

Wildlife Tourism is a large sector of the travel and tourism industry and in 2018 produced a global GDP of \$343.6 billion equivalent to the entire GDP of South Africa and employing Joshua Smith 21.8 million people equivalent to the entire population of Sri Lanka according to the World Travel & Tourism Council (WTTC, 2019).



Types of Wildlife Tourism

- National Parks/Areas
- Rehabilitation Centers

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Private Reserves/Establishments

With a variety of models, Wildlife Tourism is presented in different formats for tourist observation and interaction. Examples include National Parks such as Akagera National Park in Rwanda and Kakadu National Park in Australia; Rehabilitation Centers such as Sepilok Orangutan Rehabilitation Center in Malaysia and Dujiangyan Panda Center in China and Private Reserves; and Shamwari Private Game Reserve in South Africa and Mamancana Private Game Reserve in Colombia.

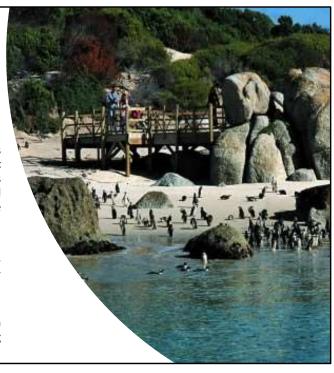
Each country has established policies regarding the health and welfare of wildlife including how the public can view or interact with the wildlife in addition to additional policies set forth by the park and/or establishment.

Marketing & Management

Depending on the ownership model, the operations is handled through either the private or public sector. In the case of Boulders Beach in Simon's Town, South Africa, as an entity of the National Park system, management is handled by the government.

In the case of Patara Elephant Farm in Chiang Mai, Thailand, management is handled through a selfoperating business.

Marketing can be outsourced to a private entity in either scenario and expensed as a cost of doing business.







There are various benefits to Wildlife Tourism, inclusive of the three pillars of sustainable tourism. From an economic perspective, tourism revenue support both local employment and the wildlife itself and can have profound impact in certain area such as Africa where wildlife tourism represented one-third of all travel & tourism expenditures. Whether park fees, tickets or built into the cost of an inclusive accommodation, the revenue helps with operational costs and as well protection of the wildlife through anti-poaching units or even toward food and other basic needs of the wildlife.

When looking at the environmental benefit, wildlife tourism supports the land necessary for the wildlife to live, further supporting the community who may or may not have access to the same land for their own needs. With measures to ensure cleanliness, as a business in either public or private areas, protection of the landscape and environment is important for an enjoyable tourism experience.

Culturally, wildlife remains important for many cultures as the care of the wildlife may be embedded in the cultures such as the mahout in Thailand caring for their elephants or Bedouin in Morocco taking care of their falcons. By adding a revenue stream for an already-engaged model, further helps support the unique cultural aspect of these groups.

From a tourist's perspective, wildlife tourism creates awareness of potential endangered

species or other negative impacts that have been imposed upon wildlife due to human consumption of either land or the animal itself such as the pangolin. However, the viewing and possible interaction with the wildlife also provides entertainment or joy for the tourist, which can further help support the overall cause of tourism within the destination.



While there are a number of benefits to wildlife tourism, there are also challenges that are presented. Economically, due to the infrastructure necessary to operate within this landscape, there can be little opportunity to pivot the model, thus causing reliance on this type of tourism. With a game reserve or any other type of establishment that offers wildlife tourism, the success or sustainability is contingent upon that sole product offering. Such is the case with shark-cage diving in South Africa when in 2018, the natural phenomena caused orca whales to attack the sharks and consume their livers forcing most of the great white sharks to migrate elsewhere, nearly destroying that type of business (Ciaccia, 2019). Additional economic challenges include that of the costs to maintain the infrastructure, particularly in the basic needs of the wildlife. To feed an elephant, it costs nearly \$80USD per day or \$30,000 per year (Simpson, 2016).

From an environmental perspective, the growth of communities and their population can be prevented by land constraints. This can negatively impact the community's ability to properly live, however some governments provide subsidies to farmers should their livestock be attacked by wildlife in tourism areas. Additionally, with some confined areas the opportunity for disease can devastate a species such as the Tasmanian devils contracting the Devil Facial Tumour Disease (Timmins, 2019).

Socially, many cultures have strong relationships with wildlife such as the mahout in

Thailand. While there are advocacy groups for the protection of animals, there is little focus on the protection of these relationships from a cultural perspective, prompting animal rights groups to attack locals and groups on their customs (Marshall, 2017).

Tourists also play a role in the challenges in wildlife tourism, sometimes in part to the lack of regulation, but more so with inappropriate behavior such as then a elephant in Kruger National Park over-turned a car because the driver did not respect the mandated distance from wildlife (Withnall, 2014).



