

How to make “rescue’ of wildlife’ conservation relevant?

Introduction

In the current times, considering how fast the IUCN Red Listing status of native wild animals is moving up the ladder, an alarming exponential growth of anthropogenic elements in the biodiversity, the growing habitat degradation and its effects on the fauna, it has become very crucial that we practice conservation welfare and adhere to conservation principles in every aspect of our decisions/steps.

There exists various ‘rescue’ operations/cases of wildlife in India, where a subset or the whole set of the existing ‘rescue’ methods/procedures, actions taken after ‘rescuing’ the animal, aim and subject of the ‘rescue’ has failed to incorporate the essence of conservation as its prime focus. ‘Rescuing’ invasive species, relocating native species from their original habitat, releasing a captive native wildlife which has risk of transferring diseases into the wild etc. come in direct conflict with what conservation stands for.

The current state of ‘rescue’ organisations being a standalone entity, bound to ethics of animal welfare rules, yields very limited results and narrows our perception/capabilities in our much broader goals of species, ecosystem restoration & their protection. It is of dire necessity that the ‘rescue’ is recognised as one of the wings of

the conservation, which can happen only if it binds itself to the principles of conservation. Fray, an embodiment of holistic views, actions that focuses not only on saving wildlife, but also in devising action plans in protecting species from extinction, maintaining and restoring habitats, inculcating eco-friendly sustainable way of living, in protecting biological diversity and in eliminating the causes that upsets the ecological space, clock and rhythm of our realm.

A group project with the objective to come up with action points that can help align the ‘rescue’ methodologies in accordance with the conservation principles was assigned to us Fellows, as part of the RHATC program by Sanjay Molur, our course coordinator & executive director of Zooreach Outreach Organisation.

After a few group discussions, we decided to make a hundred case studies of ‘rescues’ covering the whole of India from 2000 to 2020 to understand the current causes of ‘rescues’, actions taken by stakeholders after ‘rescuing’ the animal and identify the grey areas of ‘rescue’ where conservation is poorly focused.

Thereby we came up with a brief ‘rescue’ action plan flow chart that can aid in conservation of the species & populations.

Dynamics of our ‘rescue’ study.

Defining Terminologies

‘Rescue’: An interaction or interference with the wildlife individuals that are injured or sick or orphaned or are found in human populated areas that aim at the individual’s recovery and it’s welfare.

‘Rescuer’: The person or the body who ‘rescues’ the wildlife.

‘Rescue’ Action: Actions that are taken after ‘rescuing’ the wildlife. This is also a type of iteration that adds to defining what ‘rescue’ is. Look at table 1 for more information.

Release: The action of putting back an animal from where it was ‘rescued’ or to another location.

Rehabilitation: An exhaustive process where an effort is made to recover the injured or orphaned or sick animals’ health to good condition.

Stakeholders: People impacted by or have impact on the ‘rescue’ of wildlife. For example, local wildlife NGOs, animal welfare organizations, community, individual ‘rescuers’, forest department, and others.

Native species: A native species is indigenous to a given region or ecosystem if its presence in that region is the result of natural evolution though often popularized as “with no human intervention”. Source: Wikipedia

Exotic species: Exotic species, often referred to as alien, nonnative, nonindigenous, or introduced species, are those that occur in areas outside of their natural geographic range. Not all exotic species are invasive in nature. Source: Wikipedia

Invasive species: An invasive species is an organism that is not indigenous, or native, to a particular area. Invasive species can cause great economic and environmental harm to the new area. Source: Wikipedia

Translocation: Relocating an animal or plant away from its original habitat to another location within its native distribution range based on a scientific and systematic programme following the guidelines of conservation translocation (of the Conservation Translocation Specialist Group, SSC IUCN).

Threatened species: Species which are vulnerable to endangerment currently or in the near future.

Redefining Terminologies

Human-wildlife Conflict: The term ‘conflict’ creates a bias against the idea of co-existence. Also, conflicts better reflect the interactions between humans. Hence the term is replaced with ‘Human-Wildlife Interaction’.

‘Rescue’ data Compilation:

-A hundred case studies on ‘rescues’ reported in the media in the timeline 2005 to

2021 were covered, on average four cases per state.

-The locations were taken from all over India, covering 25 states: Tamil Nadu, Karnataka, Kerala, Madhya Pradesh, Uttarakhand, Uttar Pradesh, Delhi, Assam, Punjab, Rajasthan, Goa, Gujarat, Sikkim, Arunachal Pradesh, Andhra Pradesh, Telangana, Odisha, West Bengal, Jharkhand, Nagaland, Haryana, Bihar, Chhattisgarh, Maharashtra, & Himachal Pradesh; and three union territories: Pondicherry, Ladakh, and Jammu & Kashmir.

