister species (Davis, Li, & Murphy, 2010). Lions and leopards are both mainly found in Africa (Panthera Leopard, 2020; Panthera Lion, 2020). Pumas are most closely related to the cheetah and are considered to be cousin species, with them splitting from each other between 3.5 to 4.9 million years ago (O'Brien & Johnson 2007; Turner, 1997). Pumas and jaguars both face the increasing threat of wildfires, particularly in Brazil and California (Bourunda, 2019; CalFire Incident Overview, 2020).

### Action Component Summary

My project action component consisted of an Instagram page where a new conflict, solution and information was posted every day about a cat species. In conjunction with the Instagram posting there was a website that has information about each big cat and has a daily blog posting that relates to the Instagram posting of the day. The daily Instagram and blog postings slated for eight weeks, with the first seven weeks focusing on one specific big cat species and the last week focusing on all the big cat species. The first seven weeks allowed the reader to learn about one specific big cat species while the eight week focused on comparing the similarities and differences between the big cat species. The corresponding blog post allowed for more information to be posted and links to be shared so the reader can view more information and watch videos. You can view my Instagram Timeline Excel sheet in Appendix B.

Similar to the excel sheets, the website was set up to have a home page, big cat page, all seven big cats, the blog, and a page for all references that were used. This allowed the reader to go to a page focusing on a specific big cat or information on all big cats. Each page has information, videos and links for people to read more about the species or actions that they can do and share it with their friends. Each blog posting has multiple sources used to share the information and inform the reader of where the information came from. To date (November 18, 2020) there have been 56 Instagram posts, but only 55 were a part of this project, and 54 blog posts. The very first Instagram post was asking viewers to take the pledge to protect big cats and did not have a corresponding blog post. There are still three more Instagram posts and two more blog postings remaining. The last Instagram post for this project was on November 2, 2020. As of November 18, 2020 I had 1,049 likes on Instagram (1,078 including the post posted after this project ended), 90 followers, 51 blog readers and 320 visitors to my website. I do plan on still

posting to the Instagram page and website periodically as new information arises or celebrations of that cat species are going on, like International Cheetah Day on December 4th.

While posting on Instagram and the blog I have been tagging and attaching links to other big cat organizations. I have also been sharing news and updates in my Instagram story which has received a few shares among conservation organizations. I have received a couple of comments and messages from organizations thanking me for raising their awareness. There have also been conversations in a couple postings about the information and the big cats.



Instagram Question and Conversation

Some organizations have reposted or shared my posts or stories.

You can follow the Instagram page at @big cat conservation

(<u>https://www.instagram.com/big\_cat\_conservation/</u>) and view my website Big Cat

Conservation at <u>https://reedtr6.wixsite.com/bigcatconservation</u>.

## Conclusion

This study shows that all the big bodied cats have humans as their number one threat, or anthropogenic threats. After that the two largest cats, tigers and lions, and the smallest big cat, the snow leopard, has poaching as their biggest threat. Habitat loss was the biggest threat for the remaining cats; cheetahs, jaguars, pumas, and leopards. It is interesting how humans have managed to kill these animals and the ones they don't kill they steal their habitat. Humans must learn how to coexist with these animals, and through my Instagram postings, blogs, and website I do believe I was able to inform people and encourage them to make a change to help these cats.

Through my informative Instagram postings and blogs I was able to provide information about the cat, the threats they face, and actions people can take to help these cats. Misinformation or never being informed can affect how someone sees an animal species and if they take actions. My posts focused on sharing relevant and correct information with others in a way that the general public can understand it and share it with others. I kept terms simple or explained them so there was no disconnect between the general public thinking it was too scientific and chose not to read it.

This project can be grown in a few different ways. One way is to learn the reasons why the cat species have their biggest threat as their biggest threat. Another is to see if the information provided created a change in people or provided them with information they did not already know. Lastly this project can continue to focus on poaching and habitat loss with the large bodied cats to figure out why these two threats are the biggest threats to the cat species. Out of seven species only two threats have the most impact. It turns out the threats facing the seven large bodied cats are very similar according to large non-governmental organizations; poaching and habitat loss are the two main threats to focus on when considering conservation efforts with the large bodied cats.