Chaos with COVID-19

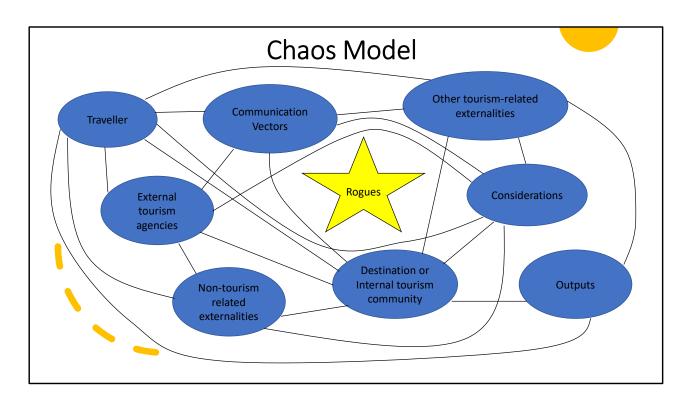
- Chaos & Complexity Theory in Tourism
 - Non-linear
 - Lack of order
 - Periods of Instability (inherent)
 - Lasting effects
 - Various stakeholders & relationships
- Wildlife Tourism is even more chaotic & complex due to the nature of the 'product'

In 2020, the travel and tourism industry was decimated by the global pandemic of COVID-19, a disease potentially introduced through illegal wildlife trade, bringing heightened awareness to poaching and ultimately causing great havoc on the industry, including wildlife tourism.

According to the UNWTO, in May 2020, the lockdown caused a 98 percent drop in international tourist numbers when compared to the previous year and 56 percent decline year over year for the first 5 months. This translate to a fall of 300 million tourists and \$320 billion loss in tourism revenue, more than three times the loss of the economic crisis of 2009 (UNWTO, 2020). The uncontrollable pandemic caused even greater chaos in an already chaotic system.

Because tourism is non-linear, it is a complex and chaotic system. With periods of instability, there can be lasting effects regardless of changes made to the system. There is a lack of order with little to be controlled, only adapted to combat consistent change within the system and with various stakeholders and relationships, change is a constant (McKercher, 1999).

Specifically within Wildlife Tourism, the sheer nature of the 'product,' wild animals, there is more uncertainty and further supports a chaos and complexity theory.



With such complex relationships between the major components in a chaos model, there can be great opportunity for confusion, further complicating any type of resolution. The COVID-19 situation, the key elements that are impacted are:

Traveller – with fear of safety or border closures, travelers no longer are able to travel.

Considerations (factors that influence the effectiveness of the Communication vectors used) – With people spending a much greater amount of time online, there is more noise than in the past, making it harder for destinations or tourism products to stand out.

Destination or Internal tourism community – businesses across the globe are closing due to a cease in revenue, making it challenging for when tourism does reopen.

External tourism agencies – similar to the internal tourism community, businesses are shutting down rendering it hard to obtain information.

Non-tourism-related externalities – COVID-19, the diversion of funds to focus on health departments

Outputs form the system – the desired outcome is impossible at the moment, but the

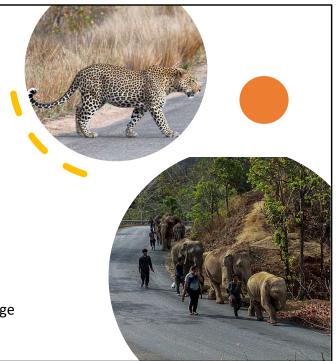
greatest challenge is the inability to forecast future outcomes.

Rogues - COVID-19



Impacts of COVID-19 in Wildlife Tourism

- Positive Changes
 - More space to live
 - Cleaner air & water
 - Undisturbed breeding grounds
- Negative Changes
 - Inability to provide basic needs
 - Behavioral change amongst communities
 - Unemployment and career change



The halt in tourism has shown great changes to our environment, mostly positive ones, a 'silver-lining' in this pandemic and more of an indication of how tourism was negatively impacting the environment, something that could not have been shown to this extent without a complete shutdown of travel.

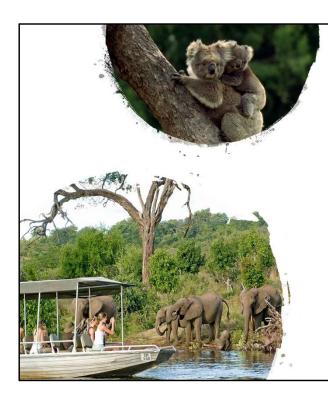
While there are positive outcomes, this is primarily in areas of models in which the landscape is completely natural, such as national parks. Conversely, those models which include a more developed infrastructure such rehabilitation centers, the effects may be detrimental and for many years.

