

The ferret badger (*Melogale moschata*)

The ferret badger is highly adaptable omnivorous wild-life mustelid, feeding on a variety of prey and food sources, including invertebrates, vertebrates, and fruits... etc. Most important food sources are earthworms and insects (Chuang and Lee 1997). The average body mass for adults is approximately 1 kg. The animal has poor visual perception, small teeth and weak biting force. It is not a strong predator. Ferret badgers seldom dig their dens but make use of the daybeds made by others, comprising dens of wild rats, porcupine dens, underground cavities or fire-wood stacks and rock piles for those living in close proximity to humans (Wang and Fuller, 2003). Ferret badgers are seen throughout southern China, Taiwan, Hainan, the northern portions of Vietnam, Laos, Thailand, and Burma, Bangladesh, and northeastern India (Storz and Wozencraft 1999). Ferret badgers exhibits strong nocturnal activity patterns, mainly populate at high landscape above 500~1000 m of altitude (Chian and Sheng 1976, Chuang and Lee, 1997, Pei 2001, Zhang et al 2010). Pei and Chiang (2004) found that at 22.6 degrees north altitude and 120.6 degrees east longitude of the 100 kilometers circumference area to Taiwan Tawu Nature Reserve and Vicinities, the occurrence index of ferret badgers are not significantly different between 150 meters to 3,000 meters. Kuo (2003) found a number of ferret badgers in an altitude of 100 meters in Taiwan Kenting National Park located at 21.6 degrees north altitude and 120.5 degrees east longitude.

Studies of ethology and habitat of ferret badgers in China and Taiwan indicate that ferret badgers can be seen when the 3 living resources exist: (1) food for ferret badgers, mainly earthworms and invertebrate animals; (2) minimal predators, mainly dogs; (3) enough burrows or setts for ferret badgers to share. Whereas, it is unlikely to see a ferret badger in human urbanized areas, because city parks are small, and leaves are cleaned routinely, therefore the soil is unfavorable for the growth of earthworms and the like. In addition, there are dogs in the city that are territorial and may chase away ferret badgers. Therefore, the urbanization condition in human community is inadequate for ferret badgers' survival. However in the suburban areas or the lowland hillsides where there are forests, secondary forests, or fruit gardens, there will be ferret badgers. This may explain why in an altitude lower than 500 meters with human population seen, less ferret badgers are seen. (Chuang and Lee 1997, Wang and Fuller 2003, Chian and Sheng 1976, Chuang and Lee, 1997, Pei 2001, Zhang et al 2010, Kuo 2003)

Shih et al (2016) indicate that the altitude of the landscape seems to dictate the spatial organization of the population, which explain the intimate linkage to the incidence of ferret badger rabies. This study finds that the incidence of ferret badger rabies prone to happen at townships of higher altitudes. Possible reasons that ferret badgers favor an altitudes of 500 to 2000 meter, or up to 2500 meter, are because they have better access to food, and can share their burrows (setts) with each other, as well as being able to escape from the attacks of stray dogs and humans. Therefore ferret badgers do not thrive in low altitude (Chuang and Lee 1997, Storz JF, Wozencraft WC, Melogale 1999, Zhang et al 2010).