-Data points were date, location, animal category, species, type of interference, action taken by the ‘rescuer’, stakeholders.

-Information was collected from media sources, personal observations, magazines, facebook, and newspapers.

Articles from the following sources: Times of India, India Today, Indian Express, Daily

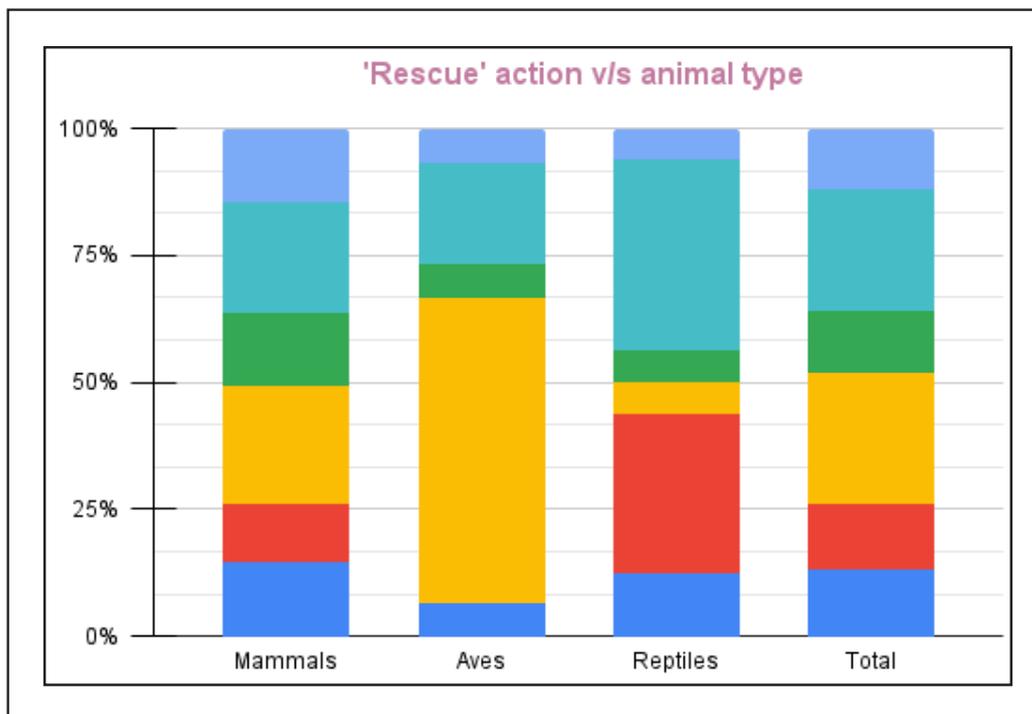
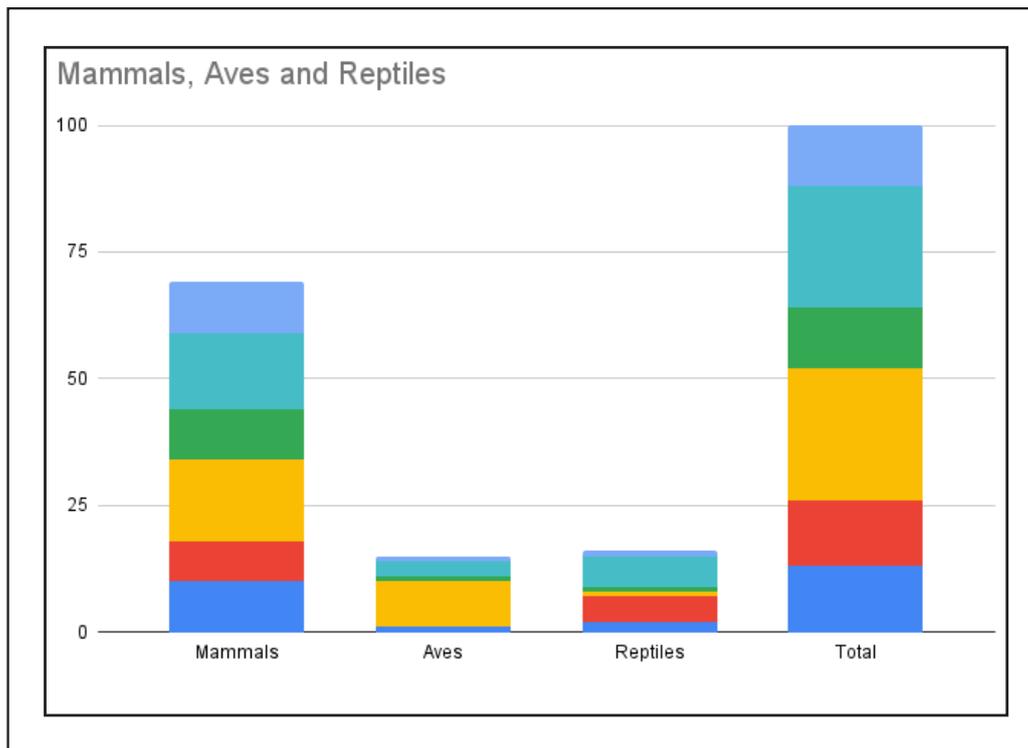
Excelsior, Hindustan Times, India Today, Deccan Herald, NDTV, News18, Asian life International: Environment and wildlife, Arunachal 24.in, The Assam Tribune, East Mojo, Forest News, Tiger Paper, Regional Quarterly Bulletin on Wildlife and National Parks Management, Down To Earth, Wildlife Trust of India, The Telegraph, ANI, The new Indian Express, Facebook, The News minute, The Hans India, NDTV, Indian Today, Snakes & Wildlife Conservation Punjab, Wildlife SOS, Turtle Survival Alliance, The Freepress, Times now, -The Better India, The Scroll, Journal of Threatened Taxa, Zoo’s Print, Conservation India.