Because of the lockdown, wildlife in the national parks are expanding their territory and occupying larger areas due to no vehicular traffic, providing a better lifestyle of the wildlife (Rizzo, 2020). Waterways and oceans are becoming cleaner with less aquatic tourism traffic (Chow, 2020). Sea turtles are now thriving because of the empty Florida beaches, providing a better safe-haven for the breeding season (Ebrahimji, 20202).

However, for those models that are in more controlled settings, the lockdown is creating an unsustainable future such as the case with the elephants in Thailand returning to their homes where their traditional owners are unable to care for the gentile giants (Sivasomboon & Peck, 2020). With no revenue coming into the facilities, they are unable to

care for the animals at a basic level. Some venues have begun selling discount tickets for the future just to acquire funds to feed their animals.

Another consequence from the pandemic, particularly with regard to wildlife is the continued need to earn income, which may increase the amount of poaching that occurs, especially in private game reserves who have needed to reduce their anti-poaching teams as a result of lost revenue (Newsome, 2020). This adds an additional component to the illegal game trade possibly increasing the spread of disease. Unemployment remains high with some workers who are now forced to either move or find new forms of employment, potentially resulting in a longer return to pre-COVID times.



Resilience during and post COVID-19

- Resilience Theory
 - Ability to respond & recover
 - Evolves in a cyclical pattern
 - Characteristics & speed on contingent upon adaptation
 - Adaptive capacity is predicated by capital previously obtained
- Wildlife Tourism has the ability to be more resilient due to previous situations.

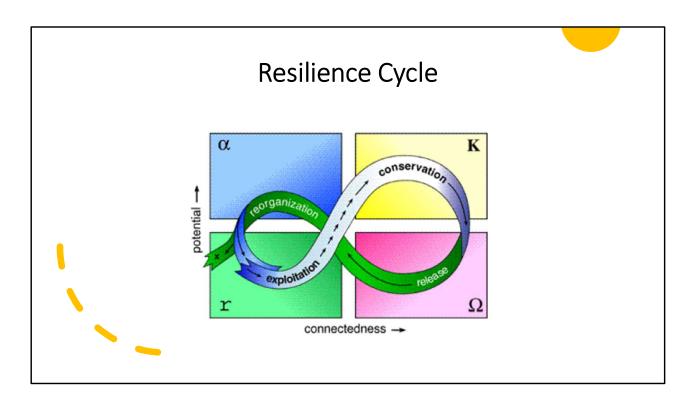
Resiliency theory was developed in the 1970's to create a model for the variance and change that occurs within a system (Holling, 1973). Under a cyclical pattern, tourism follows in a way that's not necessarily conducive to all stakeholders. As this is more than a recession, albeit presented in many ways as such, as a health concern, some destinations such as New Zealand have held precedence over the health of the citizens over all other factors. It is important to note that some countries have the financial capital or resources to do so, thus putting less strain on the need to open borders as they are more self-reliant that other destinations even with regard to tourism revenue.

Resiliency is the ability to respond and recover with variance on the spend of which this can occur that includes a variety of factors including that of the current pandemic of the healthcare system to support outbreaks. However, adaptive capacity is a heavy influence in recovery and is support by previous capital obtained. Within tourism, this includes social, economic, institutional and ecological systems (Holladay, 2018).

Because many wildlife tourism destinations are located in rural areas, there is a greater ability to move through the Holling Loop quicker because of past events such as ebola for nearly all African countries (Attiah, 2020) and the 2004 tsunami for some Asian countries such as Thailand and Sri Lanka (Cochrane, 2010). By learning from the past, they are more prepared with capital to address this current situation. However, while these are examples,

COVID-19 has presented an unprecedented challenge unlike these previous 'releases.'





To gain stability and be resilient, the "Holling Loop" is presented with four stages explained (Cochrane, 2010). After a release or an event, such as COVID-19, the current system is destabilized causing rapid uncontrollable change.

This leads to reorganization of a regeneration of systems, determining what has been impacted. As of September 2020, some destinations are in this phase, but predicated by their borders being open or allowance of tourism at an international level with roughly one-third of countries in this phase.

Next is exploitation in which new systems are created, possibly even new relationships formed. There are a few destinations that opened in the summer of 2020 such as Dubai where new systems of entry and tourism infrastructure like ticketing systems for attractions and procedures to ensure safety (Dunn, 2020).

The final stage, although cyclical in the model is conservation whereby new capital is created, stronger relationships are built and a more structured system emerges, under a 'new norm.'

It's important to note that during COVID-19, some destinations may reverse course based on the financial or health impact of the pandemic or cycle through rapidly and need to

reorganize in a different way in order to continue.



