Is Wildlife Rescue a Viable Impact Mitigation Strategy?

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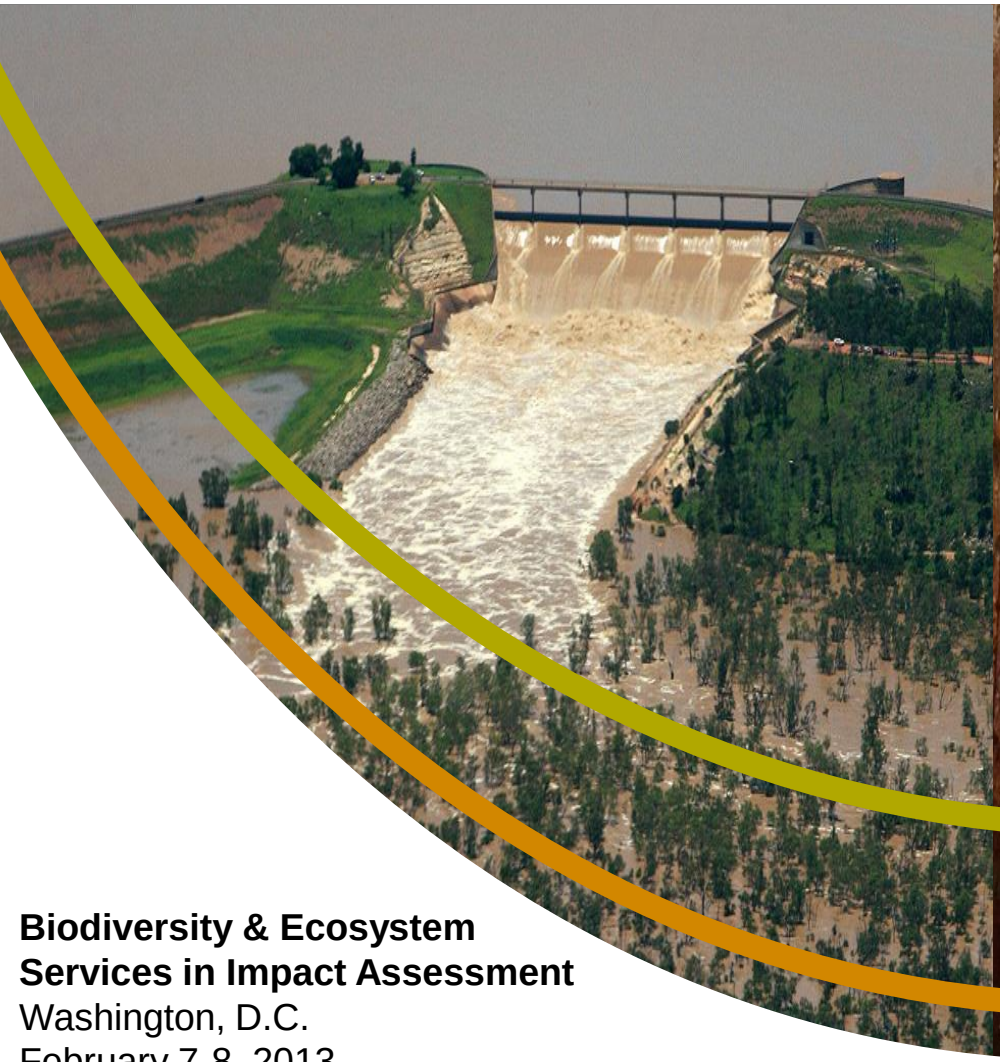
Image: (JONO SEARLE/AFP/Getty Images)



