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ECOLOGY AND THREATS TO LOVEBIRDS AGAPORNIS PULLARIA

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Abstract

Ecology can be defined as the relationship which lovebirds have with respect to each other in their physical environment. Lovebirds living in captivity or wild are quite beautiful and captivating, their pair bonding on tree branch is always the first mental picture that comes to the mind of the populace once lovebird is mention. They can be spotted from woodlands of island of Madagascar to the coastal plains of southwest Africa, north to the highlands of Ethiopia, in each unique geographical location nine species of lovebirds are living there with migratory and residence birds and their presence are usually observed during planting and harvesting season of crops such as maize, groundnuts and guinea corn and the birds are randomly shared out in accessible habitat. In little assemblage lovebirds exist and the forage on fruits, grasses, seeds and vegetables, figs and insects. The threats to wild population of lovebirds are: trade in live lovebird, habitat destruction, habitat loss, habitat degradation, and habitat fragmentation. following measures should be adopted; avoid felling of trees used for nesting by lovebirds, planting of new trees to restore already degraded and fragmented areas and continuous enforcement of laws prohibiting trade in live birds and enacting of new laws.

Keywords: Lovebirds; Agapornis pullaria; Ecology; threats; habitat loss; trade

INTRODUCTION

Ecology can be defined as the relationship which lovebirds have with respect to each other in their physical environment. Lovebirds living in captivity or wild are quite beautiful and captivating, their pair bonding on tree branch is always the first mental picture that comes to the mind of the populace once lovebird is mention. During pair bonding the exhibit jointly predisposition preening one another when sited resulting to the genus name *Agapornis*, emanating from the Greek word agape (love) and *ornis* (birds). They are further described by the French les inseparables, or in other words inseparables, which is supplementary evidence with respect to their loving character. This nomenclature arises from parrots' well-built lifestyle of having a mate per moment and extended time mutual birds utilized sitting collectively.

Distribution of Lovebirds

Lovebirds can be spotted from woodlands of island of Madagascar to the coastal plains of southwest Africa, north to the highlands of Ethiopia, in each unique geographical location nine species of lovebirds are living there. Identification and Classification, Lovebirds are known as parrots, if you are interested in buying one to be used as pet at home, the hooked beak and zygodactyl feet are basic features of the order: psittaciformes, family: psittacidae and tribe: psittaculini of lovebirds. Just like alike parrots, mimicking human is a basic characteristic of lovebirds but not as excellent as the following birds; budgerigars, Africa grey parrots and the Amazon parrots. Nine species of lovebirds which differs in terms of genetic composition and geographical area are found, and in further grouping seven of these species could be shaped into the two groups namely; eve-ring species and sexually dimorphic species. Masked, Fischer's, Nyasa, and blackcheeked lovebird are typical examples of the eye-ring species, while Abyssinian,

Madagascar and red-faced lovebird are typical examples of the sexually dimorphic species. However, Peach-faced lovebird and the Swindern's lovebird are categorized into their unique groups.

Foraging behaviour of Lovebird

Lovebirds' forages in assemblage with both migratory and residence birds and their presence are usually observed during planting and harvesting season of crops such as maize, groundnuts and guinea corn and the birds are randomly shared out in accessible habitat.

Feed Consumed by Lovebirds

In little assemblage lovebirds exist and the forage on fruits, grasses, seeds and vegetables, figs and insects.

Nesting

Nesting resources are conveyed by the female in different manner based on the species for instance nesting resources are usually fixed in the feather, and mating follows once nest building commences. Continuous mating characterized this period, followed by careful putting down of eggs within three to five days. Breeding Period Before careful putting down of eggs, mother hen usually consumes additional cuttlefish bones, which increase the faeces. There is always a variation in the clutch size of the eggs produced right from one egg to the eight eggs on each day. Roughly twenty-three days' incubation period is applicable to different lovebird species, however variation may set in depending, but this may vary to some extend the time incubation really started intensely. Large population of mother hen starts sitting on the eggs once two or three eggs are laid to guarantee uniformity in age of the chicks hatched to promote optimal chances of survival.