Personal Observations: Aakanksha Komanduri, Shweta Madgulkar, Arpan Joshi, Payal Molur, Sanjay Molur, Ashritha Anoop, Trisa Bhattacharjee, Usha Ravindra.

Table 1. ‘Rescue’ action categories. The action taken by the rescuer was divided into the following categories:

‘Rescue’ Action	Explanation
‘Rescue’ Action 0	‘Rescue’ of the animal is still in process (for example, forest department is still tracking the animal) or the animal died in the ‘rescue’ process.
‘Rescue’ Action 1	Released immediately after capturing the animal at the same spot (e.g., The animal was stuck in a pit).
‘Rescue’ Action 2	Captured, taken to rehabilitation centre and released after ‘x’ period of time at the same ‘rescue’ spot.
‘Rescue’ Action 3	Captured and taken to captivity centres like zoos for life time care.
‘Rescue’ Action 4	Captured and euthanised.
‘Rescue’ Action 5	Captured and released at a spot other than from where it was ‘rescued’.
‘Rescue’ Action 6	Captured, taken to rehabilitation centre and no update on what action was taken next.

Analysis: Graph of 'Rescue' actions with respect to the animal categories: mammals, aves, and reptiles, was plotted and the results were analysed.



- unsure or no report on 'rescue' action (unclear) (6)
- Captured and released at a spot other than the 'rescued' spot (5)
- Captured and euthanised (4)
- Captured and taken to life time captivity centres like zoos (3)
- Captured, taken to rehabilitation centre and released after 'x' period of time at the same rescue spot. (2)
- Released immediately after capturing the animal at the same spot (1)
- 'Rescue' in process/animal died during 'rescue' (0)

Observations (O)-cum-Inferences (I).

ANIMAL CATEGORY	OBSERVATIONS (O)	INFERENCE (I)
MAMMALS	<p>O1: The majority of the animals are - taken to rehabilitation centres and released back at the same spot (23.2%) - released to another spot (21.7%).</p> <p>O2: Percentage of release immediately after 'rescue' (no rehabilitation) is the least, i.e, 11.6%.</p> <p>O3: Percentage of animals taken for lifetime captivity (like zoos) reported is 14.5%</p>	<p>I1: O1 & O3 indicates that there is a prevalence of human-wildlife negative interaction as 21.7% of the animals were released at a spot other than from where they were 'rescued' and 14.5% were taken for lifetime captivity (like zoos). O1 also indicates that awareness exists among the 'rescuers', to release the animals in the 'rescued' spot after rehabilitation.</p>
AVES	<p>O1: According to the reports, 60% of the aves were taken to rehabilitation centres and released at the same spot.</p> <p>O2: Percentage of aves released to a spot other than where they were 'rescued' is 20%.</p> <p>O3: Release immediately after 'rescue' (no rehabilitation) for aves is not reported.</p>	<p>I1: O1 & O2 indicates that the birds are susceptible to more injuries as 80% of them required rehabilitation/ treatment.</p> <p>I2: O2 also indicates the presence of negative perception society may have towards birds as at least 20% of them were released to a spot other than where they were 'rescued' or/and it also implies that there is lack of awareness among the 'rescuers' about the territorial nature of birds and that they are to be released back in the area where they were 'rescued'</p> <p>I3: There is more clarity on what the 'rescue' actions can be for aves compared to other animal categories.</p>
REPTILES	<p>O1: 37% of the reptiles were released to a spot other than where they were 'rescued', highest of all 'rescue' actions, according to the reports</p> <p>O2: 31.3% of the reptiles were released immediately after 'rescue' at the same spot</p>	<p>I1: O1 & O2 indicates both the lack of awareness in 'rescuers' on the negative effects of releasing reptiles to a spot other than where they were 'rescued' as well as it indicates that there are a good fraction of 'rescuers' who are aware of the territorial nature of snakes as they chose to release the snakes in its respective original habitat & home range.</p> <p>I2: O2 also indicates that the snakes which were released right after 'rescue' may not have required a 'rescue' as they could be nonvenomous but since the 'rescuer' chose to release them in the near vicinity of the 'rescue' spot it sheds light at the continuing presence of stigma or fear people have towards the snakes.</p>

