CHAPTER ONE

ORIGINS

THERE is a label on a cage at a certain zoo that states simply, 'This animal is new to science'. Inside the cage there sits a small squirrel. It has black feet and it comes from Africa. No black-footed squirrel has ever been found in that continent before. Nothing is known about it. It has no name.

For the zoologist it presents an immediate challenge. What is it about its way of life that has made it unique? How does it differ from the three hundred and sixty-six other living species of squirrels already known and described? