Title: Methods used in estimating wildlife Inventory of indian palm squirrel(Funambulus palmarum)

Dr. Shivali Kharoliwal

Assistant Professor Lzebra College Kota (Rajasthan)

Kharoliwalshivali76@gmail.com

Abstract

Many methods for population estimation have been reported. population censing is a pre-requisite for any wildlife management process.Techniques for estimating wildlife population has received lot of attention in recent years.This lead to the systematic inventory making of the wildlife resources at all levels (from a protected area to national to global level). Along with this, attempts were made to estimate the population of animals at very large scales.Their is need for statistical research on design and analysis of animal population.This paper discusses direct count methods involved in estimating population of squirrel.
keywords: population ,wildlife, animal community

Introduction

The process of estimating the population of a species/animal community is called as census .Census started with simple counting of all individuals of a species in area to more complex methods involving statistical analysis. This necessitates collecting information on all major species so that by appropriate management interventions, they can be perpetuated for posterity. Further, the number of animals occupying a place too varies by season. Hence, census of animals in an area is not conducted as one time affair but done a periodical basis.
Objectives of wildlife population estimation are :- To study the status of wild population (status survey).

Management and monitoring the various changes in squirrel numbers.

METHODOLOGY

In the direct count method the individuals are seen and counted.This method is suitable for larger mammals like Spotted deer,wild dog wild pig etc.It involves counting of every animal available in the habitat counting is done in two successive days for four hours soon after sunrise during which the enumerators should count the animals seen by them. Selection of an estimation method varies with a given situation, Hence before deciding upon a particular method following factors are taken into consideration:nature of the habitat, special attributes of the animal, size of the area, availability of time, money and field personnel.

Result and Discussion

Counting of Indian palm squirrel was done in different seasons in city lawn from year 2019 to 2021 and following results were obtained.

season	2018-2019	2019-2020	2020-2021
summer	30	29	15
winter	47	50	51
rainy	20	22	19
spring	50	54	60

these results show that spring season was most favourable season followed by winter summer and rainy .Statistical test ANOVA was also carried out which suggest that the results were significant at 5% level in terms of season.

Conclusions

This survey is first of its kind in Indian plam squirrel.no till date reports are available regarding indian palm squirrel.The survey must betaken at the time of year when there is availability of water.(Burnham1980,Delury ,1954,Erhardt,1969 kendel1992) This will often be in mid-late May.Simple access to the water points should be opened and a machan/hide be constructed(chapman1948,Hilborn1976,jolly,1963). Data collection should be done in continuation.

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