

\*Title of Project

**Tierra de osos / Bear land**

\*Project Start Date

**20/10/2019**

Fieldwork Start Date Fieldwork End Date

21/01/2018

31/12/2022

\*Project End Date

31/6/2023

### Grants Program Level I Application Template Project Description

\*Primary Fieldwork Location Country or Area Fieldwork Location Country or Area #2  
Fieldwork Location Country or Area #3

Field Location #1 Ecopalacio Reserve (4° 43' 29.78"N, 73° 51' 30.067"W)

Field Location #2 Chingaza National Park (4° 35' 47.108"N, 73° 42' 29.293"W)

\*Fieldwork Latitude (Please enter the **latitude** coordinates of the geographic location of your primary fieldwork location, in **decimal degrees** (not degree-minute-seconds format). Be sure to enter north and east coordinates as positive values, and south and west coordinates as negative values.) \*Fieldwork Longitude (Please enter the **longitude** coordinates of the geographic location of your primary fieldwork location, in **decimal degrees** (not degree-minute-seconds format). Be sure to enter north and east coordinates as positive values, and south and west coordinates as negative values.)

\*The primary focus area for your project is: Human History & Culture

#### Wildlife

\*The primary focus for your project is:

#### Education

The secondary focus area of your project (if applicable) is:

#### Conservation

The secondary focus of your project (if applicable) is: \*What is the Discipline/Field of Study for the project?

Wildlife Photography

**Comentado [DS1]:** Normalmente las coordenadas de los sitios se ponen en coordenadas decimales.  
Eco Palacio: 4.724939 N, -73.858352 W  
Chingaza: 4.596419 N, -73.708137 W

### \*Brief Project Summary

In a few sentences, briefly describe your project as if you're speaking with a stranger at a party, avoiding jargon. Summarize your goal, and explain why your project is important, exciting, and/or novel. (Up to 1500 characters, including spaces)

In South America, the Andean region has been classified as a key biodiversity hotspot. Historically the region has provided human populations with key ecosystem services, such as water provision and the maintenance of healthy water cycles, leading to a long history of habitat modification, loss and degradation. Today, Andean ecosystems and their species face numerous threats as key habitats become more and more isolated. With an estimate of 20,000 individuals living in the wild, Andean Bears (*Tremarctos ornatus*) populations continue to decline as key habitat areas are reduced to smaller patches submerged within an anthropogenic matrix incapable of providing enough resources and leading to human wildlife conflict (HWC). In Colombia, core Andean bear population remain isolated within the high Andes national parks due to its limited connectivity and increasing anthropogenic activities across their buffer zones.

Chingaza National Park was created in 1977 aiming to protect key high Andean ecosystems and their ecosystems services, while ensuring the provision of clean water to the capital city of Bogotá. Due to the strict control of government entities to protect this key water source, Chingaza has become one of the most protected areas in the country. Over the last 55 years conservation efforts have led to the explosion of Andean bear population in the national park. Previous monitoring activities in the park estimate that Chingaza's bear population is near the 100 individuals, making it the largest well documented population in the National Park System. Today, the park and its surroundings are among the best places to find these animals in Colombia. Yet, Chingaza faces numerous challenges as bear populations grow and the protected area becomes surrounded by human activities. Connectivity loss and habitat transformation in proximity to the park has led to an increase in human wildlife conflict (HWC) in the area, reducing farmer's tolerance and escalating bear's kills.

Nowadays it's common to find footage on social media about bears attacking cattle as they get closer to people in the agricultural areas surrounding the park. In response to this situation, the national park system has begun a community program to ensure the safety of the bears by working with affected communities to avoid retaliation but sometimes social media spreads misinformation faster than the environmental education. Thus, there has never been a stronger need to provide proper environmental information about the natural history of these species to the public. Unlike their North America relatives; Andean bears are not aggressive toward humans. The perceived danger of the species has a foundation in TV documentaries and media outlets showcasing Black and Grizzly bears who people instantly relate to their local relatives. Therefore, people believe Andean bears might be as dangerous to humans as other species leading to negative perceptions that can lead to reactive and preventive actions affecting the well-being of the animals. Today, Chingaza is the second most visited national park in the country and human/bear encounters have become extremely common. Over the past four years, I have photographed and documented the natural history of Andean bears living in Chingaza. Capturing images of more than 40 different individuals in their natural habitat displaying several behaviors like eating, climbing, scratching and hunting cattle. Previous experiences in the field taught me that negative perceptions of wildlife could turn into positive ones through photography. Therefore, with more than 10,000 images about the subject, I believe that my work can be used to showcase the importance of this species and how harmless they are towards

**Comentado [DS2]:** No sé si en inglés es igual que en español, pero cuando pones números por debajo de 10 tienes que ponerlos en letras.

humans. Using my images in workshops, national park media, social media and other publications to show people why this species is so important.

This project seeks to show people how fascinating, cute and harmless Andean bears are while highlighting the species importance in the maintenance of the high Andean ecosystems and the natural resources they provide. By performing educational workshops inside local communities and putting together the best images from these past years into a photography book I also want to tell the story of a species that has been unfairly persecuted and feared to change people's perceptions so that they can truly appreciate their beauty and importance. We want to impact both rural communities close to the park as well as nature enthusiasts from the city who are most likely to visit the park and fuel its economy.

