

Extreme Birds

Alongside the more conventional record holders are some remarkable characters among birds: This exhibit deals with such birds that live in extreme - the fastest flier, the deepest diver, the most resourceful, the ugliest, the noisiest, even the smelliest. Their lavish exploration of exceptional forms, bizarre habits and fantastic feats, and complex ways in which birds cope with the countless challenges of life are amazing, beautiful, intriguing with their ingenuity or say bizarre.

PURPOSE- It is the purpose of this exhibit to familiarize the viewer with amazing and lesser known facts of feathered bipeds i.e. birds which have always fascinated the mankind with their extreme abilities.

SCOPE- It encompasses many secretive aspects of avian capabilities. It has been endeavored to take you on a journey to explore birds form myriad habitats on land, air and water, even deep freezer of this planet earth. Darwin's Theory of evolution by natural selection, among Finches at Galapagos Island and factors that led to the changes include geographical and ecological isolation, change in the environment and competition for resources. For example, if a slender beak made it easier to eat food in a dry year, then birds with this type of beak would survive and reproduce, giving birth to finches with the same characteristics.

METHODOLOGY- The exhibit focus on the extreme capabilities, nature has gifted a select few from about 9000 species surviving today. Various theories, and the distinctiveness of it as seen on stamps. It also deals with other scientific theories of Neo Darwinism or *Mendelian inheritance*: The mode of inheritance of all diploid species, and therefore of nearly all multi cellular organisms. Inheritance is controlled by genes, which are passed on to the offspring in the same form as they were inherited from the previous generation. At each locus an individual has two genes- one inherited from its father and the other from its mother. The two genes are represented in equal proportions in its gametes.

REASEARCH- This exhibit contributes with new information from original research related to the development into modern theory of study performed independently by Clifford Tobin of Harvard Medical School in Boston and his colleagues shows that *Bmp (Bone morphogenic protein)* determines beak size and shape in the six ground-dwelling Darwin's finch species of the genus *Geospiza*. Illustrations serve an important tool to get a fair idea to understand the exhibit, and could not be avoided.

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40c Exhibition post Card cd double ring, Albatross and a lighthouse, STAMPEX 87, Australia

ADAPTIVE RADIATION OF TALONS

Birds of prey have tough scales on their legs to help protect their legs from snake bites. Secretary birds do not have grasping toes like other birds of prey, instead their toes are thick and blunt with short curved talons on the ends. Both male and female are similar in appearance.



ERROR- Rough Legged Buzzard (*Buteo lagopus*)
Pink omitted in the stamp on right - Issued 18.12.2000

ITEMS MATTED IN RED TEXT BOX ARE SCARCE / EXTREMELY SCARE OR RARE TO FIND