## UNIVERSITI TEKNOLOGI MARA

# TECHNICAL REPORT

### A STAGE-BASED POPULATION OF WILD TURKEY BASED ON LESLIE MODEL

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#### ABSTRACT

In this study, Leslie Model is well-known and helpful method for population projection based on fecundity rates and age specific survival. The first part of this venture will portray the theorems, properties, application, and improvement of the Leslie Model demonstrate in detail. In the second part, particular Leslie models are used for wild turkeys in Iowa. The Leslié model demonstrate has turned out to be famous due to its simple comprehension by scholars and in light of the fact that numerous theoretical properties can be easily studied using matrix algebra.

In the case for Iowa wild turkey population, a straightforward, linear, deterministic model based on the Leslie model is used. It is easy to understand and analyze since the model is easy. In any case, its simplicity additionally implies that it is a long way from natural reality. There are excessively few parameters to satisfactorily depict the complexity nature of a genuine turkey population. However, it is a decent model on which to construct more complex and realistic models which may permit stochasticity and thickness reliance of survival and fecundity rates.

#### **INTRODUCTION**

#### 1.1 Research Backgroud

Population contain all characters of a given animal categories in an exact locale. According to Pidwirny (2006) said that "population contain hereditary variety inside themselves and between different populations". It is imperative for me to think about population since I have to know how quick the world is developing. Other than that, population likewise can give us the data about the quantity of creatures that still exist or that are wiped out. Right now, the number of inhabitants in creatures are diminishing every now and then and some effectively wiped out. Dark wench. Sumatran rhinoceros, mouse deer, ocean turtle and orang-utan are a portion of the creatures that are under basic threat and are experienced in the likelihood of getting to be terminated. In this research, I will concentrate on the number of inhabitants in wild turkey since it is one of the jeopardized creatures.

The wild turkey is an upland ground bird local to North America and is the heaviest individual from the differing Galliformes. It is an indistinguishable species from the local turkey, which was initially gotten from a southern Mexican subspecies of wild turkey (not the related occllated turkey). Albeit local to North America, the turkey likely got its name from the tamed assortment being transported in to Britain in boats originating from the Levant by means of Spain. The British at the time, along these lines related the wild turkey with the nation Turkey and the name prevails.

According to John Pastor (2008) Leslic matrix or Leslie model were invented by Patrick Leslie. The Leslie matrix is a special case model. Leslie model is one of the most popular model use to explain about population growth that is closed to migration. According to Smith (1994) this model focus to one sex and usually it is female since they produce offspring. According to ?. The Leslie Matrix model is broadly used to extend the current situation with a population into the future, as an approach to assess life history speculations by considering diverse