By giving away high-quality educational posters with illustrations and books to the communities we expect to get their attention and participation. We'll use this space to demystify Andean bear facts and to teach natural history about the species. We'll also give the communities the opportunity to learn how to take economical advantage of the presence of the species as well as to indicate how to mitigate negative impacts the bear might have with farm animals. During this time, documentation of the conflict will take place and these images will be included in the photography book so local nature enthusiasts might learn about the difficulties the species and the communities face for their wellbeing. It is said that an image says more than a thousand words, we believe in that.

There are few coffee table books in the country; most of them are made by banks or editorial houses who focus more on texts and less on images. We want to produce a product that little kids and grown-ups can enjoy no matter their educational background. We also want the images to speak by themselves so no matter what, people will get the message. Additionally, to reach as many people as possible, complementary educational posters will be designed and shared during in workshops with target communities across rural areas surrounding the park.

This project has 2 audiences we want to impact. Through educational workshops we want to impact communities who are most likely to face human/bear conflict at the edge of Chingaza national park. The other audience is focused on nature enthusiasts from Bogota, la Calera and Tunja who are most likely part of the tourism community that visits the park, contributes to its economic growth and are more actively involved in the protection of the species through activism.

**\*Total Project Budget:**

This amount should reflect the total scope of the project, including the amount requested from National Geographic Society and all other funding sources. You will be asked to provide additional budget information on the **Budget Details** tab.

20,000\$

## **Project Leader Information**

Project Leader Name

**Sebastián Di Doménico**

\*How did you learn about the specific grant opportunity to which you are applying? Please select one response.

**\*Please add specifics.**

(up to 255 characters)

I've known about the National Geographic Grants programs for a while now. I know Lina Aragon and I'm good friends with Ivan Valencia, both where Natgeo Explorers a few years ago. They told me about the program but at that time I felt that my project was not ready. Nowadays, after looking for allies that can help me produce this project I came across Federico Pardo who insisted it was a good opportunity for a National Geographic grant.

\*Country or Area of Primary Citizenship Country or Area of Citizenship #2 Country or Area of Citizenship #3

\*Country of Primary Residency

Citizenship #1 Colombia

Citizenship #2 Italy

\*If you are a citizen or resident of the United States, please indicate your race/ethnicity.

\*Date of Birth

**06/01/1993**

\*Gender Identity

**Male**

\*Current Position or Job Title

**-Photographer and Nature Guide for Caminantes del Retorno**

**-Photographer at Keeping Nature & Conservation**

**-Independent Nature Photographer**

**-Frankfurt Zoological Society Photographer for education and workshops in the amazon region**

Institution/Organization

**-Caminantes del Retorno**

**-Frankfurt Zoological Society**

**-Keeping Nature & Conservation**

**-Ecotropico Colombia Foundation**

\*Primary Language

**Spanish**

*(Please note: the quality of your grammatical language expression is not a determining factor in awarding a grant.)*

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What other languages, if any, do you use for professional communication? Additional languages (if applicable):

**English**

**Portuguese**

\*Highest Degree Awarded \*Department/Major

\*Year Awarded

\*School

Degree Awarded #1

**Biological Sciences Bachelor degree/Universidad de los Andes 2016**

Degree Awarded #2

**Cultural manager and media producer, Masters/Universidad Jorge Tadeo Lozano (2021-Currently)**

\*If awarded, will you accept grant funds to your personal bank account (individual) or through an affiliated institution?

**Individual**

*(Please note that if you are accepting funds through your institution, you must complete the Institutional Grant Agreement provided at time of award with your institution and provide their payment information.)*

\*Describe the skills of your team members and tell us why they are necessary to the success of your project. Please provide no more than two sentences per team member. Successful proposals will include details about local collaborators, a requirement for projects conducted outside of your country of primary residency.

**Sebastián Di Doménico:** Photographer, videographer, biologist and an expert in finding frogs, snakes and Andean bears. He has been working in Colombia as a biologist, nature guide and wildlife photographer since 2016 for companies like Caminantes del Retorno, Tropical Herping and Keeping Nature & Conservation. He's currently studying his masters in the Universidad Jorge Tadeo Lozano in cultural management and media production. As a photographer he has worked with several foundations like Ecotropico Colombia and the Frankfurt Zoological Society to tell stories and teach people about photography and nature. He is one of the most recognized wildlife photographers in the country and he has been featured in National Geographic Web, Biogeographic Magazine, The guardian, WWF magazine, among others. He's also been awarded in contests like Wildlife Photographer of the Year, Montphoto Contest, TNC international photo contest, Wildlife Photo, Agenda del Mar, among others. He's currently one of the judges of the Agenda del Mar photo contest, one of the most popular photo competitions in the country. He usually works also as photography influencer with a small community of 22k followers on Instagram that actively engage with his content such as Instagram Lives with other photographers and local entities like the national park agency.

**Alejandro Almeciga:** Local guide that grew up in Chingaza and has a vast knowledge about the paramo. During the last few years, he has experienced the conflict between the national park, the bears and the livestock in the region. He's also one of the owners of the Ecopalacio Reserve where bears can be found. This makes him the perfect candidate to bring the community's voice to the project.

**Paula Andrea Romero:** Artist and book Editor. She has amazing editing skills regarding artistic books. As an artist and book designer she has the skills to build a cohesive body of work regarding books and illustration posters. Together with her husband Emmanuel Laverde they have founded Arte y Conservacion and try to create scientific illustrations while working in conservation initiatives. She is one of the most talented artists in the country and has worked with institutions like Jardin Botanico de Bogota, Universidad Nacional, International bird fairs, among others.

**Juan Carlos Clavijo:** Director of the Chingaza National Park. He has been directing and managing the national park for the past 8 years and he's in charge of the wildlife management plan that involves working with communities to mitigate the impact between bears and humans. He can also grant access to the national park social media pages that can be used to spread speeches, posters and educational talks about the bear.

**Diana Stasiukynas:** biologist with a Bachelor's degree from University of Los Andes in Colombia and a Masters in Conservation Science from Universidad Javeriana. Diana works with camera trapping, in-situ genetic sampling, statistical analysis and other survey techniques in diverse conservation and wildlife management projects with local communities, ranchers, government and non-governmental organizations throughout Colombia. Currently, she is a field researcher and data analyst for the Jaguar Corridor in Colombia, the Small Cats Program and leads the Road Ecology program in the country.

(Up to 2000 characters, including spaces)

\*Do you or your Team Members already have any media commitments or interest for this project? This includes media commitments already held by your home institution or other

funding bodies.

(Up to 2000 characters, including spaces)

There are no official media commitments so far. The only commitments we have are the following: The Universidad Jorge Tadeo Lozano has accepted this project as a master thesis for Sebastian's studies. This involves a written document giving examples of how this project influences local cultural management and how it can create a new identity in the community with the Andean bear in mind. There is also a commitment with Paula Andrea and her editorial company Arte y Conservacion which involves keeping editorial autonomy for the book, that means that the university or even National Geographic cannot influence the editorial design of the photography book. This means that even if this grant opportunity is denied the project will be developed during the next year. There are no further commitments.

\*Please describe what skills, attributes, and/or experiences make you uniquely qualified to implement this project. Please include any relevant information not in your CV that you wish to share.

(Up to 1500 characters, including spaces)

After 8 years traveling Colombia and Ecuador as a photography guide and biologist, I've developed several abilities for finding wildlife such as trail tracking, understanding animal behavior and reading climate patterns. I also have a lot of experience in the national park areas, especially Chingaza, as I've been conducting bear tours for the past 2 years.

After almost 50 different bear sightings I already know several individuals who are used to my presence and allow me to get very intimate shots. I'm well known across several areas of the national park, and I know most of the park rangers and some locals who live in the mountains that can help me with sightings and special access to specific areas.

In terms of photographic experience, I've been awarded in photography contests such as Wildlife Photographer of the Year, Montphoto contest, TNC international photo contest (twice), among others. I'm currently one of the judges of one of the most popular wildlife photo contests in the country, the Agenda del Mar 12<sup>th</sup> edition. I'm also part of the Everyday Extinction initiative among with other well-known photographers and I've had images published in media like The guardian, WWF magazine, Biogeographic Magazine, Remembering Wildlife and even the National Geographic webpage. I've done photography stories for Ecotropico Colombia foundation, the Frankfurt Zoological Society and the Agenda del Mar in different regions of Colombia.

In terms of workshops and communities I've had the chance to work in several areas of the country such as the Llanos, the Caribbean coast, the amazon and even the Chocó. I've worked for the Frankfurt Zoological Society as a photography teacher giving educational workshops about DLSR cameras and smartphone photography, teaching park rangers how to elaborate a storytelling portfolio from different regions of the amazon such as Rio Pure, Apaporis, Amacayacu, Chiribiquete and Cahuinari national parks. I've also worked with communities in the Llanos and the Caribbean coast in educational workshops regarding conservation of amphibians and reptiles, focusing on snake-bite accidents with the Ecotropico Colombia Foundation. Nowadays, my primary focus in terms of community work has been the Almeciga family, located very close Chingaza National Park.

During the past 2 years I've had a strong relationship with the Almeciga family working together to improve their transition to a more sustainable livelihood through the implementation of clean energy and promotion of ecotourism in their reserve. Other entities like Givepower foundation, the German embassy and several tourism agencies have started working with them to promote tourist activities in the reserve to provide an alternative to cattle. They are a great example of change towards a more sustainable development. They have had livestock inside their property for 30 years and they lose 1 animal per month due to bear attacks. Nowadays, the family is trying to leave cattle behind (by selling it) and focus more on tourism and protecting the bear ecosystem for a more environmentally friendly option for their wellbeing. Their transition has been an example for several people surrounding the national park and who want to make a living out of nature and tourism. Some of the interested communities are San Juanito, Suasie Reserve, Bosque Guajira and Mundo Nuevo, the place where a farmer got arrested for killing an Andean bear.

I truly believe that the combination of skills from my biology and photography background make me the perfect candidate for this project. I'm currently one of the best people at finding these species in the country and I have a community of over 20,000 people on social media that engage with my mission. This will allow me to engage with both the people from Bogota through different media and the rural areas through my multiple contacts with the national park and small communities.

\*Please describe your career goals over the next 5 years and tell us how receiving a grant from National Geographic will help you achieve them.  
(Up to 4000 characters, including spaces)

I have two passions in life, nature and photography. I would like to keep improving my skills and travel to new areas in search of more species, images and stories to tell. I hope that in the next 5 years I can spend all my time involved in wildlife photography by either telling conservation stories for local and international media or giving nature photography workshops across Latin America and even overseas. After this first stage of the bear project is done, I would like to focus partially on other species like amphibians, reptiles or other animals like jaguars and tapirs. That does not mean I'm done with this story; I would like to move to a second stage where video and other types of content can be produced to enhance the message and help spread the conservation narrative to other communities. If done right Chingaza will become the best place in the world for Andean bear sightings in the next 10 years. I plan to submit my images to the iLCP community with projects inside the Colombian territory and if I succeed, I'll be the first Colombian to be part of this community!

On the other hand, I've been working with the national park using my images to identify bear individuals and where they live. I would like to keep working around this subject by trying to narrow the bridge between the national park and the local communities. As a potential third phase of the project, I would like to encourage the community to identify individuals by using their own pictures as reference. By using this data, we can identify individuals and understand travel patterns and we can learn more about bear movement at the edge of the national park. This might also help me identify new stakeholders to work with in future conservation projects.

Receiving a grant from National Geographic would allow me to focus more on my craft, meaning no wasted time looking for recourses and more time looking for interesting behaviors and shots. It will also give me a certain degree of local recognition that could help

me in the networking process with different people like government agencies, business partners and cultural entities interested in the project and ultimately the conservation of the Andean Bears. This would provide more privileged access to different communities just by working with a recognized entity such as National Geographic. Also, I believe the local communities will listen and pay attention during educational speeches and workshops cause a lot of them consume natgeo media through local television networks.

## Project Details

### \*Background

\*Please provide background information and context about the issue your project will address. What is unique or important about your project and how is it different from previous work on this topic? Include relevant citations in the Works Cited section below. (Up to 4000 characters, including spaces)

Classified as vulnerable by de IUCN and adorning the logo of the Colombian National Park system, the Andean Bear (*Tremarctos ornatus*) is the only bear species in South America<sup>1</sup>. In Colombia this species is the most popular animal inhabiting the Andes, an ecosystem that we call the "paramo". Since the 1990s, habitat fragmentation and degradation has led to reduction and destruction of the bear's habitat negatively affecting bear populations across the country. Across its range, protected areas like National Parks have become a sanctuary for the species, yet, poor connectivity and habitat degradation has forced the species to venture outside protected areas where encounters between bears and humans are becoming more common than never before.<sup>1</sup> Most of the protected areas in the Andes have overlapping between the bear and human "habitats", such as Chingaza National Park<sup>1,3</sup>. Founded in 1977 and managed between the National Park Agency and the Bogota Water Company (Empresa de Acueducto y Alcantarillado de Bogota) due to the dams and reservoirs situated within the park. Today almost 70% of the water consumed by Bogota is produced by the Andean forests and paramos inside this park only.

Founded in 1977 and co-managed by the National Park Agency and the Bogotá Water company (Empresa de Acueducto y Alcantarillado de Bogota), Chingaza harbors the greatest natural water supply in the country. After almost 50 years of strict environmental control to protect the ecosystems, the Andean bear population inside the park has increased dramatically. Partially isolated, the park is a conservation island submerged in a human dominated landscape. This represents a huge conservation issue, as bear population grows dispersing and old individuals seeking for new areas to settle are forced to travel outside the park, usually encountering humans in their way. . Sadly, in March 2017, the death of an Andean bear close to Chingaza made national headlines in Colombia<sup>4</sup>. The bear was hunted by a farmer in Mundo Nuevo, at the edge of the national park and local authorities criminalized him for this action leading to his arrest a year later<sup>4</sup>. This conviction sends a message to those who attack wildlife but also got other framers worried because they insist the bears do kill and eat their livestock, affecting their main subsistence. Nowadays some farmers have resentment towards bears mainly because they feel helpless if a bear goes after their cattle. Sightings of Andean bears close to farms and livestock have become more common due to the growth of the population during the past few years. On 2022 a video on Tweeter got viral showing a bear gutting a calf close to the road at Ecopalacio's reserve just a few kilometers away from the park. Even though the owners of the cow didn't retaliate, people from outside the reserve got worried, and several farmers gathered to discuss the

**Comentado [DS3]:** ¿? Revisar esta frase.... No es claro

**Comentado [DS4]:** Esto no tiene nada que ver con lo de arriba. Piensa en re-estructurar estas últimas frases y más bien pegarlas al párrafo de abajo.

possibility of cattle loss due to bear attacks in the future. It's possible that some farmers are willing to act by their own means by clandestinely hunting bears to avoid bear attacks.

There is a lot of disinformation surrounding the species. Most people in the rural areas do not have access to proper information regarding this species of bear. They mostly believe that this species is like grizzlies and black bears in terms of behavior and that they can be harmful towards humans. Some of the negative actions taken against this animal occur due to fear but, this species is nonaggressive towards humans and there are no official reports of bear attacks on humans. There is a strong need for educational material regarding Andean Bear natural history to avoid these negative interactions. Some efforts have been made by the state government to provide certain degree of information, but the technical language used in their reports and the need for internet to access these types of materials is limited. This means that people who need this information the most are excluded from it. Unfortunately, other entities like the national park are investing most of its budget on infrastructure due to the high demand for tourism and little is left to expand knowledge to the communities.

There has never been a time in this area where a conversation between, the "campesinos" and other entities working in the paramo is needed to ensure the protection of a beloved species like the Andean bear. Fortunately, the increasing demand for ecotourism surrounding the park gives the perfect chance to change the narrative in the rural areas and give new opportunities for a sustainable development with the bear at its core. By giving educational speeches about bear biology using photographs taken inside the national park to showcase behavior we can captivate the campesinos into taking care of the bear. It's important to showcase not only how the bear is harmless towards humans but also how other communities have managed to improve their wellbeing by taking care of the species. It's very important to show as an example the success the Almacigas have had to other communities. These workshops will be scheduled with local governments and schools and will last for 2 hours. During this time a presentation will be given to a group of 50 people showcasing mostly images of bears while talking about natural history, demystify local myths around the species, showcasing examples of communities that take advantage of the bears presence and develop strategies to mitigate attacks towards livestock. Free media material will be given to those communities and schools to promote the workshops and to encourage the communities to be present. To those community members interested in working as local guides we can provide advice and help to get a guide in contact with several agencies that use communities as local guides for birding and hiking. The free media materials involve copies of the photography book, free posters with illustrations from Arte y Conservacion and educational books about the biodiversity of the national park (Mammals of Chingaza, reptiles of Chingaza and birds of Chingaza). During this time, we also want to ask every community about the challenges they face with the species and what need do they have to solve them. This information will be used with the national park improve the management plan regarding the species in the future.

On this first visit to the community we'll also ask members of the communities their perception towards the Andean bear at the beginning of each workshop. A second visit will occur 6 months later to deliver copies of the printed book for free and to ask for a second perception. One of our main goals is to change the narrative about the perception of the species. By this end stage we expect at least a 60% change towards a positive perception of the species. This will be used as a prime indicator to measure the success of the project.

Even though the rural communities are the main target audience for this project there is a second audience we want to impact. The perception of the Andean bear is not the same between the conflict areas in Chingaza and the city of Bogotá. Urban population tend to value more the importance of the environment better than rural population. Therefore, their perception of the bear has a positive connotation in these areas. Chingaza is the second most visited national park in the country and Bogota is its main audience. Nature enthusiasts are those who actively defend the most the protection of the species and are crucial for the implementation of conservation actions with the authorities. This will be the second audience for the project, basically the people who are most likely to visit the park on a weekend. Even so, this percent of the population has a high level of disinformation as well few knowledge about the natural history of the species. Most of the information of bears has been documentaries on other bear species. Therefore, the need for proper education about the native species is required to enhance the discussion about the protection of the species.

There is a strong need for more people to engage with this problem. Through photography we can trigger emotional engagement, and people might become involved in putting pressure on the government to ensure the survival of the species. Therefore, a photography book is a good alternative for getting interest in the subject and allows new knowledge to flow through images so elders and kids can learn more about this species. This kind of product might be considering a “commodity” and there for its audience must be targeted towards the nature enthusiasts from cities like Bogota, Tunja and La Calera. On this book the focus will be on imagery to showcase natural history of the species. Through images taken during these past 4 years portraying rare scenes and behaviors we can get the attention of the audience. Arte y Conservacion is the editorial company in charge of producing at least 1000 copies of the book by the end of 2023. It's important to deliver a copy of the book at the second visit to the communities as a gift for their cooperation and to encourage their participation for the second survey.

#### \*Objectives

Please provide a bulleted or numbered list of the objective(s) of your project with a short description of each, and how progress towards each objective will be measured. Objectives should be SMART: specific, measurable, achievable, realistic, and time bound. (Up to 4000 characters, including spaces)

#### **-Change the narrative around the natural history of the Andean bear of at least 1 community close to the national park.**

The primary problem around the bear's conservation in Chingaza is that communities out of fear tend to harm the species even though its harmless towards humans. The lack of education and the spread of misinformation have made campesinos very worried about a potential attack or threat to their families and well-being. By giving free educational workshops and giving away posters and books people can learn to coexist with the species. By showing examples of other campesinos that have turned into ecotourism guides and now profit from the bears it might turn the narrative around the species.

#### **-Through the production of a photography book, enhance the information needed towards nature enthusiasts in the region**

Most of the people from Bogotá don't know what the bear populations around chingaza are going through. Sadly, this audience is the one who has the most influence when it comes to decision making and putting pressure for conservation actions. People from the city need to know about the threats that the species is going through and the needs from the community to ensure a sustainable development for both bears and campesinos. Through a photography book about one of the most emblematic species in the region we might get the attention needed to make a change in the decision making. By explaining people that the wellbeing of the bear and the communities are intertwined with the preservation of the city's water we might get new initiatives interested in the process.

**-Determine perceptions and attitudes towards Andean bears in at least 3 communities surrounding chingaza**

By scheduling with local governments of Guasca, la Calera, Mundo Nuevo, San Juanito and Junin we expect to visit several communities and rural schools to perform the workshops. We expect people to attend by offering the posters, books and education for free. Before every workshop people will be asked about their perception towards the species considering the possibility of conflict with the animal. At a second visit where the people will be given copies of the photography book for free they will be asked a second time to see the potential impact of the project.

**Secondary Objectives**

**-Document the human/bear conflict by telling stories surrounding the community needs**

Through photography and traveling different areas of the park a cohesive portfolio will be created showcasing the different characters in this conservation story.

**-Promote tour guide services to community members to improve appropriation of the species**

Nowadays the national park system allows people from nearby communities to become nature guides inside the protected areas after taking a 3 month course. By showcasing the Almeciga's success we could change the interests of community members towards a more harmonious development with the bear.

**\*Methods**

Please provide a timeline and description of the activities, methods, tools and/or storytelling coverage plan you will implement. Explain why you think these are likely to achieve your objectives and describe any potential ethical or safety risks to your project and how you will mitigate them.

(Up to 4000 characters, including spaces)

## Month 1 and 2

On this first stage it's important to contact local governments and schools to ask for availability to perform the workshops in Guasca, Mundo Nuevo and la Calera together with the National Park Agency. It's also important to start designing, developing and producing educational posters with Arte y Conservacion with the supervision of mammal expert Diana Stacyukinas. These illustrations might take 2 months to produce due to the complexity and high detail imagery. A presentation will be designed to show Andean bear facts in an interesting manner using different images captured between 2018 and late 2022. A member from the Almeciga family will be invited to showcase how tourism has changed their lives and has brought new incomes to the family.

It's also important to start locating potential DSLR camera trap spots to document elusive behavior to showcase during workshops and inside the photography book so both audiences can interact with it. This installation process will take 2 weeks inside the Ecopalacio Reserve. The cameras will be left inside the reserve at least 1 month each. We chose the reserve because it's very safe and few people travel inside which ensures the equipment's safety. This time will also be spent trying to document the hunting behavior of the bears as livestock can be located 10min away from the reserve's house. Alejandro Almeciga will be hired to ensure company and safety during these weeks even though bears are harmless towards humans in case of any type of accident.

## Months 3 and 4

The production of the first posters should be completed and we plan to travel to small reserves to give away some posters to see how their clients and workers interact with it. This will serve as a small promotion of the workshops as well. The reserves chosen are Bosque Guajira, Reserva el Zoque, Finca Suasie, la Laja Chingaza and Ecopalacio. Most of these reserves are located close to Bogota and can be reached in a single day per reserve.

Then the workshops will take place on the different communities. La Calera, Mundo Nuevo, San Juanito and Guasca. People will be asked about their perception of the species and small events will take place inside the local rural schools of each area.

## Months 5, 6, 7

The production of the photography book will take place during this period. If by any chance a workshop had to be canceled or postponed it will resume here.

It's very important to announce and promote with local governments these activities we can get to a broader audience that overlaps with the national park.

**Camera Gear already owned:** Canon 1Dx Mark iii, Sigma 150-600mm, Canon 24-70mm f/2.8 v1, Canon 100mm f/2.8 Ef, DJI Mavic 2 Zoom, Nikon d7100 for camera trapping with camtraps gear, Manfrotto 190Go Carbon fiber tripod, 28,000mAh External power bank, 2 Yongnuo Flashes, 1 Trippro Octabox 40inch and a 1550 Pelican Case.

**Expedition expenses:** Gas, food, big water bottles, first aid kit, batteries, hotel stays in San Juanito and la Laja, Local guides for reserves other than Ecopalacio, Reserve entrée fees.

**Missing gear:** Nikon d7100 with camtraptions trigger sensor, housing, 3 Nikon SB-28 flashes and flash housings for additional camera traps.

\*Communication and Engagement

Please briefly describe your stakeholders, how they are involved in the project, and whether you have existing media or dissemination plans with any of them. **We define stakeholders as anyone impacted by your work, such as local communities, professional networks, public/private sector, media outlets, students, or audiences.** To help us evaluate the outreach component of your proposal, please add links to any websites, social media accounts, public engagement platforms, or other mechanisms you will use to engage your stakeholders.

(Up to 4000 characters, including spaces)

Mundo Nuevo community: A small town located at the edge of the national park between la Calera and Choachi. This was the location where a bear was hunted, and the farmer involved got arrested back in 2016. Here the main ecosystem is the Andean Forest and most of the families here have livestock. This is one of the most important communities to get to due to its history in terms of the conflict with the animals. This is also one of the areas where tourism services are becoming more important. Its forest has good bird diversity, and its landscapes offer more than 16 different waterfalls for travelers to visit. It's very important to showcase the bear's significance for the future development of the town. It also has one of the biggest rural schools in the area and has students from families living 20km away from the town.

La Calera Community:

Junin's Community:

**Conservation entities in Bogota:**

**Arte y Conservacion:** the editorial agency dedicated to design and produce the book assisting other areas like book design and general design. They have produced books in the past as their founders are well known scientific illustrators with books like "Orchidarium" and "Colibri" (Emmanuel Laverde and Paula Romero). This would be their first photography book, but they will still draw some illustrations for book design. There is an agreement with the agency to keep their editorial autonomy as we look for sponsors that can help finance the book. It's important to mention that even if we don't get any sponsorship we have the recourses to produce at least 1,500 copies of the book.

WebPage: <https://www.arteyconservacion.com/>

Instagram: [@arteyconservacion](https://www.instagram.com/arteyconservacion)

**Reserva Ecopalacio:** Owned by the Almeciga family, a group of 9 brothers that have a 2500-hectare property inside the paramo where the bear can be found. It is located almost inside the national park. Two of the brothers have cattle in a specific area inside the reserve and they are losing almost 1 animal per month to bear attacks (we are certain that is a ture bear attack and not puma or other carnivore due to consumption patterns on the corpses). There is an agreement with the family which involves unlimited access to the reserve for camera trapping and making photography trips and in return they can use the images on their social media page and webpage to promote their ecotourist initiative which involves taking tourists inside the paramo. This year we manage to promote environmental initiatives inside the reserve, and we got chosen by the Give Power Foundation to install solar panels and special heaters to allow guests to stay at their cabins in the mountains. Keeping the paramo safe and being close to the national park has allowed the family to promote their bossiness and grow towards a more sustainable living. There is another agreement regarding the book, the reserve wants their logo on the book and in return they allow me to stay at the cabin and use their infrastructure for producing images for a special fee.

Web Page: <http://ecopalaciochingaza.co/>

Instagram: @reservaecopalacio

**Universidad Jorge Tadeo Lozano:** One of the most important universities in Bogota. This book is part of a thesis project for the master program "Gestion cultural y production audiovisual" (Cultural Management and media production) which I'm currently attending. At the time this document is being written I'm in second semester and my thesis director is Jorge Melguizo. Jorge is a culture consultant and manager, he's also a former Secretary for the social development from Medellin. There are no agreements regarding the book away from my responsibilities developing documents and presentations around the book.

**Chingaza National Park:** The place where the project is based on. Their participation is essential to get into contact with local governments and to help spread awareness of the project through their social media and communications team.

COMUNIDADES ALREDEDOR DEL PARQUE QUE VAS A IMPACTAR - VEREDAS

#### \*Results & Impact - CAMBIAR

Describe all the expected results of this project, its predicted impacts, and what success means for each stakeholder. Results are defined as the deliverables that will be created during this project (e.g., academic/white papers, photographs, lesson plans, etc.). Impact is defined as

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the specific changes you hope to achieve (e.g., behavior change, greater understanding of an issue, improved management of a resource, etc.).  
(Up to 4000 characters, including spaces)

This will be the first photography book dedicated to Andean bears in the country. Even so, Arte y Conservacion is a small company and with only 1,500 books its naive to believe this will educate most of the population of rural campesinos that encounter bears in Colombia. We want to focus mostly around Chingaza National Park, and we would like to see in the next few years a reduction in mortality on the bear population that lives inside the park.

We believe that given the chance, locals will have a greater understanding of the natural history of bears and will learn to live with them by killing fear with knowledge and hopefully setting special fencing for their livestock to avoid predation. The almaciga family is the perfect example that if given the change people might see the bears as an opportunity for ecotourism as Chingaza is the second park in the country with the most tourist visitors.

My main goal in terms of media coverage is to have a publication with National Geographic society or the magazine, to bring this story to another level although other outlets may include Biogeographic magazine, BBC Wildlife Magazine and photography contests like Wildlife Photographer of the Year, Montphotto Contest, among others.

Finally, we want to approach the local governments of the areas with the most reports of human bear conflict to give workshops inside local schools and towns. We can educate and teach people the importance of the bear as well as to shine some truth to the myths surrounding the species. It's important to give the community books (at least 50 books for schools and local libraries) and educational posters with amazing images from the camera traps so they can learn about natural history but also what activities the community can engage in if they want to help the bear species. These activities include proper care for livestock, tourism and other environmental activities. During these workshops we would like to showcase the importance of the species and how other communities like Eco Palacio have taken advantage of the protection of the bear to improve business like ecotourism.

Andean bear conservation in and around Chingaza's National Park is challenging yet not impossible. Human wildlife conflicts with carnivores, such as bears, is strongly related to how communities perceive the species. may inform conservation actions that can be limited by misconceptions. Through this project, community engagment and participation across several workshops

Misconceptions of Andean bears as vicious cattle predators , along with cattle predation

#### \*Works Cited

Include any bibliographic information that supports the research, educational, or scientific evidence or stories you cite in this application. Storytelling applicants should include a link to their portfolios.

(Up to 4000 characters, including spaces)

1. Garrido Corredor, A. M., Cottyn, H., Martínez-Medina, S., Wheatley, C. J., Sanchez, A., Kirshner, J., ... & White, P. C. (2021). Oso, osito¿ a qué venís? Andean bear conflict, conservation, and campesinos in the colombian páramos. *Sustainability*, 13(19), 10489.

2: Vélez-Liendo, X.; García-Rangel, S. *Tremarctos ornatus* (F.G. Cuvier, 1825). In *The IUCN Red List of Threatened Species 2017*; International Union for Conservation of Nature: Gland, Switzerland, 2017.

3. Goldstein, I.; Paisley, S.; Wallace, R.; Jorgenson, J.P.; Cuesta, F.; Castellanos, A. Andean bear–livestock conflicts: A review. *Ursus* **2006**, *17*, 8–15

4. Caracol Radio. Ganadero es Condenado a Cinco años de Cárcel por Matar un oso. Available online: [https://caracol.com.co/radio/2017/03/24/judicial/1490367097\\_638707.html](https://caracol.com.co/radio/2017/03/24/judicial/1490367097_638707.html) (accessed on 24 March 2017).

5. Castaño-Camacho, A. *Oso Electrocutado en Chingaza*; Natural Press: Bogotá, Colombia, 2020; Available online: <https://www.naturalpress.ca/oso-electrocutado-en-chingaza/> (accessed on 21 December 2020).

6. Hanisch, E., Johnston, R., & Longnecker, N. (2019). Cameras for conservation: wildlife photography and emotional engagement with biodiversity and nature. *Human Dimensions of Wildlife*, *24*(3), 267-284.

#### **\*Budget Details**

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**Year Selection**

Start Date:  End Date:

**Budget**

Parent Category	Grantee Budget Category	2020	Total	Justification
Travel	Airfare	<input type="text" value="0"/>	\$0.00	<input type="text"/>
Travel	Vehicle Rental and Maintenance	<input type="text" value="0"/>	\$0.00	<input type="text"/>
Travel	Other Transportation	<input type="text" value="0"/>	\$0.00	<input type="text"/>
Lodging/Food	Lodging	<input type="text" value="0"/>	\$0.00	<input type="text"/>
Lodging/Food	Food	<input type="text" value="0"/>	\$0.00	<input type="text"/>
Equipment/Lab	Equipment & Supplies	<input type="text" value="0"/>	\$0.00	<input type="text"/>
Equipment/Lab	Laboratory Costs	<input type="text" value="0"/>	\$0.00	<input type="text"/>
Equipment/Lab	Laboratory Tests	<input type="text" value="0"/>	\$0.00	<input type="text"/>
Compensation	Applicant and Team Members Compensation	<input type="text" value="0"/>	\$0.00	<input type="text"/>
Compensation	Assistants and Consultants Compensation	<input type="text" value="0"/>	\$0.00	<input type="text"/>
Evaluation	Measurement and Evaluation	<input type="text" value="0"/>	\$0.00	<input type="text"/>
Other	Institutional Overhead	<input type="text" value="0"/>	\$0.00	<input type="text"/>
Other	Dependent Care	<input type="text" value="0"/>	\$0.00	<input type="text"/>
Other	Miscellaneous	<input type="text" value="0"/>	\$0.00	<input type="text"/>
<b>SubTotal</b>		\$0.00	\$0.00	

Name of additional funding source: Funder category:

**Other Funding Sources**

Please describe the support received: Amount received:

**Attachments**

\*Please upload a C.V. or resume (required).

Please submit a copy of your curriculum vitae or resume with the following information:

- • *Current position (even if unpaid)*
- • *Relevant work experience*
- • *Education*

List any relevant:

- • *Publications*
- • *Awards*
- • *Leadership experience*
- • *Volunteer/community engagement experience*
- • *Professional network or collaboration involvement*
- • *Links to your portfolio/social media accounts if applicable*

If applicable, you may upload additional images, maps or figures below. If uploading a photo, include photographer credit in the space provided.

#### **Ethical Certification**

The National Geographic Society has zero tolerance for bribery and corruption, and complies with all applicable laws prohibiting such conduct including the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act. Grantees may not: offer or give anything of value to a government official or any other person as an incentive to, or in exchange or as a reward for, obtaining an improper advantage for National Geographic; or give, offer, solicit or accept anything of value that is intended to induce the recipient to violate his/her duty of loyalty to his/her employer. All licenses, permits and other government permissions or approvals required to carry out a grant must be obtained through the lawful, legitimate process of the country where the grant activity occurs.

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**\*I have read and agree to the above policy.**

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**\*I have read and agree to the above policy.**

By submitting this application, I represent that I am in compliance with the ethical standards and codes of practice for my discipline, and specifically the requirements for

projects relating to human or animal subjects. I further agree that I practice the National Geographic Society's internal values including honesty, fairness, and transparency. Lastly, I agree that the National Geographic Society may share details about the project at the time of award.

**\*I have read and agree to the above policy.**