Aggression with other Birds and Animal Species

Friendliness connecting well-matched mutual lovebird are quite a thing of joy to stare at and they are territorial in nature, ready to safeguard spaces used for foraging and making nest in opposition to new birds that may approach their territory. Supervision of lovebirds' socializations is very important with respect to other animal species such as dog, cat, little mammal and other avian. Therefore, considerate study of the lifestyle of the said species will assist pet keepers and prospective pet breeders to establish a peaceful habitat for happy birds.

Threats to wild Populations of Lovebirds

The threats to wild population of lovebirds are: trade in live lovebird, habitat destruction, habitat loss, habitat degradation, and habitat fragmentation.

Trade in Live Bird

Right from 1400s close to 44 Parrots species were documented as highly transported species. In terms of their pest status, not less than seventy percent were considered to be agricultural pest during introduction trials in comparison to just fifteen percent of the entire parrot group. In USA not less than seventy-four foreign pstitacines were introduced into the wild based on report and pstitacines usually have the ability to set up population of species that are not indigenous once they are brought into new surroundings, resulting to a decline in native species. This decline may be stimulated through show of aggression from exotic species and it is a severe environmental problem and a key global ecological threat. As number of international trade increases, the quantity of birds conveyed also increases therefore once introduction is edged, avian trade perhaps will be controlled because trade in live bird is a function of introduction. In 1990 approximately 150,000 parrots were taken into captivity and transported live to a new locality and lovebirds could be inclusive because they all dwelled in the wild. Law restricting capturing of endangered bird species has been enacted resulting to decrease in imports and exports of parrots, creating a new room to breed birds in captivity, although this has increased greatly in recent time and there is a likelihood of prospective undomesticated populations may start off from little numbers of birds breed in captivity instead of great numbers captured from wild. Anyway, this could take a very slow process which required more than a few decades and the probability of establishing a new population of parrots could be reasonably little.

Habitat Destruction

In recent time, habitat destruction is one of the impacts of human activities on bird species that is considered as nonstop threat which is the function of the degree of destruction. The blueprint and basis of habitat destruction differ in developing and developed homelands; in developing homelands, the blueprint and basis of habitat destruction is associated with the community's poor financial status and absence of land whereas in developed homeland it could be linked to technological advancement. In developing homelands, clean clearing of tropical forest basically for farming to sustain the farmer and his family has been put into practiced for centuries by local populace and how it can be sustained depends on the number of community members that relies on these systems and the degree of land clearing because as population increases, disappearance of forest increases and the level of soil fertility decline quickly as well.

Habitat Loss

The key threat to lovebirds living in the wild recently is habitat loss and every avian species are at susceptible to this threat. Human population is growing at a very fast rate globally, making conservation difficult to achieve in most cases areas where habitat loss is highly pronounced, for instance in Africa where unique forest habitat is gradually disappearing due to habitat fragmentation because the most major undesirable impact of fragmentation is merely the disappearance of original habitat. This may stimulate displacement of species and establishment of a demoralize population forever. Apart from that, the remaining bird species will be distributed within the left-over forest patches which may increase competition for scarce resources within the available space, over-crowding may set in as well, resulting to stress and prospective outbreak of diseases.

Habitat Degradation

Habitat degradation envelops habitat disappearance and breaking of forest habitat into pocket of fragmented patches but little attention is given to habitat degradation whereas habitat loss and habitat fragmentation are major subject of discuss in the public domain. Habitat degradation covers selected occurrence for example, bring exotics species into a new locality, disappearance of big old trees from the forest and woodlands, modified species composition in savannah as a result over grazing from ruminant animals and modification of forest fire regimes because birds are quite susceptible to environmental degradation, although this association observation is not sufficient, more data should be collected to substantiate the relationship because habitat degradation stands for collective risk to mutual breeders. **Habitat Fragmentation**

Habitat fragmentation can be defined as the splitting of a forestland into a pocket of patches called fragment as a result of anthropogenic activities such as farming, logging, monocropping, road construction, and urbanization. These anthropogenic activities in most cases are capable of splitting the forest in unequal patches of which some may be smaller whereas others are larger in size resulting to loss of habitat for lovebirds. The distribution and abundance of birds can be influenced by habitat fragmentation and habitat loss such as wildfires, changes in vegetation communities which may involves conversion of forestland to grassland.

