

## A STUDY OF THE IMPORTANCE OF FLAGSHIP SPECIES ON CONSERVATION EFFORTS

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### **Abstract**

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*The flagship species approach is a successful conservation method. Scholarly discussion of flagship species has centred on two aspects: the basis on which it would be wise for them to be selected and the methods used to use them. Here, we focus on a third factor, specifically how flagship species behave, have the power to arouse public interest, and affect conservation outcomes. By utilising concepts from the sociologies, such as affordance, outlining, and entertainer organisations, we investigate examples of flagship species in order to put forth a hypothesis regarding the activity of these species. In a nutshell, our hypothesis holds that a flagship species is unified with traits that pay the price for the accumulation of somewhat aware relationships with ideational components located in earlier social frames. These connections increase the likelihood that a conservation activity will align with deep social structures, current social quirks, and political economy to the point where different organisational structures will alter the public's of different species and people. The species is redefined (or resurrected) as a social resource that represents a larger nature, publics, and political strategies. Furthermore, our hypothesis states that species with traits that correspond to thought networks combining human anxiety will have a constrained flagship limit. This is due to the requirement that the delivered depictions be able to align with plans integrating overall goals. In terms of applied conservation practise, our hypothesis suggests that: The presence in current social edges is a crucial criterion for selecting potential flagship species, and successful organisation of flagship species necessitates an understanding of the social affiliations of the species. Additionally, a species' capacity to electrify activity might be restricted to particular environments.*

**Keywords:** *Flagship Species, Conservation Efforts, conservation organizations, biodiversity conservation.*

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### **1. Introduction**

The primary normative obligation on the planet today is the preservation of biodiversity. Keeping up with biodiversity can significantly reduce the risk of illnesses in humans, animals in the wild, and domesticated animals. The most advanced attempt to characterise biodiversity has made it clear how complex it is, which raises questions about how to best address the challenges of biodiversity at the board and checking. Recently, scientists have suggested selecting an

average of 20 species per year to be protected from extinction pathways. Although conservation science can be used to create such arrangements of species based on threatened status, endemism, and extraordinaryness, it is still unclear which species will become generally vulnerable to extinction in a given year.

By dissecting large amounts of data, we can adopt the concept of flagship species as the section highlight particular key species, screen biodiversity progressions through a predetermined number of key species, uncover the system of changes in biodiversity, and effectively oversee and protect biodiversity. The term "flagship species" currently refers to endangered species that have been selected to protect a unique area that needs to be protected. A large magnetic vertebrate is typically used to solicit assistance from the public.

The executives' strict budgetary guidelines assigned for conservation make it difficult to safeguard and preserve species. Our paper illustrates the benefits of using a flagship species to guide local conservation and planning as well as local area schooling by conducting a contextual investigation of the famous Australian warm-blooded animal, the koala. We continue to present a contextual analysis of the koala as a feature of a local area schooling mediation in the territorial Australian city of Ballarat after looking into a few elective phrasings for describing notorious species. Finally, we infer from our contextual analysis the significance, a few implications, and choices regarding the inclusion of flagship species in regional training programmes.

Protecting biodiversity is challenging because of the growing number of species and environments that need insurance and the limited funding available. Many creators have used proxy species for conservation efforts as indicators of natural changes and to include, or essentially teach, the local community about ecological issues. It is practically expected that surrogate species will attract funding from the community and the government. Numerous creators have highlighted the importance of these species' contribution to the advancement of natural mindfulness and knowledge. Lemurs, for instance, were used to help children understand the value of conservation in Madagascar by emphasising the threats to the species' survival in bog and forested areas, and brilliant lion tamarins in zoos play a role in the preservation of regular natural environments through research and state-funded education on ecological issues generally.

Flagship species are an important tool for conservation because they can be used to engage the general population and build reserves. A significant number of other species will also be conserved as a result of the preservation of a flagship species "in situ." A method is needed to locate flagship species with widespread appeal and attract resources to land outside the protected regions framework. A regulated illustration of the concept of the flagship species is a common bird, warm-blooded animal, plant, or bloom.