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# Appendix A

### Master list excel sheet of all big cat organizations.

Organization Name	Focused Ca	t Species V	Vebsite Link	Mission	Projects	Contacts	Notes				
Action for Cheetahs in	Kenya Cheetahs	h	ttps://www.actic	Our mission is to promote the con	Habitat monitoring, Livestock prot	e Mary Wykstra	Dr. Laurie Marker from CCF is a co-founder				
African Lion & Environr	mental Res Lions	h	ttps://lionalert.o	ALERT is dedicated to a multi-disc	Lion conservation, communication	1					
African Wildlife Founda	ation Cheetahs, L	ions and Leop <u>h</u>	ttps://www.awf.	Our mission is to ensure that wildlife a	Sustainable allocation of land and	Kaddu Sebunya, CEO					
AfriCat Foundation	Leopards ar	nd Cheetahs	ttps://africat.org	The AfriCat Foundation is committed t	Leopards and Cheetahs	Wayne Hanssen and Donne Le	6				
Big Cats Wild Cats	All	<u>h</u>	ttps://bigcatswil	NO mission statement	Conservation, Education, Illegal tr	7					
Cape Leopard Trust	Leopards	<u>h</u>	ttps://capeleopa	To ensure the long-term survival o	Research, Conservation, Education	Dr. Quinton Martins, Co-Found	ler				
Cheetah Conservation	Botswana Cheetahs	<u>h</u>	ttps://www.chee	Cheetah Conservation Botswana	a Cheetah populations, Biodiversity	, Rebecca Klein					
Cheetah Conservation	Fund Cheetahs	h	ttps://cheetah.o	CCF's mission is to be the international	Livestock Guarding Dogs; Conser	Laurie L. Marker, DPhil., Found	d				
Cheetah Outreach	Cheetahs	h	ttp://www.cheet	Promoting the survival of the free	Livestock guarding dogs, Cheetah	Annie Beckhelling					
Conservation India: En	nabling Cor Tigers, Snov	w leopard h	ttps://www.cons	We define conservation as knowledg	HWC, Population estimation, Wild	1					
Cougar Conservancy	Mountain Li	ons <u>h</u>	ttps://cougarcor	Our mission is to reduce human-w	HWC, Policy, Education and Outre	e Korinna Domingo, Founder/ Di	1				
Cougar Network	Mountain Lie	ons <u>h</u>	ttps://www.couc	We strive to conduct research on	Population, Recolonizing	Dr. Michelle LaRue, Executive					
Cougar Rewilding Four	Indation (CI Mountain Lie	ons <u>h</u>	ttp://www.easte	To facilitate the recovery of the co	Research, Educate, Protection of	Dave Furedy, President					
Defenders of Wildlife	Jaguars, FL	Panther, Tiger h	ttps://defenders	Defenders of Wildlife is dedicated to the	n -	Jamie Rappaport Clark, Presid	lent and CEO				
Ewaso Lions	Lions	<u>h</u>	ttps://ewasolion	Ewaso Lions is an independent 10	Warrior Watch; Mama Simba; Lior	n Dr. Shivani Bhalla, Founder an	N.				
Felidae Conservation F	Fund Puma, Chee	etahs, Leopard h	ttp://felidaefund	Strengthen the conservation of native	f Bay Area Puma Project, Argentine	Zara McDonald, President					
Feline Conservation Fo	oundation All	<u>h</u>	ttps://www.felin-	Conservation of wild felines throug	Conservation; Education; Advoca	Mindy Stinner, President; Briar	Will this organization help in my IAP goal?				
Feline Worlds	All	h	ttps://www.feline	NO mission statement							
Global Snow Leopard &	& Ecosyste Snow Leopa	ards <u>h</u>	ttps://globalsno	GSLEP, the Global Snow Leopard	Management Planning and Popu	l.					
Global Tiger Forum	Tigers	<u>h</u>	ttps://globaltige	To highlight the rationale for tiger	Saving tiger habitats, Training and	d Lyonpo Yeshey Dorji, Hon'ble	¢				
Jaguar Conservation F	Fund Jaguars	h	ttps://www.jagu	Promote the conservation of the ja	Monitoring and Research; Feces	ę					
Jaguar Identification Pr	Project Jaguars	h	ttps://www.jagu	NO mission statement	ID project, Camera traps						
Kaminand Habitat Con	nnectivity In Jaguars	<u>h</u>	ttps://kaminand	Kaminando creates lasting solutio	Camera traps, GPS collaring	Kimberly Craighead, President	Vision statement: Connecting land, wildlife and peo	1			
