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A FIELD GUIDE TO ANIMAL SIGNS

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FOREWORD

The Kerala Forest Research Institute has been conducting research on various aspects of wildlife for the past three decades. One of the crucial problems experienced in wildlife surveys and studies on wild animals is the correct identity of the species in the field. Since most of the wild animals are nocturnal, identifying them based on their indirect evidences is an arduous task.

Researchers, students of wildlife and forest department staff involved with wildlife studies in forests and protected areas quite often depend on the wisdom of tribals, for identifying the wild animals based on the indirect evidences. On the basis of the field experience gained over the years, Dr. E.A. Jayson and Dr. P.S. Easa published a Field Guide, for identifying the animals based on their footprints, pugmarks, faecal matters and calls. The first print of this Field Guide received encouraging response, and the copies of the Field Guide were exhausted within a short period, especially during the years when the Wildlife Census was carried out in the State. This necessitated reprinting of the Field Guide for the benefit of the concerned.

I am sure, as in the past the Field Guide will be of immense help to the wildlife researchers, students, forest department officials, volunteers participating in the wildlife census and to wildlife enthusiasts.

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INTRODUCTION

Most of the mammals are nocturnal and direct sighting of these in forest areas are rare. But, many of these declare their presence by way of indirect evidences or signs left by them. Scientific studies on wild animals often rely on such indirect signs. Many of the census methods are also based on assessing the abundance of indirect evidences. In the prehistoric days, tracks were relied upon for hunting animals and also to escape from them. The best trackers are animals. But they track the trail of other animals not by visual methods but based on scent. Tribals have developed the technique of tracking animals to perfection.

Books on wild animals generally describe the colour and other morphological features for identification (Prater, 1980). But these help in recognizing the diurnal species which could be closely observed for sufficient time. Usually one has to depend on signs left by the animals for recording their presence. Field guides for identifying tracks and signs of the wild animals of the western countries are available (Murie, 1975). However, no such work has been published on animals in India.

This field guide describes twenty seven species of mammals based on their indirect evidences. No attempt has been made to include species other than mammals, mainly due to the difficulty in distinguishing them based on indirect evidences. A key is also provided for identification of species based on indirect signs.

Indirect evidences examined for this work include, tracks, foot prints, droppings, gnawings on the bark of trees, scratches on trees, rubbings and burrows. Evidences of animals are often found near water holes, river banks, lake sides, roads, foot paths and feeding areas such as kills, food trees etc. Locating or finding tracks is always not (Plate 1) easy because we may not often find a perfect track in the field. The same individual leaves varying

impressions on different substratum like mud or sand. Differences might be due to the change in age or sex of the individual also. The size and shape of pellet/scat also vary according to the age and type of food consumed. Rain will wash away the tracks and foot prints in monsoon. Similarly, drying in the open sun will change the colour of scats.

Most of the drawings produced here are made from the photographs taken from the forest or natural habitats. When it was difficult to get conclusive evidence from these signs, the indirect signs were studied in zoo. Plaster casts were prepared in the field whenever a track or foot print was observed.

Tracks were measured in the field and usually casts were made of plaster of paris (Calcium sulphate). Preparing plaster of paris for making casts is simple. This is usually made just before the use. Water is poured into a container with plaster of paris powder and stirred vigorously using a stick. Assess before hand how much of batter will be needed. Very thick plaster paste will set immediately and a thinner mixture will give more time. If the plaster is too thick, it will set while pouring and may not reach all the crevices of the pug mark or track. If this happens the details will not be clear. If it is too dilute, it may run all over the track or foot print and will not set. While mixing, when it loses the watery quality, it is the time to pour the mixture into the track. If diluted after it begins to set, it will never become hard but will give the texture of chalk when dried.

Best way is to place pieces of sticks around the track to prevent the overflow of plaster. When the plaster is hard the cast is taken and washed in running water and cleaned using a brush. If the track is in sand, plaster should be poured very slowly through the side. Wax can also be used for copying tracks. In some cases it will be difficult to obtain tracks from the field. In such instances an impression pad can be prepared on the ground through which animals are likely to pass. Impression pads can be made either with sand or with mud.

Plate 1. A water hole with animal tracks

Identification of animals is usually done based on a combination of indirect evidences. Size of foot prints and knowledge on the habitat of the animals will also help in the processes. This field guide will be helpful to distinguish animals based on indirect evidences along with the distribution and habitat data.