Natural organisations distinguish flagship species from cornerstone and pointer species and use them for public missions. The other three terms for species that pose a particularly serious threat

to conservation hinge on concepts that demand in-depth knowledge of both biology and organic principles. Flagship species perform best when statistical surveying data is freely available, as well as the public's perception of the species and how much they like, value, or support it.

### **1.1. The definition of flagship species needs to be updated**

Researchers have adopted a variety of theories to help people understand the problem of biodiversity misfortune. The concepts of cornerstone, umbrella, central, and marker species are all useful in conservation science for identifying and monitoring changes in the sums, varieties, and synthesis of biodiversity. Despite this, these concepts are frequently misrepresented and misused, even in logical writing. The general populace has a hard time understanding what these concepts mean and why they are important for the protection of biodiversity, and it's even harder if they keep seeing problems that are related. The concept of flagship species can help with solving this problem, mainly because it has deep cultural and social connotations in addition to making reference to science. Numerous fictitious studies and practical conservation achievements have demonstrated the value of promoting species that raise the value of all facets of society and supporting the conservation efforts that should be supported.

In conservation science, the concept of a flagship species has two implications. The main character makes a reference to species that are restricted to particular explicit biological systems. Their presence is interpreted as proof that the environment is real. Focusing on the preservation of this type of flagship species involves the management and control of vast areas of the environment, protecting flagship species but also a great number of other less notable species. The following significance alludes to those species that have strong extraterrestrial, fashionable, or social qualities. They may attract public attention, much like VIPs do when they take part in missions involving natural security.

## **2. Flagship species**

Flagship species are "referred to magnetic species that act as an image or centre highlight raise ecological cognizance," according to Sam ways et al. (1995, p. 491). They may also be portrayed in light of their inherent significance. In any case, there is often a correlation between a species' biological importance and public support for ecological interventions because it is assumed that the general public upholds an altruistic worldview that values nature inherently. A delegate species should have the alluring characteristics of a flagship species if it is to be powerful in an essential capability in empowering the execution of conservation activity in the case that a particular area of general society does not naturally value nature. brought up that the extinction of an endearing species can have a greater impact on people than a lack of habitat, even though the lack of habitat poses the greatest threat to the species. As a result of their own high territory demands, magnetic enormous vertebrates can elicit assurance of other species' living spaces. When assessing a species' overall financial worth, the public perception of its mystique can be just as important as its singular circumstance or degree of "endangerment." Using endearing

species can frequently generate more money for nature security projects than, say, using sophisticated biological concepts.

He described nonhuman moxy as a blend of a species' perceptibility, utility, feel, and potential to create fulfillment in his exhaustive examination of what determines if a species is charming and reasoned that mystique acts primarily on the close to home, as opposed to the mental level. Magnetism is still an inherently emotional trait. Verifiably, endearingly enormous vertebrates are the best ambassadors for ecological issues in the general public because they elicit greater empathy and financial support than, say, plants or insects. In any case, it should be highlighted that the real and significant effects of non-human magnetism are setting specific and in no way, shape, or form everywhere shared, either in social settings or over time. For instance, a species like the harrier might be endearing to one group of people while being a vermin species to grouse trackers, which is contrary and unattractive.

### **2.1. Role of flagship species**

The following list illustrates the important roles of flagship species:

- a) The viability of using flagship species that people have a deep appreciation for to help with raising funds for species (through gifts and the travel industry) and living space conservation (Ginsberg, 2001).
- b) Flagship species that are in grave danger shouldn't be ignored because they undoubtedly contribute to the publicising of problems.
- c) Numerous governmental and non-governmental organisations invite flagship species because they may be able to ensure the safety of entire habitats.
- d) It is a factor in pay.
- e) It contributes significantly to bolstering local governance.
- f) It also aids in promoting friendliness and prosperity.

### **2.2. Issues with the Concept of Flagship Species**

Simberloff argues that because they might go extinct, flagship species are unlikely to be good replacements for more extensive biodiversity, environmental security, or local community education. If everything were equal, it would be more profitable to invest in projects and train people to protect biodiversity. Utilizing flagship species, according to Roberge and Angel's Hat, can affect the management and conservation requirements in their benefits but be detrimental to additional severely underappreciated species. The creators also acknowledge the possibility of conflict between the leadership of various flagship species. According to Simberloff, they argue that in the most dire scenario—the extinction of a flagship species—conservation partners' perspectives might be adversely impacted.

