

**REPORT OF NOSHKI AREA WITH  
REFERENCE TO SMALL MAMMALS.**

**(2007)**



*Salpingotus michaelis Balochistan Pygmy Jerboa*

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## **Introduction**

District Noshki is situated about 125 Km from Quetta city; it is located in North West of Pakistan and share boundaries with Afghanistan. The physical features of the district vary and may be distinctly classed under four types habitats, they are: highland, the plains, the wetlands and the deserts. The climate of the district ranges from cool winter to extreme hot in summer. The plant species include: Tamarix salt bush prosopis – Acacia sp. The desert area was observed with well-diversified fauna including reptiles, small mammals and birds.

The area of district Noshki is 5797 Sq. Kms. According to 1998 census report the total population was 98030 souls. District Noshki has only one tehsil, namely Noshki and consist of only one sub-tehsil called Dak.

Zangi Nawar wetland is located with in the district Noshki, is a series of 22 lakes in the middle of sand dunes that store run off water. Water level in some of these lakes has been raised by construction of embankments and is used for irrigation purposes. Zangi Nawar is globally significant wetland, Zangi Nawar wetland lies under the Indus flyway (green root), that is why it is important site for the migratory birds, for their roosting, feeding grounds.

One endemic mammal: Pygmy jerboa (*Salpingotus michaelis*) was found beside the other endemic species. The present report is an outcome of an expedition carried out in Noshki District, Balochistan, Pakistan. The field studies have been carried out in the month of May-June 2007 by a team comprising of Dr. Hafizur Rahman, Ex-Senior Wildlife Preservation Officer with specialization in the field of Herpetology, Mr. Attaullah Pandarani and the following members as our guide and host.

### **Objective:**

The main objective of the study is to collect and review secondary data of small mammals of the selected area of district Noshki.

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## **Methodology for the survey of small and large mammals.**

### **Site Position:**

Present survey was conducted during the months of May and June 2007, and the area surveyed were Okan, N 29, 20, 476 E 65, 47, 026 Kharina/Zanginawar N 29,23, 938 E 65, 43, 825 Khadoki Karr area N 29, 28, 029 E 65, 49, 006 Mahbat N 29, 16, 922 E 65, 26, 604 Kashangi area.

1. One hour plot searching and marking of location by G.P.S.
2. "Spot Lighting Method". This method is used for locating small and large mammals such as hare, porcupine, hedgehog, fox, wild cat, jackal etc. because all these nocturnal animals move for food. In this way the population of different Species at different localities is estimated.
3. By using "Folding Sherman Trap". By this method small mammals are sampled, Oats, peanut butter and honey are mixed well and used for bait (Food) Keeping inside the traps. Traps are set at different locations with rich habitat before it darkness in the evening and are left for the whole night. The locations are visited early in the morning before sunrise and the trapped specimens are Observed and identified in the field. In this way the populations of different Species of small mammals are estimated.
4. Counting of fresh holes and tracks. By this method the population, range and shelter and status of small mammals is determined. Fresh holes and tracks are counted in the study area of one square Km. which helps a lot to estimate the population.

### **Result:**

During the survey 8 species of small mammals recorded from Noshki. Three Toed Jerboa to be the most abundant and most widely distributed in sandy and flat area. While five -toad jerboa is less common in the study area. Pygmy Jerboa is very rare animals endemic to Pakistan and of great physiological interest. It is confined to shifting sand dune desert in the Noshki region of South Western Balochistan. Spine and dropping of Porcupine were noted and no direct sighting was made. Afghan hedgehog is common in the study area. *Paraechinus hypomelas hypomelas*, *Gerbillus naunus* and *Gerbillus cheesmani* are less common in the study area.

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### Threats to Small Mammals:

Fortunately the area is rich with the natural resources, but unfortunate incident and activities, like drought, Afghan war, hunting of animals and pouching of reptiles, rapidly distorted these natural resources. Afghan refugees cleaned the vegetation from the area, locals and strange hunters ruthlessly cleaned the wildlife. The trappers in the form of “Jogi” trap the endemic reptiles, small mammals in large quantities during the summer months and brought to Karachi for illegal export.

Due to removing of vegetation from sand dunes, the area is rapidly going to desertification. Natural habitats of mammals, reptiles, birds are being destroyed and disturbed. Endemic and endangered species are hunted and trapped.

Table-A: List of small mammals species observed in Noshki area.

S.NO	ORDER	FAMILY	SCIENTIFIC NAME	ENGLISH NAME
1	RODENTIA	HYSTRICIDAE	<i>Hystrix indica</i>	Indian crested porcupine
2	RODENTIA	GERBILLINAE	<i>Gerbillus nanus</i>	Balochistan gerbil
3	RODENTIA	GERBILLINAE	<i>Gerbillus cheesmani</i>	Cheesman’s gerbil
4	RODENTIA	DIPODIDAE	<i>Salpingotus michaelis</i>	Balochistan pygmy Jerboa
5	RODENTIA	DIPODIDAE	<i>Allactaga elater</i>	Small five toed Jerboa
6	RODENTIA	DIPODIDAE	<i>Jaculus blanfordi</i>	Three toed Jerboa
7	INSECTIVOR A	ERINACEIDAE	<i>Hemiechinus auritus megalotis</i>	Afghan hedgehog
8	INSECTIVOR A	ERINACEIDAE	<i>Paraechinus hypomelas</i>	Brandt’s hedgehog

Table-B: The species of small mammals recorded from different localities of Nushki.

<u>Area</u>	<u>Location on G.P.S.</u>	<u>Habitat</u>	<u>Name of Species</u>
Okan	N 29, 20, 476 E 65, 47, 026	Sandy area near Tamarix plant	<i>Allactaga elater</i> <i>Gerbillus nanus</i> <i>Sal Pingotus michaellis</i>
Kadukir Karr	N 29, 28, 029 E 65, 49, 006	Sandy area Near Bushes	<i>Allactaga elater</i> <i>Afghan Hedgehog</i> <i>Gerbill cheesmani</i> <i>Jaculus blanfoxdi</i>
Khaisar/Kashangi		Hill area near bushes	<i>Paracehinus h.</i> <i>Hypomelas</i> <i>Hystrix indica</i>
Kharina/Zangi Nawar	N 29,23, 938 E 65, 43, 825	Sandy and wetland	<i>Jaculus blanfordi</i>
Muhbat	N 29, 16, 922 E 65, 26, 604	Sandy area	<i>Paracehinus h.</i> <i>Hypomelas</i> <i>Jaculus blanfordi</i> <i>Salpingotus michaeus</i>

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**RECOMMENDATION:**

1. Every NGO should try for conservation of small mammals.
2. Small mammal survey should be conducted that will help in assessing its status.