Leopard Conservation	Project Leopards	<u>h</u>	ttp://www.leopa	NO mission statement	Protection, Research, Education	Fred Berrange, Founder					
Lion Guardians	Lions	h	ttp://lionguardia	Lion Guardians is a conservation of	Coexistence, Conflict mitigation, C	Dr. Leela Hazzah, Executive D	lirector				
Lion Recovery Fund	Lions	<u>h</u>	ttps://www.lionr	Created by the Wildlife Conservation I	Expand conservation footprint, Bu	i Shivani Bhalla, Founder and E	Foudned by the Wildlife Conservation Network (WC				
Mara-Meru Cheetah Pr	Project Cheetahs	h	ttp://marameru.	Mission of the Mara-Meru Cheetah Pr	Cheetah identification, Region, Po	Dr. Elena V. Chelysheva					
Mountain Lion Foundat	ation Mountain Lie	ons <u>h</u>	ttps://www.mou	A national nonprofit organization p	ł	Debra Chase, CEO	Held a 9 month internship with Debra and the MLF				
My Cat	Tigers	<u>h</u>	ttp://mycat.my/	MYCAT is the alliance of the Mala	Community Engagement, Advoca	¢					
National Tiger Conserv	vation Auth Tigers	<u>h</u>	ttps://projecttige	Not their mission: The Project Tige	Corridors, Reserves						
Northern Jaguar Project	ct Jaguars	h	ttps://www.norti	LONG mission statement	Prey, Relationships among jaguar	Diana Hadley and Matt Skroch	, Co-Presidents				
Panama Wildlife Conse	ervation Jaguars	<u>h</u>	ttps://panamaw	To promote the conservation of wi	Scientific research, Environmenta	1					
Panthera	All	h	ttps://www.pant	Ensure a future for wild cats and the	Tigers Forever; Project Leonardo;	Fred Launay, Ph.D., President					
Primero Conservation	Jaguars	<u>h</u>	ttps://www.prim	NO mission statement	WIDCAT, Conservation planning,	Ron Thompson, President					
Range Wide Conservat	ation Progra Cheetahs	<u>h</u>	ttp://www.cheet	The Range Wide Conservation Pr	Cheetah landscapes, Illegal trade	, Dr. Sarah Durant- Project Lead	1				
Rocky Mountain Cat Ca	Conservanc Mountain Lie	ons <u>h</u>	ttps://catconser	NO mission statement	Research, Community projects, E	Caroline Krumm, Director					
Save China's Tigers	South China	a Tigers h	ttps://www.save	Our mission is to restore and prote	Breeding; Rewilding; Reintroducti	c Brad Nilson, Director	The restoration project is in South Africa, not China				
Save Wild Tigers	Tigers	h	ttps://www.save	SWT works towards preventing	Speak Up for Tigers	Simon Clinton, Founder					
Saving Wild Tigers	Tigers	h	ttps://www.savir	NO mission statement	Protect tigers, habitat, prey, Supp	Nina Rao and Sunil Somalwar,	Co-Chairs				
Snow Leopard Conserv	rvancy Snow Leopa	ard <u>h</u>	ttps://snowleop	Ensuring snow leopard survival ar	Conservation; Education; Improvi	n Dr. Rodney Jackson, Excutive	1				
Snow Leopard Conserv	rvancy India Snow Leopa	ards <u>h</u>	ttp://snowleopa	Promotion of innovative grass-roo	Population, Ecological research, C	Rinchen Wangchuk					
Snow Leopard Founda	ation Snow Leopa	ards <u>h</u>	ttps://slf.org.pk/	NO mission statement	Research, Mointoring, Education,	Dr. Muhammad Ali Nawaz					
Snow Leopard Trust	Snow Leopa	ard h	ttps://www.snov	The Snow Leopard Trust aims to p	Snow Leopard Enterprises; Livest	Rhetick Sengupta, President					
S.P.E.C.I.E.S.	Jaguars, Le	opards, Pumai h	ttps://carnivores	To ensure the viability, diversity, and in	Dr. Anthony Giordano, Founder, D	species1@hotmail.com	Held a 9 month internship with Anthony and SPECI				
The Cougar Fund	Mountain Li	ons <u>h</u>	ttps://www.coug	The Cougar Fund protects the cou	Public Awareness and Education;	Dr. Rick Hopkins, President					
+ = 0	Organizations	Tige	rs 🔻 L	ions 👻 Leopards	Jaguars      ▼ Pi	umas 👻 Cheetah	ns 🔻 Snow Leopards 👻 Fe	lines 👻 HWC	• Other Sc	urces 🔻	ICUN Red List 👻