Due to the high costs associated with maintaining a single species, White warns that the single species-based approach to management may prove to be unprofitable. He uses the conservation initiatives designed to protect the southern bushy-nosed wombat, whose existence is threatened by loss of habitat, hunting, and harm, as models. In order to protect a small population of wombats that was on the verge of extinction, conservation planning in South Australia included the expensive purchase of 1215 ha of land and construction of a wall. A project of a similar nature was also undertaken in Queensland. Due to the small populations, these intercessions (Bode and Wintle) are not only expensive but also move slowly. Additionally, their slow progress is frequently obscured by ongoing conflicts over specific animals and their habitats, and very little is done to further the conservation of various species or of larger geographic regions.

### 2.3. Important flagship species of the world

One of the most important conservation techniques was developed in Brazil in the middle of the 1980s: flagship species-based biodiversity conservation. From that point on, numerous conservation modifications were planned and successfully carried out all over the world. Table 1 includes references to some of the world's notable flagship species.

**Table: 1.** a few significant world flagship species

Name of species	Country	Status	Economic ecological,, cultural or religious value	Purpose
Dalbergia melanoxylon (African black wood)	Tanzania	Endemic. 8,500 species of plants (54% endemic)	Excellent and expensive timber.	Conservation of habitat
Elephas maximus (Asian Elephant)	India (Western Ghats)	Number of individuals: 45,000 (wild)	Cultural symbol of the people of South and Southeast Asia	Conservation of elephant habitat
Macaca silenus (Lion tailed Macaque)	Southern India	Number of individuals: 3,000 – 5,000 (wild)	Effective seed disperser and can maintain tree diversity	Habitat conservation
Lagothrix lagotricha (Woolly monkey)	Columbian Amazon	Endemic. 81 primate species (25 – 40% frugivorous)	Effective seed disperser and can maintain tree diversity	Habitat conservation
Leontopithecus chrysomelas (Golden headed lion tamarins)	Brazil	Number of individuals: 850 – 3,100 (wild)	Effective seed disperser and can maintain tree diversity	Ecosystem conservation

### **3. Use of flagship species by conservation organizations**

Unambiguously stated in the showcasing writing is the necessity for organisations to communicate a brand image to the general public, which is typically done through a logo. If a relationship can be established between a species and the human population, or if one already exists and the species has an established place in people's sense of place with an inherent right to be there, the viability of the species is improved. An efficient way to assess the association's brand strength is to evaluate the logo's output, in this case an assessment of the advancement of the flagship species.

Utilizing a flagship species has about two advantages for conservation organisations. First and foremost, it is simpler to introduce the association as a particular and knowledgeable organisation. Additionally, it helps remove mental barriers when completing pledge-gathering activities because donors can relate their support to a clear theme that supports the conservation idea; the easier the message, the greater the desire to give. However, identifying the ideal flagship species can be challenging, and a few potential problems should be taken into consideration.

The validity of an organisation may be negatively impacted by focusing on a single flagship species in order to raise pledges for the wide insurance of biodiversity, especially when it is unclear to the contributors how the money will be used. In addition, rather than being based on logic or objective standards, crusades are frequently based on the allure or prevalence of a species. If a species is to serve as a conservation measure for other species, it must exhibit a high probability of enduring in a stable population.

### **4. A Preliminary Theory of Flagship Species Action**

Flagship species are those that have an effect on the social realm of humans. These effects are brought about by the morality of their relationships with various components (foundations, publics, states) or ideas, legends, values, and so forth that work together to benefit the larger environmental frameworks in which they are caught.

