nigripes and the jungle cat F. chaus. The Indian desert cat was chosen both because of its endangered status and its suspected close physiological relationship to the domestic cat. Litter-bearing animals, such as cats, were presented several challenges that CREW researchers did not encounter when working with non-litter bearing animals, such as eels and bongo. For example, litter-bearing animals usually require a larger number of embryos in the uterus to signal and pregnancy. Few scientists suspect this to be the case with cats. Also, the fact that cats are induced ovulators presents problems of timing for egg collection. CREW scientists were able to determine this from their study.

Nash's birth resulted in several other significant findings, one being the confirmation of the close relationship between the Indian desert cat and the domestic cat. It is now known that the domestic cat is a suitable recipient for Indian desert cat embryos. Secondly, it was found that donor semen from Indian desert cats can be held for at least 24 hours, making it possible transport from one zoo to another. Finally, it was found that Indian desert cat embryos can be safely held in culture for four days so that they can be transferred into the uterus rather than the oviducts.

Embryos of transferable species is important to endangered species propagation and the benefits are twofold. Firstly, it sheds new light on the evolutions of cat species. Also, IVF is a promising technique for endangered animals that can artificially bring their genomes together in culture to produce embryos for transfer into domestic relatives acting as common surrogates.

(De Betsy L. Breeder, The Cincinnati Zoo, 5000 Vine Street, Cincinnati, OH 45220)

King Cheetahs are Tabbies

The strikingly blotched and striped coat of the rare king cheetah Acinonyx jubatus rex is now believed to be a mutation of the tabby gene in the cheetah species. Dr Donald Lindburgh, a research scientist at San Diego Wild Animal Park, says that all cat species, domestic and wild, have only about 10 genes whose mutations account for the great variability in coat patterns. A mutation of one known as the "tabby gene" is responsible for the blotching of the striped tabby pattern in domestic cats. The same mutation of the tabby gene is now believed to produce the king cheetah’s coat.

Dr Lindburgh, writing in the March issue of ZOONOOZ, magazine of the Zoological Society of San Diego, says that other kinds of mutant cheetahs have been recorded. They include a white cheetah with blue spots and a bluish coat to the white background described by the Meghal Emperor Jehangir in the 17th century (attributed to the deep pigmentless gene), and a cheetah recorded in 1877 as seen in Cape Province of South Africa covered with "dark fulvous blotches" on a "pale isabelline" (brownish yellow) background. This cheetah lacked the characteristic tear line on a cheetah’s face. A shot cheetah photographed at 1921 had very few spots on the neck.

Captive births at the DeWild Cheetah Breeding and Research Centre in South Africa have established unequivocally that the king cheetah is merely a variant form of the common cheetah. Pedigree analysis has shown that the king coat pattern is controlled by a single gene occurring in recessive form.

Dr Lindburgh writes that both parents must have the recessive gene to produce the king pattern in young, which should appear by chance 25% of the time or average. At DeWild all parents of king cheetahs had normal coats. They gave birth to 26 cubs of which nine had the king pattern, which is close enough in a small sample to accord with the rules of inheritance.

The king cheetah was first given specific status as Acinonyx rex by Regional Pocock, Curator of Mammals at the British Museum of Natural History in 1971, but he later withdrew the claim, and accepted it as an unusual variant. All evidence confirms the king cheetah form to adjoining portions of Zimbabwe, eastern Botswana and South Africa.

New Cat Not New?

Professor Dr Paul Leyhausen takes issue with the suggestion that the Tsushima cat reported in CAT NEWS 10 is a new discovery. He says he has seen and photographed six of these cats owned by a private amateur in Tokyo. They were larger than the leopard cat Prionailurus b. bengalensis and "clearly belonged to the subspecies P. b. manchuricus". Measurements of skulls of Korean and Tsushima specimens at the National Science Museum in Tokyo were completely alike.

Dr Leyhausen also comments that the Iriomote cat F. iriomotensis is not conspecific with the leopard cat, as has been suggested. He says that the claws of the Iriomote cat are incompletely sheathed and the toes are partially webbed as in the fishing cat F. viverrina and the flat-headed cat F. planiceps. The claws of this cat and the rusty-spotted cat do not interbreed. The skull of the Iriomote cat shares most characters with that of the leopard cat, but it also possesses some traits linking it to the golden cats F. aurata and F. temmincki and marbled cats F. marmorata respectively.

"This is why I think it is a relatively ancient species among wildcats whose preservation is more important even than that of the tiger," he adds.

New Cat Research Fund

A new cat research fund is being established by the Interna
tional Society for Endangered Cats Inc. of Columbus, Ohio, USA. Dr Gail Foreman, Director of Research, says that, depending on the success of the fund, partial or total funding of field research projects will be available.

The types of research that will be considered fall into three main categories: field-oriented; captive-oriented; and education-oriented.

1. Field-oriented projects include:

1.1. specific field research projects involving status, conserva
tion, ecology, taxonomy and/or behaviour;

1.2. general mammalian surveys in areas where wild cat populations exist or may exist and where no current information is available;

1.3. the establishment and support of field research stations in.