# Appendix B

#### Instagram Timeline Excel Sheet

	Day	Cat Species	Conflict Focus	Description of Post	Highlight Organization	Picture to use for IG	Notes	Posted	# of Likes	Feedback
September 6th	Pre	All	Pledge	Take the Pledge, follow our IG and website	BCCI	Pledge image		Yes	9	
Week 1:		Tiger								
September 7th	Day 1		Information	Subspecies, range, diet	WWF/ IUCN Red List	Subspecies picture-WWF	No IG	Yes	16	Vistor tagged their friend. Vistor commented "(3 cry
September 8th	Day 2		Poaching	Poaching for the illegal wildlife trade (bones, blood, skin, etc)	MyCat http://mycat.my/	Nelson and Suka- Me		Yes	31	MyCat commented "(4 praying hands emojis)"
September 9th	Day 3		Habitat Loss	Palm Oil- app, watch what you buy/use	Cheyenne Mountain Zoo Palm Oil App	Helens Berani picture		Yes	14	
September 10th	Day 4		Prey Loss	Prey loss, Save Chinas Tigers	Save China's Tigers https://www.savec	Helens Cinta picture	No IG	Yes	10	
September 11th	Day 5		Climate Change	4 main threats from climate change	Conservation International	Tiger in water		Yes	10	Vistior commented. "WOW beautidul shot (two thur
September 12th	Day 6		Illegal Pet Trade	Illegalt pet trade, cub petting, pets- SDZG Moka case	SDZG, LTB, CTR	Helens cubs picture/ CTR in	fograph	Yes	8	
September 13th	Day 7		International Tig	International Tiger Day, history, ways to help, adopt a tiger	WWF, Discovery Project Cat	Connor picture		Yes	14	
Week 2		Lion								
September 14th	Day 1		Information	Subspecies, range, diet		Izu/Lion Range Map		Yes	9	
September 15th	Day 2		Poaching/ TH	Poaching and trophy hunting	Lion Recovery Fund (WCN & LDF)	Cecil the Lion		Yes	10	
September 16th	Day 3		Habitat Loss	Habitat loss outside of livestock	African Wildlife Foundation	Helene's Ernest grass pictur	re	Yes	7	
September 17th	Day 4		Livestock Conflic	Retaliatory killings/ habitat loss	Ewaso Lions	Helene's Ernest & sister pick	ture	Yes	7	
September 18th	Day 5		Illegal Wildlife Tr	Bone trade, cub petting	TRAFFIC Wildlife Witness App	App Photo		Yes	18	
September 19th	Day 6		Coexistence	Learning how to coexsit with wildlife	Lion Guardians, Panthera's Project Lee	Helene's Lion Cubs picture		Yes	28	
September 20th	Day 7		World Lion Day	Wirld Lion Day, Big Cats Initative	Dereck and Beverly Joubert- Big Cats	Helene's Mom and Cubs pic	ture	Yes	23	
Week 3		Leopard								
September 21st	Day 1		Information	Subspecies, range, diet		Subspecies picture		Yes	25	Conversation about snow & clouded leopards not b
September 22nd	Day 2		Anthropogenic	Different types of anthropogenic threats	Cape Leopard Trust	Helene's Leopard on limb		Yes	17	CLT responded "Thanks (tagged us)"
September 23rd	Day 3		Habitat Loss	Wildlife Corridors	AfriCat	AfriCat's Leopard Photo		Yes	16	
September 24th	Day 4		Posching	Passons for pasching, fur use	African Wildlife Foundation/ Panthera	AWE Loopard Photo		Voc	10	