Species are living things with a set of affordances. They include material organisation and aggregate (what it looks like), conduct (what it does), and dispersion, which conservationists might refer to as "attributes" (where and when it happens). These qualities, or affordances, adapt to existing human edges in a variety of ways and to varying degrees. In this way, they jointly produce a range of cycles, limits, and impacts. For instance, the Asian elephant manages the cost of human oppression and order through its size and power, knowledge, and social behavior. This extended to and created the persona of "divine ruler," a class of God-lords with the power to command (address) a creature that rural people feared and thought to be wild. The orangutan's humanoid appearance and transformative proximity to humans combine with traits associated with empathy, community, and shared freedoms to the point where the species starts to be regarded as a relative among particular publics. Important migratory species like cranes, storks, cuckoos, and swallows appear and depart, intensifying patterns associated with spring and

reestablishment to the point where they serve as harbingers. In order to expect a social profile and commonality, we set that species with material ascribes that immediately "span" with, or broaden and intensify, social edges. They develop into comparisons that strengthen the association and legitimacy of social edges.

More often than not, people project their current selves onto other beings with the intention of fortifying or possibly uniting them and imparting certain traits. From a human perspective, a male lion's balance, structure, and hunting behavior are quickly understood to represent the brave, valiant, and powerful traits of a victorious champion. Such traits have long been regarded as important in the creation of national and governmental records, such as the "English lion," where the species expects significant traits. Our argument is that certain species become vitalized in stories as accounts, similes, or images based on human (mental) rehearsals. Animal images are ubiquitous in culture and serve as 1) the symbol of a cause (the whale inside the overall environmentalism outline, for example), 2) the seal of a group (the Wallabies inside the overall rugby/sport outline), and 3) the symbol of a family. Undoubtedly, some creatures have the ability to serve as symbols because "they are great to think with," as Levi-Strauss notes. Such animal representations are potent because they influence how important and character-defining types of content are presented within organisations.

## **5. Flagship Species In Action**

*1) The tiger's situation serves as an example of how a species can develop into and maintain its status as a flagship. Our goal in this section is to promote a better understanding of how flagship species behave through an examination of four flagship species, specifically the monster panda, orangutan, whale shark, and Eurasian bittern. These are cases that stand out to us, but along with the tiger, we accept that they deal with a logically delegated set of animal flagships. They deal with the organised and contemporary, local and global, competent and unremarkable. Additionally, the activation of these flagships captures the basic categories of conservation management techniques.*

*2) For 50 years, the giant panda has served as a compelling symbol for environmental protection. Up until 1920, it was largely unknown to western audiences, but its exceptional and profoundly distinctive combination and behaviour, along with its relationship with China, allowed it to work with a variety of social edges at a lower cost than would have been the case with a simple combination alone. For instance, the panda's appearance in a few western zoos brought attention to the elite practise of building "interest cabinets" of common wonders and public zoos, as well as the feelings of adoration and care that the panda's "cuddly" group managed. The main zoo pandas caused a stir in the public, creating strong casing spanning relationships between the creature and human edges connecting with inquiry, interest, the Orient, and youth teddy. A "outline bundle" of drawn-out and revived moral-stylish framings of conservation and the paternalistic belief that the fate of other living things was in human hands emerged along with the species' obvious "dis-adaption" Peter Scott, a naturalist and artist, captured the powerful significance of the giant panda in his renowned logo that accompanied the founding of the World Wildlife Fund in 1961. With the help of mid-20th*

*century print and correspondence advances, the species' highly contrasted colouring controlled the cost of modest logo generation, resulting in the Panda logo becoming one of the most recognisable brands on the planet.*

## 6. Conservation of Flagship Species

Regarding natural occurrences like the emergence of new species and the eradication of extinct ones, the world is incredibly unique. According to estimates, the vast majority of all species have already gone extinct. All animals and plants contribute significantly to the earth's ecosystem, and some of them actually have a noticeable impact on it.

There are many reasons why species disappear, but the most important ones are climate change, environmental degradation, the extinction of necessary species that upset the natural order of things, and so on. The extinction of a species results in the loss of not only significant life, but also of one of the most important resources or guiding principles for maintaining the environment.

Flagship species are those that are on the verge of extinction. The best defence against their eradication is to increase public support for them. Help can come in the form of money or unselfish awareness. They can benefit from the financial support in several ways, including by raising the critically endangered species in captivity and using the money for planned trials that will increase their biodiversity.

