

## Survival of a Radio-collared Leopard in Kaeng Krachan National Park, Thailand

As part of an ecological study on the species, three adult leopards (*Panthera pardus*) were captured, radio collared and monitored in Kaeng Krachan National Park (KKNP), Thailand from February, 1996, through February, 1997 (GRASSMAN JR., 1999). At the conclusion of this study the cats were not recaptured for removal of radio collars. The current status of these leopards remained unknown until Spring 2002, when a camera trapping survey in KKNP conducted by the Wildlife Conservation Society and the Royal Forest Department (WCS, 2001) produced several photos of a radio-collared black leopard (A. J. Lynam, personal communication). This individual, an old female from GRASSMAN'S (1999) study appeared to be lean with a pale, lusterless coat. As a result of these photos the KKNP Chief requested that we recapture this individual to remove the expired collar.

Between July 16 and July 26, 2001, five box traps were set within this cat's home range. A total of 52 trap-nights resulted in a single capture of an uncollared female leopard. Although the radio-collared black leopard was not captured, she was identified on the park road on June 27, 2001, by a former research assistant (K. Sukgao, personal communication).

When first captured on September 26, 1996 this leopard was aged as a prime adult (4–6 years of age) in good physical condition. She was missing one canine while another was broken in half from some previous trauma (GRASSMAN, 1997). It is widely agreed that the loss of one or more canines in large cats is a potentially life threatening injury compromising their killing ability (LOCKE, 1993; RABINOWITZ, 1986; BAILEY, 1993). Despite this disadvantage, this leopard survived well into her tenth year, while wild leopards rarely attain an age in excess of 10 years (TURNBULL-KEMP, 1967).

It is unknown whether the radio collar was directly responsible for this leopard's poor condition. However, it is clear that this individual was geriatric, likely nearing the end of its natural life. The fact that this cat survived nearly five years with the radio collar intact suggests that the collar may not have reduced its life expectancy (although we do not wish to imply that radio collars should be left on longer than necessary for tracking).

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