## Fishing cat

#### Prionailurus viverrinus

The fishing cat *Prionailurus viverrinus* is about twice the size of a large domestic cat, but its deep-chested body and comparatively short legs make it look much bigger. The small rounded ears are set well back on its elongated face. The tail is about one-third of the head-and-body length, marked with five to six black rings and a black tip. The short, coarse fur is mouse grey or olive brown and covered with small black spots. On the face, back, and neck, spots merge into short streaks or lines. The belly is white (Fig. 1; Sunguist & Sunguist 2002).

#### Status and distribution

The fishing cat has an apparently broad but discontinuous distribution in Asia (Sunquist & Sunquist 2002, Choudhury 2003). It is classified as an endangered species by the IUCN Red List because of severe population declines reported throughout much of its range over the last decade (IUCN 2010). Furthermore, an appalling lack of reliable evidence for its oc-

currence within the presumed range has become apparent.

The fishing cat is primarily found in the Terai region of the Himalayan foothills in Nepal and northeastern India (Fig. 2; Choudhury 2003, IUCN 2010), but may already be extinct in Pakistan (IUCN 2010). It appears to occur all over Sri Lanka (IUCN 2010), and it is considered widespread and locally common in Bangladesh (Khan 2004). In Myanmar, skins of fishing cats can be found in wildlife markets, and traders state they obtain skins from local hunters (Shepherd & Nijman 2008). Camera trap studies and sign surveys have confirmed the presence of fishing cats in two coastal areas of Thailand: the Thale Noi Non-Hunting Area and the Khao Sam Roi Yot National Park. However, no evidence of the species was found at Klong Saeng and Maenam Pachi Wildlife Sanctuaries (Cutter & Cutter 2009). The presence of fishing cats is not confirmed by hard facts in Laos, although at least one valid direct observation was made in the Nam Theun Extension proposed National Protected Area in 1996 (Duckworth et al. 2010). No sign of the cat was found in Vietnam during a survey conducted by wildlife officers. However, wildlife officers admitted problems with species identification (Johnsingh & Nguyen 1995). According to a personal communication in Duckworth et al. (2005), stuffed fishing cats were found in Vietnamese taxidermists in the late nineties. The presence of fishing cats has been confirmed in northern and southwestern Cambodia (Duckworth et al. 2005, Royan 2009, Rainey & Kong 2010). However, there are no confirmed recent records from peninsular Malaysia (IUCN 2010) apart from a photograph of a fishing cat-like animal obtained in the Taman Negara National Park in 2000 (Kawanishi & Sunguist 2003). On Java, fishing cats were only recorded from coastal wetland habitats in the west of the island, and were considered to be critically endangered by Melisch et al. (1995). There is no information about the present situation of the Javan population and there are no confirmed records, neither historical nor recent, from Sumatra (Duckworth et al. 2009, Sanderson 2009).

The fishing cat is often not recognized as a Chinese species (Smith & Xie 2008). In 1986, it was reported to have probably disappeared from the western border regions of China (Karanth 1986). One record from Taiwan from 1962 (Chen 1969) is now considered to be erroneous, while two other records from Yunnan from 1996 remain unclear (Zhang et al. 1997, IUCN 2010). The existence of a stable population in China is unlikely, but there could well be fishing cats occasionally roaming into Guangxi or Yunnan near the Vietnam border (Nowell & Jackson 1996, L. Feng, pers. comm.).





Fig. 1. Fishing cats stalking prey (top, photo N. Buck; bottom, photo Art Wolfe).

#### **Habitat**

Fishing cats are strongly associated with wetlands. Although they are widely distributed through a variety of habitat types, their occurrence tends to be highly localized (Nowell & Jackson 1996, IUCN 2010). Across their range, fishing cats occur in coastal and inland wetlands, near rivers and streams, in marsh areas, reed beds, tidal creeks and mangrove forests. They are found close to the fringes of dense vegetation, including evergreen and tropical dry forest, scrubs, and tall grass (Nowell & Jackson 1996, IUCN 2010). In Sri Lanka and Thailand, fishing cats can also be found in degraded habitats intensively used by humans (Cutter & Cutter 2009, IUCN 2010). They have been observed at elevations up to 1,525 m in the Indian Himalayas (Nowell & Jackson 1996).