ANIMAL CATEGORY	OBSERVATIONS (O)	INFERENCE (I)
<p>GENERAL</p>	<p>O1: Animal released to a spot other than where they were ‘rescued’ cases reported is more than 20% in all three (mammal, reptiles, aves) animal categories.</p> <p>O2: There were zero cases reported on the animals being euthanized.</p> <p>O3: Most number of reportings were on mammals, i.e, 69 as compared to reptiles (16) and aves (15).</p> <p>O4: According to the reports, rehabilitation, and release of animals at the same spot is more in aves, i.e., 60% as compared to mammals and reptiles.</p> <p>O5: Very few cases, i.e., 13 out of 100 were reported as ‘rescue’ in process or animals dead during ‘rescue’.</p>	<p>I1: O1 implies that there is a dire need for creating more awareness to ‘rescuers’ on the negative effects a released animal can have on the habitat, other species that live there & the stress it creates on the released animal itself, if its released at a different spot other than the rescued spot.</p> <p>I2: From O2, Euthanasia is not recognised as an effective ‘rescue’ action; or/and euthanasia is perceived as unethical by the people, making it a taboo topic for media to report about; or/and euthanasia has not happened so far.</p> <p>I3: From these 100 case studies, we can infer that the ‘rescue’ actions used in all three categories are dependent on the facilities availability, ‘rescue’ situation and the condition of the animal and the type of interaction the animal shares with the locals.</p> <p>I4: O3 indicates media coverage is more on mammals than reptiles and aves. This could imply the focus is more towards charisma, emotional imagery, negative interactions, and attention-grabbing factors mammals carry as compared to others. In other words, it implies less media attention goes to reptiles and aves as compared to mammals.</p> <p>I5: O4 implies that the ‘rescue’ action is more in accordance with conservation principles with respect to aves as compared to reptiles and mammals.</p>

METHODOLOGY DRAWBACKS:

- In the ‘rescue’ action 0 where it groups two totally different ‘rescue’ scenarios, i.e., ‘rescue’ in process and animal died in process, it becomes unclear or invalid to derive any conclusions.
- As most of the ‘rescue’ reports were highly reliant on the news media, the credibility of the sources is questioned.
- The sampling was opportunistic rather than

random as generated by the listing in Google search engine.

RESULTS / LEARNINGS / TAKEAWAYS

- In the 100 cases sampled, there were no translocations carried out. In instances where animals survived and were not kept in captivity after ‘rescue’, they were either released into the same area or to a different spot without following the scientific and

systematic guidelines of translocation.

- There is a dire need for education/training sessions for ‘rescuers’ about conservation welfare and principles.
- Euthanasia for cases indicated in **the ‘rescue’ flow chart** (refer ‘rescue’ action flow chart) needs to be recognized as effective conservation solution only provided all other proposed solutions are exhausted.
- Given how the human-wildlife interaction is bound to increase in the future, the present case study could be a gateway for future ‘rescue’ analysis and helps us know the trends/shifts in people’s perception towards wildlife.
- It is crucial that the rehabilitation centres

write scientific reports of the whole method of ‘rescue’, rehabilitation, and release they followed for bettering practices in the future.