Acceptable public Being mindful can help people build strong defenses against the poaching of endangered species. If enough people support it, it may also help increase the pressure on natural divisions and related organisations involved in preserving the species. Some of the most well-known endangered species include the African elephant, Asian elephant, Bengal tiger, and giant panda.

## 7. Mutual effort for better biodiversity conservation

Trusts that a single species is unquestionably protecting pointer species, umbrella species, and flagship species raise concerns about enormous security costs and an unfavourable overall impact on biodiversity conservation. But he ignores the benefits of choosing flagship species based on a variety of models, some of which relate to the conventional organic and environmental approaches to focusing on species and others to the roles of species in economic frameworks and societies. The consideration of social and social models adds respect in terms of fundraising efforts and securing strategy change, but more importantly, it is an acknowledgment of the conservation activities that networks have previously practised. Combining this internal support for conservation with external staff, financial, and material support may result in better conservation outcomes. We believe that the global acceptance of our proposal to harmonise natural and environmental standards with sociologically selected components can potentially

achieve significant advancements in biodiversity conservation, remembering for more logical conservation frameworks.

The world has once again bombed to achieve its conservation goals, according to the United Nations' 2020 Global Biodiversity Outlook report. Chinese scientists should participate in discussions to ensure that their knowledge and skills fully advance the case for effective management of biodiversity around the world. We suggest that the accompanying activities be widely adopted in a planned manner, with each involving various types of partners:

1. Choose flagship species to use in various topographical settings, keeping in mind that some flagship species should be used for particular countries, districts, biodiversity hotspots, and important protected areas.
2. Create a website that will allow information about the flagship species to be shared with everyone, and that will also allow you to see examples of how their designation as flagships has worked out practically.
3. Launch state-funded training initiatives using flagship species to increase public awareness of the effects of biodiversity loss and to provide information for fundraising campaigns.
4. Start neighborhood local area improvement projects that combine improvements in local financial improvement and improved organic variety conservation. The objective is to connect local interests' advancement with feelings of increased collective responsibility for observing uncharted areas and wild life.

## **8. Methods**

### **8.1. Selection of logo species by conservation organizations**

Our initial two research questions were addressed subjectively, and as a result, we were able to make contact with representatives of conservation organisations that are actively operating in Switzerland. Given the small number of dynamic organisations, this approach is workable and furthers understanding while avoiding the risk of presenting unimportant developments.

We selected 14 organisations that were active in Switzerland and successfully advancing global (n = 4), public (n = 4) and territorial (n = 6) levels of nature conservation. Although some animal protection organisations were also remembered for the example if they engaged in ecological assurance as part of their activities, we primarily chose natural security organisations. Organizations with at least one creature species in their logos were chosen because the focus of this study is on the use of agent species. The organisations selected the meeting participants themselves, which included members of the board panel, association presidents, and media contacts.

The procedures for identifying their agent species were broken down, and one representative from each of the 16 international, regional, and local conservation organisations was consulted. The recognisable proof of the subject under investigation, such as a text, passage, or watchword,

is necessary for content analysis (Holsti 1968). In this instance, developments, which are communicated as characteristics of suitable flagship species, serve as the fundamental unit of analysis and provide the "content unit" (Holsti 1968). We concentrated on developments that were common to all organisations as well as developments that were relevant to particular hierarchical settings, such as whether the association operates on a local or global scale.

## 9. Results

### 9.1. How do conservation organizations select flagship species?

Interviews revealed the characteristics and criteria used to select the species that conservation organisations have designated as flagship species (Table 2). A list of up-and-comers was not typically used to produce the selection of a delegate species. The delegate species was the focus of a conservation or security effort in four cases (two global, one public, and one provincial) at the time the association was formed. The task of selecting a representative species was given to a professional visual planner in three instances, and each logo combined elements of birds, fish, and vertebrates.

Every organisation stipulated that their logo must capture the essence of the organisation in order to inspire the creation of an interior relationship with the organisation. In all of the organisations we spoke with, capturing the quintessence was associated with species identification, which was given more importance than the graphical plan. Three international, two public, and three territorial organisations all used the species profile as a starting point. To evaluate the brand strength of their logo and the profile of their delegate species, two international and one public association had adopted promotional studies.