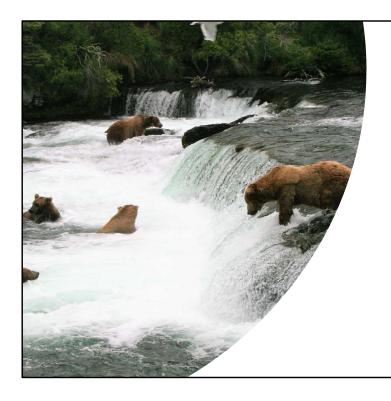
A Smart Systems Approach

A great learning opportunity is presented to nearly all destinations and tourism entities as this complete lockdown was not possible without such a catastrophic event that allows companies and tourism agencies to essentially start over in a new way. By prioritizing resiliency and ultimately increasing sustainable efforts, the tourism industry can gain the necessary capital to reduce negative effects that have previously occurred as a result of tourism, but create systems to reduce risk in the future, thus being more sustainable overall.

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Many stakeholders are involved within the tourism industry and a smart systems approach requires the need to obtain insight from these individuals, businesses and governments. While one change can be positive for one entity, such as the modification of feeding an elephant to only observation, that may result in the tourist visiting another destination entirely, producing less revenue and forcing the facility to euthanize the animals with the inability to buy/harvest food for the animal. There is a cost-analysis, not simply from a financial perspective, but costs to the community with employment, costs to the preservation of a cultural tradition or even costs to the environment with resort development. Through either backcasting or forecasting and identifying indicators for change and their impacts to various stakeholders, a smart approach can be determined.



Opportunities

- Maintaining Inspiration
- Technology Engagement
- 'Silver-lining' Messaging
- New Systems/Policies
- Reinvigorating Relationships
- Redesign of Infrastructure
- Internal Development/Focus
- Rejuvenation of 'product'

While the shutdown has led to a halt, it would be a missed opportunity to not utilize this time to focus on various way of improvement. This can be done internally within a system as well as externally.

Maintaining Inspiration – Destinations have a primary focus to help inspire people to visit and with pent-up travel demand due to the lock-down inspiration is welcomed even more than in previous times.

Technology Engagement – The introduction of virtual tours or viewing is increasing with some national parks setting up live cameras for consumers to view wildlife like the Grace Center in Eastern Democratic Republic of Congo. This may even spark greater interest in seeing the animals in person.

'Silver-lining' Messaging – With countless examples of areas who have seen a reduction of pollution and the halt of travel has had profound impact on the environment and thus its wildlife, offering a new found appreciation for this type of tourism.

New Systems/Policies – Many places now have less work due to less/no tourism, so the creation of new and more sustainable policies is now possible from a 'work-load' perspective. Governments are being creative in their offering of opening tourism with

longer stay visas also aligning with the slow tourism movement that allows for greater engagement with communities and ultimately wildlife.

Reinvigorating Relationships – Within the travel trade space and more time available, tourism companies can focus on creating better and stronger relationships within the travel agency and tour operator sector, including that of training and education.

Redesign of Infrastructure – With natural changes that have occurred in wildlife tourism, this time presents the opportunity to adjust how engagement occurs. Perhaps there is a herd that has migrated to a new area because of less human traffic that allows future guests at the lodge to experience more authentic viewing.

Internal Development/Focus — With international borders closed, there is a new appreciation for domestic travel. By allowing locals to have these experiences, it could have a reciprocal effect on the entire tourism experience when international tourists visit, such as the case in Rwanda where residents can obtain gorilla trekking permits for \$200 compared to the \$1,400 normally (Mugisha, 2020).

Rejuvenation of 'product' – Previously shared in that the natural reproduction cycles are becoming stronger due to a reduction of tourists, creating a larger wildlife population in the Joshua Smith - Academic Paper future, some of which may even be endangered.

Two questions to consider:

- What are some ways in which a wildlife tourism venue (not a national park whose wildlife acquires basic needs on their own) can produce revenue to support their wildlife?
- How would you like to see wildlife tourism change to be a more sustainable system (understanding the return of animals to nature is unlikely an option for many reasons)?

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Question 1 Note: There are financial implications within National Parks not obtaining revenue such as the reduction of employees including those in anti-poaching units, however generally speaking the governments are providing financial support in being a government entity. There are, however, many examples in wildlife tourism in which the facilities and rehabilitation centers are struggling to provide basic care because of a reduction of revenue, which may ultimately result in the death of the wildlife and thus impacting the future ability to attract tourists.

Question 2 Note: Because wildlife tourism is complex in that it provides income for locals and supports a greater industry both directly and indirectly, returning some wildlife to nature is not possible as the animals are unable to care for themselves, there may not be enough land or their existence is reliant upon human protection from poachers or other factors.

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Wildlife Tourism

An approach to sustainability during and in a post-COVID world

-by Joshua Smith For CRD569 Fall 2020



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