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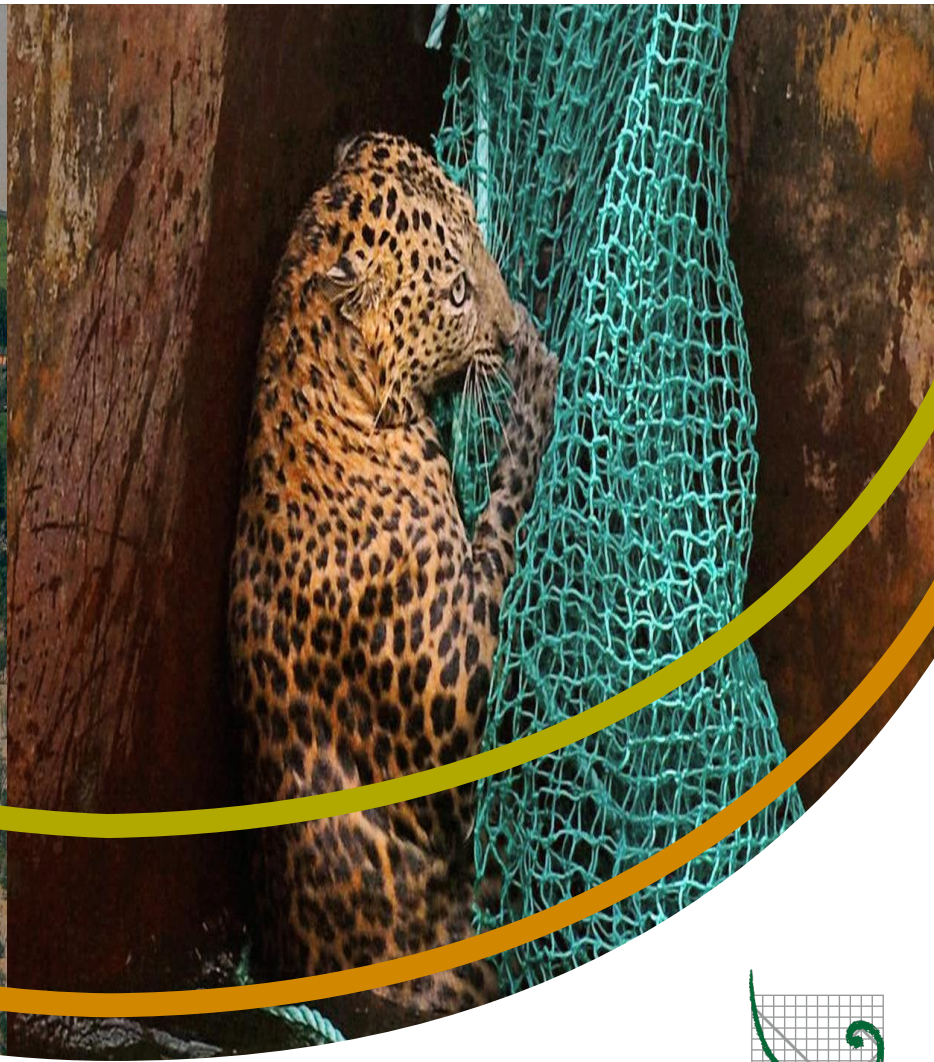