Conclusion and Recommendations

Trade in live birds, habitat loss, habitat destruction, habitat degradation and habitat fragmentation pose serious threats to lovebirds. In order to reduce this impact, the following measures should be adopted; avoid felling of trees used for nesting by lovebirds, planting of new trees to restore already degraded and fragmented areas and continuous enforcement of laws prohibiting trade in live birds and enacting of new laws.

BIBLIOGRAPHY

- Alderton, D. (2003). *The Ultimate Encyclopedia of Caged and Aviary Birds*. London, England Hermes House pp.216-219.ISBN 1-84309-164-X.
- Andrew, S.P (2004) *Conservation Biology* Cambridge University Press. pp. 66-196
- Appleyard, V. (2001). *Lovebird Hand Book* Baron's Educational Series, New York. http://www.Barronseduc.com. pp. 1-20.
- Didhama, R. K., J. M. Tylianakis, M. A. Hutchison, R. M. Ewersc, and N.J. Gemmell. (2005), Are invasive species the drivers of ecological change? Trends in *Ecology and Evolution* 20: pp. 470-474.
- Douglas.E.R. and William. . C. (2007). Population Ecology and potential impact of Emerging populations of Exotic parrots' wildlife research center Hilo Hawaii, USA pp. 300 -330.
- Egwumah, P.O. (1998). Avian Community Organization and Habitat Structure in Ikwe Wildlife Park, Benue State Nigeria. Ph.D Thesis University of Ibadan pp. 214-221.
- Knick, S. T. and Rotenberry, J. T. (2002). Effects of Habitat Fragmentation on Passerine Birds Breeding in Intermountain Shrubsteppe. Studies in Avian Biology No. 25: pp. 130 – 140.
- Lenore, F. (2003). Effects of Habitat Fragmentation on Biodiversity. Annual Review of *Ecology, Evolution and Systematics* vol.34: pp. 487-515.
- Mclachlan, G.R; Liversidge, R. (1978)''330 Rosy-faced lovebird'' Roberts Bird of South Africa Illustrated by Lighton, N.C.K: Newman, K; Adam J; Gronvold,H. (4th ed) The Trustees of the John Voelcker Bird Book fund. pp. 236.
- Millsap, B. A. & Allen, G. T. (2006). Effects of Falconry Harvest on Wild Raptor Populations in the United State: Theoretical Considerations and Management Recommendations *Wildlife Society Bulletin* 34 (5). pp. 1392- 1400.
- Noon, B.R. (1981). Techniques for sampling avian habitats. In: D.E. Capen (ed) USA Forestry Service TR. RM-87 pp .42 52.
- Piersma, T., Koolhaas, A. Dekinga, A. Beukema, J.J. Dekker, R. Essink, K. (2001). Long-term effects of

mechanical crockle-dredging on intertidal bivalve stocks in the wadden sea. J.Apple. Ecol. 378: pp. 976 – 990.

- Rabinowitz. D. (1981). Seven forms of Rarity. In The Biological Aspect of Rare Plant Conservation, ed H. Synge. New York: Wiley. Pp. 205-217.
- Ricciardi A., W. W. M. Steiner, R. N. Mack, and D. Simberloff. (2000). Computer in Biology: Towards a Global Information System for Invasive Species *Bioscience* vol.50: pp. 239-244.
- Richard, D.G, David, W.G and Paul, F.D. (2004). Bird census and Survey Techniques Suther- 02 qxd pp. 17-52.
- Serle, W. and Morel, G.T. (1992). Field Guide to Birds of West Africa William Collins and Co. Ltd. London. pp. 97-104.
- United Nations Convention to Combat Desertification (UNCCD) News (2009) A bi-monthly update on the work of the United Nations Convention to Combat Desertification. <u>http://unccd.int</u>.
- United State Department of Agriculture (2010).Conservation Manual, Natural Resource Conservation Service. <u>http://fcegov.usda.gov</u>.
- Wiens. J.A (2009). Habitat Fragmentation: Island vs Landscape Prospective on Bird Conservation *Ibis* 137: pp. s97- s104.
- World Wildlife Fund- United Kingdom (2001). Souvenir alert highlights deadly trade in endangered species. www.wwf.org.uk/news/scotland.
- World Wildlife Fund- United Kingdom. (2007). Parrot trade. Online article. World Wildlife Fund United Kingdom (2001). Souvenir alert highlights deadly www.worldwildlife.org/trade/fa qs_parrot.cfm.



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