The imagery associated with various species was also thought to be a significant determinant. Three of the five species addressing international organisations are defenseless and thus require security. One public organisation used the species that served as the focus of their conservation efforts, and success was remembered for the imagery that appeared after the mission's conclusion. Five of the six local organisations chose species that are thought to be representative of the district, with all local organisations requiring that the species' range remember the region for which the association works.

**Table: 2.** Features of the species selected by Swiss conservation organisations as their "flagships," including their selection criteria.

Organization	Logo Species	Selection Criteria
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<b>International 1</b>	Large herbivorous mammal Endangered Large eyes Soft toy suitable	Selected by board member Essence of organization (protect the vulnerable) Threatened species Perceived as non threatening to public Presence in public consciousness
<b>International 2</b>	Medium Fish eating Bird Common Migratory	Selected by board Essence of organization (global reaching) Essence of organization (specializes in birds) Perceived as non threatening
<b>National 1</b>	Large herbivorous mammal Re-introduced Large eyes	Selected by board Existing campaign issue (at time of selection) Essence of organization (protect the vulnerable)
<b>National 2</b>	Large bird of prey Common Large eyes (2) Fish	Selected by graphic artist Essence of organization (variety of areas of interest) Perceived as non threatening to public Presence in public consciousness
<b>Regional 1</b>	Large bird of prey Common	Selected by board Essence of organization (indicator species) Perceived as non threatening to public Presence in public consciousness

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<b>Regional 2</b>	Medium water bird Worms/mollusks Common	Selected in public competition Existing campaign issue (at time of selection) Essence of organization (specializes in birds) Perceived as compatible with public
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## 10. Conclusion

Flagship species can be used as an important tool for biodiversity conservation in working normal frameworks and in the preservation of a significant number of different species across a wide range of scientific categories. For biodiversity conservation, a strategy for enlisting public support for flagship species is absolutely essential.

Flagship species have been put on display to perhaps improve recognition of territory protection. According to the models identified in the quantitative portion of this review, the extraordinary spotted woodpecker would be a plausible candidate to serve as a flagship for projects in Switzerland. The eclipsing of the woodpecker by the weevil in Lugano demonstrated that information about a species' magnetism in the local environment is essential before it is determined that it will serve as a flagship for neighbourhood level application. A species without an express association with a population may be used on a general level.

Less magnetic species may be able to take on the role of a flagship species, the review suggests. Although the clover stem weevil lacks the characteristics that are considered reasonable for a flagship species in writing or meetings, it would be a sensible choice in Lugano if no other more magnetic species was available. When information indicating that a non-magnetic species is also a marker species is provided, the conclusion that the species can potentially serve as a flagship species suggests that the ideal flagship species will be both attractive and a pointer species. Applications that produce the best results begin with a variety of concepts. Even though the relationship between the likelihood of the presence of an obviously non-magnetic species and growths in utility evaluations suggests that public data can increase the impact of moxy, further investigation is anticipated to look at the impacts of a blend of presence and data about a connection with biological quality, as well as the impacts of the basic likelihood of presence.

Conservation organisations may use these findings to help identify flagship species, especially for those that are anticipated to have a specific conservation role. To achieve biological goals, the species chosen as an inspiration should be specifically chosen for the goal and with consideration for the surrounding environment.