September 24th	Day 6		Provilance	Hunting style and reasons for lack of prov	Nono	Holono's Loopard in troo		Voc	11	A group plagiarized my contence and convright pho
September 25th	Day 5		PD7C Loopard I	The preject SDZC has feauling an leanards in Kanua	SDZC/Laisaba Canaanianai	Ambrass Leopard In Lee		Vee	0	A group plagialized my sentence and copyright pro
September 27th	Day 0		International Los	mand Day El2	CLT/ Daethara/WWE	Philoso Leopard photo	ha.	Vee	21	
September 27th	Day /	laguar	international Lec	paro Day 5/5	GLI/ Palluela/ WWP	SDZO Legapro mom and cu	ius	Tes	21	
Vveek 4	David.	Jaguar	Information.	Coloredae areas dia	Income Interalification Designat	Heles de la susse alabase		Maa		Managements of Water Issue at the set of the
September Zoth	Day I		Information	Subspecies, range, diet	Jaguar Identification Project	rielene's jaguar picture		res		vistor commetned (two neart snaped eye emojis)
September 29th	Day 2		Habitat Loss	Northern Jaguar Reserve	Northern Jaguar Project	NJP Jaguar photo		Yes	4	
September 30th	Day 3		-Wildtires	Wildfires and how they affect jaguars in their region	Panthera/Associated Press	Associated Press Photo		Yes	149	Cape Leopard Trust tagged us in a photo about leo
October 1st	Day 4		Poaching	Poaching, direct killings, one of the last jaguars in the US	Primero Conservation	Helene's mom and cub Jagi	No IG	Yes	13	
October 2nd	Day 5		Prey Loss	Prey loss	Panama Wildlife	Helene's Jaguar Fish Photo		Yes	10	
October 3rd	Day 6		Community Scie	Community Science, camera traps	Kaminando	Kaminando Camera Trap Pl	noto	Yes	11	Kaminando commented "(winking face) thank you!)
October 4th	Day 7		World Jaguar Da	iy 6/11- 11/29 international jaguar day	WCS	WCS Jaguar Photo		Yes	8	
Week 5		Mountain Lion								
October 5th	Day 1		Information	Range, CESA protection		Mike's 2 Pumas photo		Yes	34	We reposted the Cougar Conservancy's story about
October 6th	Day 2		Habitat Loss	Lack of connectivity, Liberty Canyon Wildlife Crossing	National Wildlife Federation/ P-22	USFWS-NPS kitten photo		Yes	11	
October 7th	Day 3		-Wildfires	Monrovia Cougar	Cougar Conservancy	CC's puma in bobcat fire ph	oto	Yes	72	Cougar Conservancy shared our post in their story
October 8th	Day 4		Poaching/ TH	Hunting, Depredation permits, P-56	Mountain Lion Foundation	NPS SMM P-56 Photo		Yes	15	
October 9th	Day 5		Prey Loss	Prey, Livestock, Deer issues		Helene's puma pic		Yes	25	
October 10th	Day 6		Flordia Panthers	Drive slow, committ to the minute	Naples Zoo	USFW FL panther picture, F	L Tag, Cat Tales	Yes	20	Cat Tale author Craig Pittman commented saying "
October 11th	Day 7		International Pur	P-22 day, FL Panther Day, Int. Puma Day	NWF, SaveLACougars, Naples Zoo	Helene's puma pic, FL pic, F	P-22	Yes	10	
Week 6		Cheetah						*********		
October 12th	Day 1		Information	Subspecies, range, diet		Helenes cheetah cubs photo	5	Yes	13	Shared puma safety tips in story- reshared by Court