- There were a few media reports of ‘rescues’ on invasive and exotic species. It is high time that ‘rescuers’ understand the biggest threats invasives pose to the habitat and native species. Invasives must be euthanized after capturing. As for exotics, it is impossible to know beforehand whether the species will become invasive or not. Also, they must not be released into the wild as they do not belong here. If there is no biosafety captive facility available then exotics are to be euthanized.

CAUSES OF ‘RESCUES’

The cause of the ‘rescue’ of all the animals is due to the presence of high anthropogenic pressure.

Most common causes of injury reported in these 100 case studies were:

Stray dogs attack, use of chemical sprays & pesticides, hunting, use of killer manjha thread, dehydration, orphan, roadkills, kept in captivity, electrocution, animal found in human populated areas, pit, pond, road, mesh, well, drain, road, school, agricultural fields, residential area, trapped inside stone structure, factory, clinging to a log, found in branch of a hollowed tree near paddy fields, attacked human, infant separated from herd, habitat flooded, illegal trade, used as performing animal, injured orphans, fallen tree with holes, stuck in stream, entangled in fishing nets, caught in snare, trapped in noose, stranded in the canals, stuck in the agricultural fencing, injured by spears, maneater.

Eliminating these causes should be the prime focus of the ‘rescue’ organizations and the forest department.

EUTHANASIA, a plausible tool for conservation

The act of euthanizing wild animals has perplexed conservationists, decision-makers, and animal welfare groups for a long time. The topic of euthanasia not only poses a moral dilemma but the lack of a legal and binding protocol makes the process arduous.

Euthanasia becomes the last resort for a multitude of reasons like when a ‘rescued’ animal is terminally ill, severely injured, or the ‘rescue’ center lacks the resources for permanent biosafety captive care. Even though euthanizing animals can be sensitive, emotional, and sometimes controversial, the decision should primarily be based on conservation welfare and considerable evaluation must be done in understanding the negative effects the animal can have on the habitat and other wild species, if released into the wild.

Euthanasia of sick or injured animals that are unlikely to survive; euthanasia of exotic species in case of non-availability of biosafety captive facilities; and euthanasia of the captured invasive species regardless of the extent of injuries must be considered, if one is to work for the benefit of the species, habitat, & ecosystem, and not just limit ones view to the welfare of the individuals.

If the decision to euthanize an animal has been taken, the act of euthanising should be done in the most humane way possible. The method of handling and the degree of restraint required needs to be taken into consideration when evaluating the choice of euthanasia. The safety of the people involved in euthanasia must also be considered, as some native and exotic animals can be dangerous or carry zoonotic diseases.

No set of guidelines can provide easy answers to the toughest calls. However, they can help fast-track the process, save crucial time, energy, and resources that can be invested in eliminating the factors that are causing these ‘rescues’ in the first place.

CONSERVATION WELFARE

The idea of conservation welfare introduced by Sally Walker is different from the idea of animal welfare. While animal welfare is centered on the welfare of an individual (be it wildlife or domestic), conservation welfare focuses on the welfare of the wild species and its populations. The subject being different in these two ideologies, it brings a massive difference on the impacts it can have on wildlife population, policy, decision making pertaining to wildlife, and therefore conservation.

For example, let's say 1 out of 10 frogs is down with a life threatening contagious disease. While animal welfare rules work on recovering this one infected frog, conservation welfare dictates one to quarantine the infected frog to understand the cause of disease. In case of non-availability of quarantine-cum-biosafety facility, it guides us to euthanize the infected frog as the disease can spread to the other nine frogs if not kept in isolation. Here conservation welfare ensures not all frogs die and that the population survives.

From the above example it is evident that the vision of conservation welfare entails a much broader, holistic view and it becomes very crucial to adhere to it, if we are to conserve the various elements of biodiversity in the long run. However, one must not forget that animal welfare is the utmost basis of all our conservation endeavors. It is given that we incorporate it in our every practice and rethink it only when it becomes irrational and stands in the way of conservation.

EDUCATION, a dire need....

'Rescue' sites are the key opportunistic hotspots to create awareness among the locals on the need to save wildlife, their ecological role, the ecosystem services they provide and the need for us to coexist with them. Education being the highest sustainable solution for any issues of the world, it must be given the highest priority at any given space and time, when the opportunity presents itself. In addition, the stakeholders responsible for the 'rescue' of wildlife should keep enough educational packets, hand pockets, pamphlets on the local species ready, distribute them to locals at 'rescue' sites and encourage them to report to the authorities when a wildlife in distress is seen. An impact a 'rescue'-cum-education can have on the locals at 'rescue' sites is tremendous. Hence the newly coined term, '**RescuEdu**'.

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