## 11. References

1. Adams, W.M., R. Aveling, D. Brockington, B. Dickson, J. Elliott, J. Hutton, D. Roe, et al. 2014. *Biodiversity conservation and the eradication of poverty*. *Science* 306: 1146-1149.
2. Allen, D.E. 2014. *The Naturalist in Britain: a social history*. Princeton, NJ: Princeton University Press.
3. Andelman, S.J. & Fagan, W.F. (2012) *Umbrellas and flagships: efficient conservation surrogates or expensive mistakes?* *Proceedings of the National Academy of Sciences* 97: 5954–5959.
4. Andelman, S.J. and W.F. Fagan. 2013. *Umbrellas and flagships: efficient conservation surrogates or expensive mistakes?* *Proceedings of the National Academy of Sciences of the United States of America* 97: 5954-5959.
5. Audi, R. *The Cambridge dictionary of philosophy* (ed.). Cambridge: Cambridge University Press.
6. Axell, H. 2012. *Of Birds and Men*. Sussex: The Book Guild.
7. Barua, M. and P. Jepson. 2011. *The bull of the bog: bittern conservation practice in a western bio-cultural setting*. In: *Ethno-ornithology* (eds. Tideman, S. and A. Gosler). Pp. 301-312. London: Earthscan.
8. Barua, M., D.J. Gurdak, R.A. Ahmed, and J. Tamuly. 2012. *Selecting flagships for invertebrate conservation*. *Biodiversity and Conservation* 21: 1457-1476
9. Barua, M., J. Tamuly and R.A. Ahmed. 2010. *Mutiny or clear sailing? Examining the role of the Asian elephant as a flagship species*. *Human Dimensions of Wildlife* 15(2): 145-160.
10. Barua, M., M. Root-Bernstein, R.J. Lalde and P. Jepson. 2013. *Defining flagship uses is critical for flagship selection: a critique of the IUCN climate change flagship fleet*. *AMBIO: A Journal of the Human Environment* 40(4): 431-435.
11. Berger, J. *Population constraints associated with the use of black rhinos as an umbrella species for desert herbivores*. *Conservation Biology* 11: 69–78.
12. Bonn, A, Rodrigues, A.S. & Gaston, K.J. (2012) *Threatened and endemic species: are they good indicators of patterns of biodiversity on a national scale?* *Ecology Letters* 5: 307–314.
13. Brechbuhl, U. & Rey, L. " *Natur als Kulturelle Leistung: Zur Entstehung des Modernen Umweltdiskurses in der Mehrsprachigen Schweiz*
14. Hegde, K., Sarkar, P.K., Hareesh, T.S., Maheswarappa, V., Ahir, K.C., and Hegde, R. [2012]. *Distribution and population structure of Dipterocarpus indicus and Calophyllum apetalum in Western Ghats of Karnataka: An important flagship species*. Abstract In: *National seminar of Second Indian Biodiversity Congress (IBC 2012)* (Eds.) M. P. Nayer, G. G. Gangadharan, T. V. Ramachandra, C. Sureshkumar, Priyadarshan Dharmarajan and Bhaskar Acharya. Indian Institute of Science, Bangalore, p. 31.
15. M. Barua *Mobilizing metaphors: the popular use of keystone, flagship and umbrella species concepts* *Biodivers. Conserv.*, 20 (2011), pp. 1427-1440
16. Maldonado, A. [2015]. *The role of woolly monkeys as a flagship species for conservation in the Columbian Amazon*. Oxford Brookes University, UK and The Woolly Monkey Project, Columbia, pp. 1-5.

17. NEASPEC. *Saving the flagship species of north-east Asia: Nature conservation strategy of NEASPEC. ESCAP, United Nations, 70 p.*
18. Sarkar, P.K., Ahir, K.C., Hegde, R. and Poonacha, N.M. [2011]. *Assessment of density, population structure of selected flagship tree species in the Western Ghats of Southern Karnataka. In: National Conference on "Plant Diversity: Prospects and Problems of Conservation (27th – 29th October, 2010)" The Journal of the Swamy Botanical Club (Eds.) D. Sivaramakrishna, Bangalore. The Journal of the Swamy Botanical Club, A Journal of Plant Sciences, 28: 49-58.*
19. Sarkar, P.K., Ahir, K.C., Hegde, R. and Poonacha, N.M. [2012]. *Identification of flagship tree species in the Western Ghats of southern Karnataka. In: Proceedings of the National Seminar on Tropical Ecosystems: Structure, Function and Services – TESFS 2010 (Eds.) B. Nagarajan, C. Kunhikannan, K. R. Sasidharan and N. Krishnakumar. Institute of Forest Genetics and Tree Breeding (ICFRE), Coimbatore, India, pp 170-173.*
20. Seismo Verlag. Caro, T., Engilis, A. & Gardner, T. (2014) *Preliminary assessment of the flagship species concept at a small scale. Animal Conservation 7: 63–70.*

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