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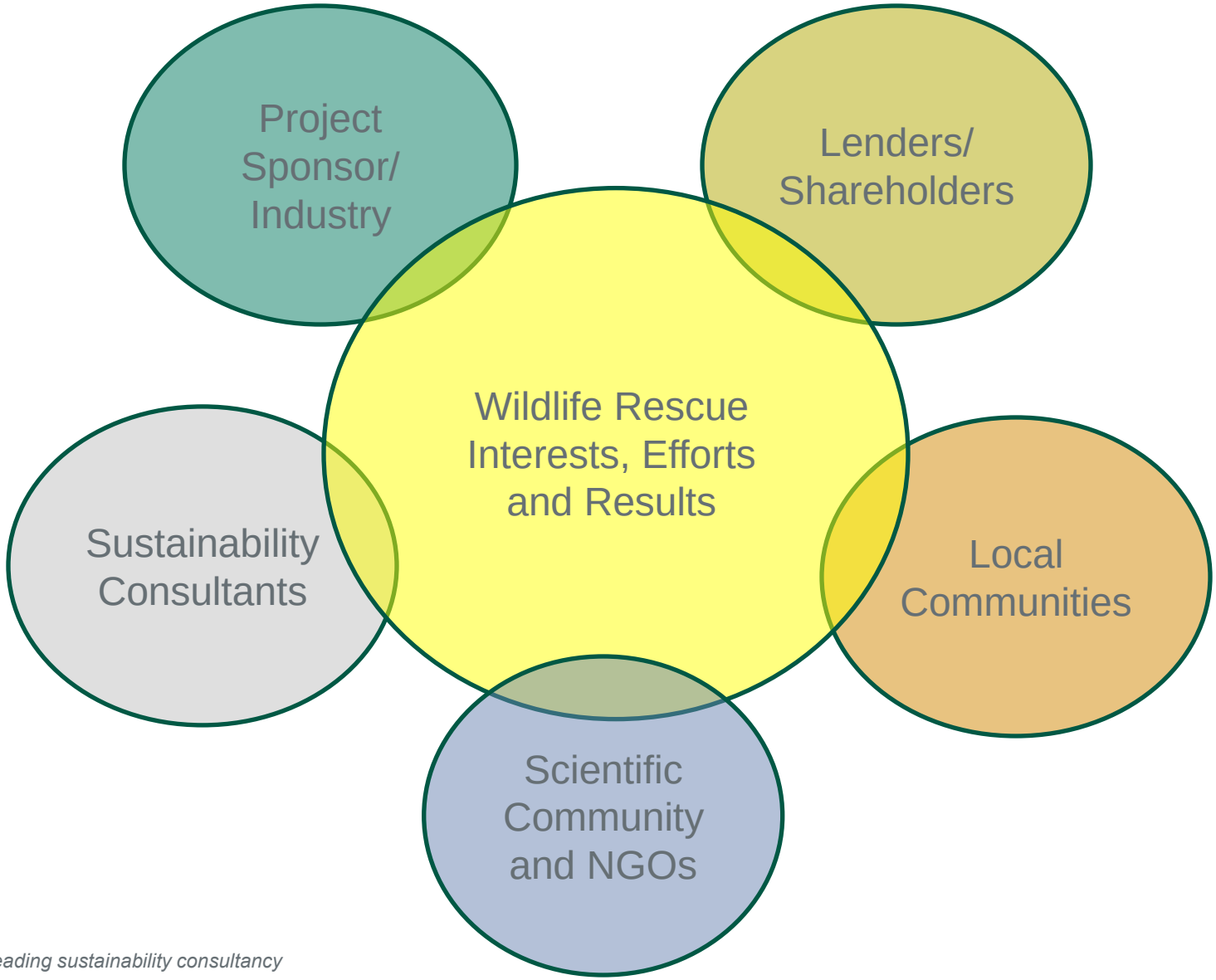
Why is Discussing Wildlife Rescue Important?



Why is Discussing Wildlife Rescue Important?

Improper implementation can result in:

- Biodiversity loss
- Adversely affect local communities and trigger NGO attention
- Reputational risks for project sponsors and lenders

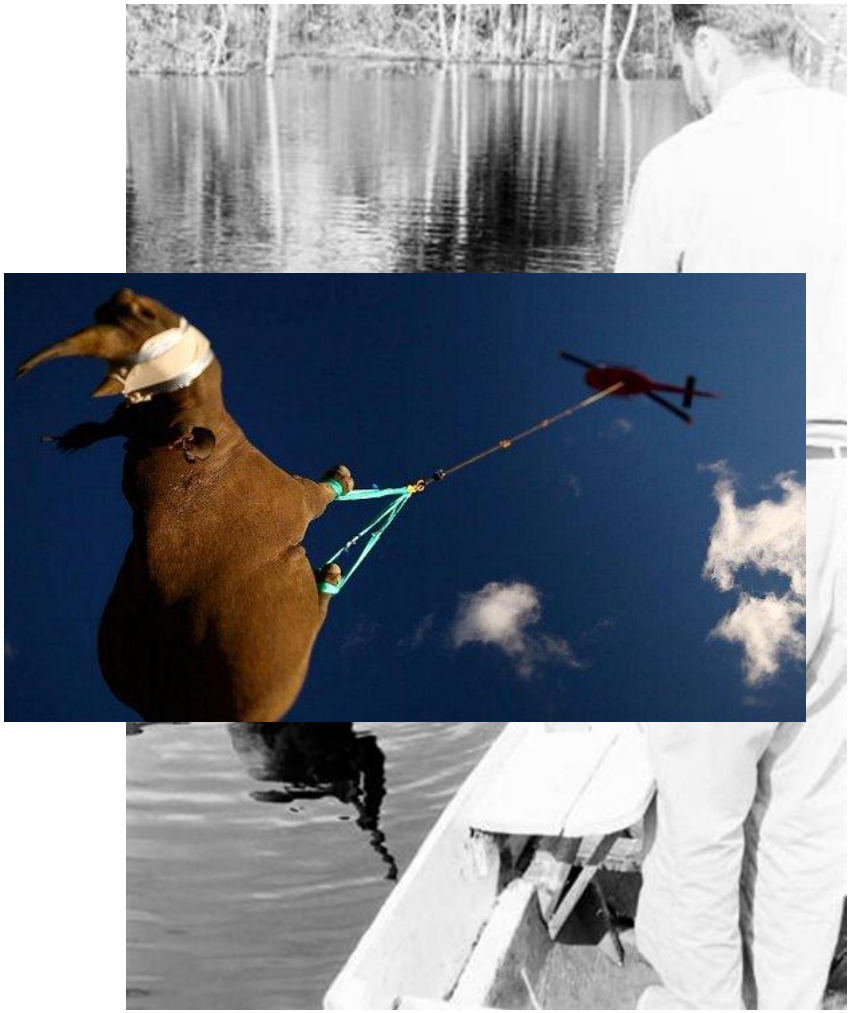
What is Wildlife Rescue?