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#### **Ecology and behaviour**

Fishing cats are believed to be solitary and mostly nocturnal, although they have also been observed during the day in Sri Lanka (Nowell & Jackson 1996, Sunguist & Sunguist 2002). They are capable of swimming long distances and have been observed to dive head first into the water after their prey or to scoop out fish with their paws (Sunguist & Sunguist 2002). Two dens have been found in the wild and both consisted of rough nests in dense patches of reeds (Sunguist & Sunguist 2002). During a study in Chitwan National Park, Nepal, the home range of a radio-collared male was measured at 16-22 km<sup>2</sup>. It overlapped the smaller ranges of several females, which used areas of 4-6 km<sup>2</sup> (Sunguist & Sunguist 2002). Mating takes place in January and February. In captivity, litter size is between 1 and 3, sometimes even 4 kittens. The age of independence is 10 months and one female became mature at 15 months. Captive fishing cats have lived up to 12 years (Nowell & Jackson 1996, Sunguist & Sunquist 2002).

### **Prey**

As its name implies, the fishing cat's main prey is fish, even though it also hunts birds, rodents, reptiles, insects, frogs, molluscs and crustaceans (Haque & Vijayan 1993, Sunquist & Sunquist 2002). Chital fawns are mentioned as possible prey (Sunquist & Sunquist 2002). Fishing cats have also been observed scavenging on carcasses and during one study, large amounts of grass were found in their faeces (Haque & Vijayan 1993). Furthermore, the fishing cat is known to prey on poultry (Sunquist & Sunquist 2002, Cutter & Cutter 2009, IUCN 2010). There is no information on its food habits from China.

#### In captivity

Fishing cats are not common in zoos. Most are probably inbred as they originate from the same population in the Rotterdam Zoo. They

Data from Smith and Xie 2008
Data from the Cat Specialist Group

Fig. 2. The distribution of the fishing cat in China.

# Prionailurus viverrinus

Names:

渔猫 [yue mao] fishing cat

Head and body length:

65-86 cm

Tail length:

25-33 cm

Weight: 6-15 kg

Global Population: <10,000 (IUCN 2010)

Chinese Population: unknown

Distribution in China:

unknown

**IUCN Red List:** 

Endangered A2cd+4cd (2010) CITES:

Appendix II

China Red List:

not listed

China Key List:

not listed



hoto A. Sliwa

are reported to tolerate living in groups (Sunquist & Sunquist 2002).

#### **Main threats**

The greatest threat to the fishing cat across its range is destruction of wetlands and mangrove habitats through settlement, conversion to agriculture and aquaculture, excessive hunting, and wood-cutting. The fishing cat may also be threatened by pollution of rivers through agriculture or waste water from fish farms (Cutter & Cutter 2009, IUCN 2010). The depletion of fish stocks from over-fishing is prevalent in many Asian wetland environments and is likely to be a significant threat (IUCN 2010). Fishing cats are shot or poisoned because they raid poultry sheds and are believed to kill young domestic livestock (Melisch et al. 1995, Sunquist & Sunquist 2002, Cutter & Cutter 2009).

Their pelts can still be found on wildlife markets (Shepherd & Nijman 2008). They are also caught in fish traps or in snares set for other species (Kolipaka 2006, Cutter & Cutter 2009). On Java, remaining wild populations were suspected to suffer from genetic decline because of population fragmentation (Melisch et al. 1995).

#### **Current and future protection**

The fishing cat is protected by national legislation over most of its range. Hunting is prohibited in Bangladesh, Cambodia, China, India, Indonesia, Myanmar, Nepal, Pakistan, Sri Lanka and Thailand. There are hunting regulations in Laos. In Bhutan and Vietnam, there is no protection outside protected areas (Melisch et al. 1995, Nowell & Jackson 1996, IUCN 2010). There is an ongoing project in Thailand, which supports basic surveys, ecological research (17 radio-collared cats), and public outreach (Fishing Cat Research and Conservation Project 2009). Local wildlife authorities in Yunnan and Guanxi should be made aware of the possible occurence of the species in their provinces.

- WCS China Program, Chinese Academy of Sciences, 19 Zhongguancun Lu, Beijing, China, 100080; <yxie@wcs.org>
- <sup>2</sup> KORA, Thunstrasse 31, 3074 Muri, Switzerland <eva.jutzeler@emeraldlake.net> <k. vogt@kora.ch>