October 13th	Day 2		Habitat Loss	Bushblok, Habitat loss	CCF, FSC	Helenes male cheetah phote	D	Yes	13	
October 14th	Day 3		Poaching	Poaching, Licestock conflcits, Livestock Gurding Dogs	CCF, CCB	Helenes female cheetah/ CO	CF conflcit hotline	Yes	19	
October 15th	Day 4		Prey Loss	Prey loss, how they lose their prey		Helenes coailation photo		Yes	8	
October 16th	Day 5		Illegal Pet Trade	CCF's role in the illegal pet trade	Cheetah Conservation Fund	Helenes cheetah cubs		Yes	23	
October 17th	Day 6		Cool Crafts	Supporting locals, Raising cheetah awareness	Action for Cheetahs in Kenya	ACK Cheetah with socceer	ball	Yes	11	Cool Crafts liked our post
October 18th	Day 7		International Che	International Cheetah Day, Cheetah Breeding in AZA Zoos	CCF, SSP Cheetah Breeding Centers	CCF Marker and Cheetah		Yes	9	
Week 7		Snow Leopard								
October 19th	Day 1		Information	Subspecies, range, diet				Yes	4	
October 20th	Day 2		Poaching	Poaching, Livestock depredtation, GSLEPP	GSLEPP and their 20 by 2020 project	GSLEPP snow leopard and	map	Yes	8	In story shared thanks to Oakland zoo for caring for
October 21st	Day 3		Prey Loss	Prey loss, Livestock conflicts	Snow Leopard Trust	Helene's eating snow leopa	rd	Yes	7	
October 22nd	Day 4		Habitat Loss	Habitat Loss reasons, Livesock conflcit	Snow Leopard Conservacny	SLC Buddhist poster	P-22 Day!	Yes	6	Vistior tagged friend and commented "very cool"
October 23rd	Day 5		World Snow Leo	International Snow Leopard Day, WWF Together app, Door H	fanger	Mike Wilson's photo/ Door H	langer	Yes	9	
October 24th	Day 6		Climate Change	Climate change, habitat loss	10.5	Helene's Penny cool cat phe	P-22 Day Celebr	Yes	9	P-22 reshared our story about P-22 celebration day
October 25th	Day 7		AZA SSP	AZA Snow Leopard SSP info	AZA	Elena Mavros photo- SDZG		Yes	9	, second and a second
Week 8		Mix								
October 26th	Day 1		Family Cat Tree	Family Cat Tree, how the big cats are related		Image of 26 cat species/ far	nily cat tree of 37	Yes	9	
October 27th	Day 2		Threats and Sole	Big Cat Threats and Solutions	SDZG book	Moka Book Image	, Sur a co or or or	Yes	5	
October 28th	Day 3		Apex Predators	What an apex predator is and their importance	WildFutres	WildFutres Puma Ecosyster	n	Yes	5	
October 29th	Day 4		National Cat Da	National Cat Day 10/29	Big Cat Injative	Beverly Jouberts Leonard n	hoto	Yes	90	
October 30th	Day 5		Roles Zoo's Dia	Raising awareness SSPs Research Education	SDZG Nanles Zoo	Nanlos Puma nieturo	1010	Yes	24	
October 31et	Day 6	Leonarde Joan	Malanietic Cate	Malanietic cate and conflicte2 Mara unique	SD7G	Panthara Black Leonard La	quar	Vae	10	
November 1st	Day 7	cooperos, vagu	What cat are use	What cat are you guiz	Panthara	Panthora Ouiz images	900	Voe	0	
November 7st	Day /	All	Pladaa	Take the Pladge follow our IC and website	BCCI	Pledge picture		Vac	0	
Hovember 2/10	1 USI	C58	i louge	rake the r leage, follow our to alla website	0001	rieuge picture		105		