- Removing plants, animals, soils, etc… from one location to be impacted to another "suitable" location
- "Translocation"
  - Captive to Wild - Golden Lion Tamarins
  - Restocking – i.e. Trout streams
  - **Wild to Wild**
    - **Mitigation normally deals with this type**
    - ex. "footprint species"
- Monitoring to gauge success

snail darter (*Percina tanasi*)

Wildlife Rescue as a Mitigation tool

- Understanding efficacy increases biodiversity conservation
- A lot written, little is known
  - “sexy” rescues
- Wildlife rescue seems:
  - logical
  - simple
  - humane
- **Except that often times it’s not.**

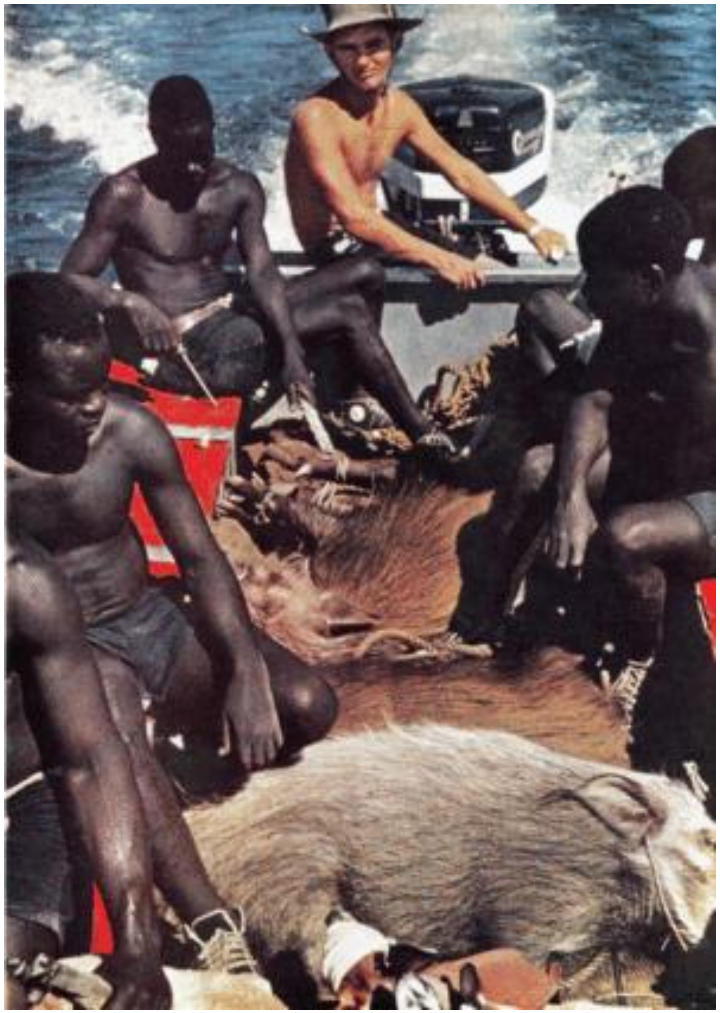


Early Notable Examples

Operation Noah: Zambia and Zimbabwe (1958)

- Kariba Dam - Zambezi Valley to Matsudona National Park.

- 5,000 animals.
  - 1,866 impala,
  - 585 warthogs,
  - 200 buffalo,
  - 43 rhino,
  - 23 elephants,
  - and at least a dozen lions.



Early Notable Examples

Operation Gwamba: Suriname (1964)

- Afobaka Dam
  - Brokopondo Reservoir
- 10,000 animals rescued
- Flooded area to energy generation ha/ MW = 60
  - Brokopondo Reservoir = 5333

Still Proposed Today

"Loss of Terrestrial Wildlife

The loss of terrestrial wildlife to drowning during reservoir filling

Mitigation / Enhancement Measures

Wildlife rescue efforts shall be taken up, wild animals rescued or captured shall be relocated at suitable habitat."

So is it Effective?

- Factors
  - Lack of evidence
  - Trap efficiency
  - Post release survival rates
    - Monitoring
- “WB study of Dams”
  - Better to choose best sites
- Even the “best sites” can still have impacts on biodiversity

Issues with Methodology

Many projects lack adequate plans for translocation including:

- Detailed information on “to-be-rescued” population
- Adequate trapping methodology tailored to the targeted species
  - Types of traps used
  - Trap locations
  - Trap at different times of the day and or year
    - i.e. when less food resources are naturally available, etc.
- Relocation site population demographics
- **Releasing “rescued” animals into already “saturated” environments can lead to further biological upheaval**
- **Important point as offsets work continues**

What Can be Done?

Lenders and project sponsors

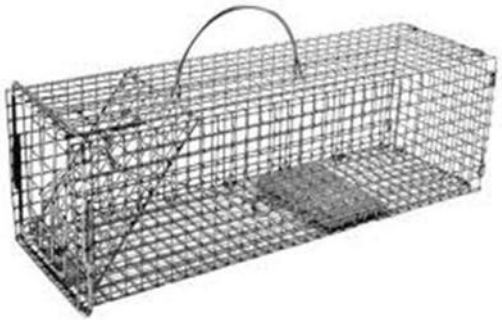
- Given the complexity of the issues involved **be wary of "wildlife rescue" without an extensive and detailed approach** which should begin as early as possible in decision making process

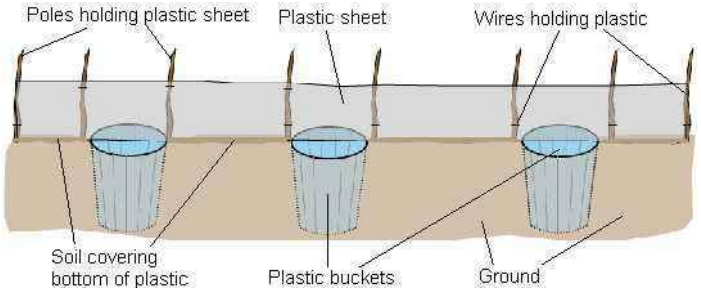
Photo: Chris Brown

What Can be Done?

Consultants

- Improvements in wildlife rescue will depend on **better understanding of when and how to use this strategy** as a mitigation tool and to **compile and share results** of its efficacy.





Ways Ahead

Proposals need to consider:

- Enough time to adequately understand the ecosystem being impacted. Is there adequate knowledge about the species being targeted for rescue?
- The trapping methodology that will yield the highest number of captures with the least stress to the individual. This effects project timelines and budgets
- The suitability of the release site. Not only in fulfilling habitat and feeding requirements but also in avoiding situations where extreme inter and intra-species competition could derail efforts
- Monitoring post “rescue”

So is Wildlife Rescue a Viable Strategy?

Only time and more data will tell

Take home message

"Managers must often exercise conservation options under considerable uncertainty, something that only an increasing body of well-documented case histories can help reduce."

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Selected References

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- Good Dams and Bad Dams: Environmental Criteria for Site Selection of Hydroelectric Projects. World Bank, November 2003
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Photo: Clayton Degayner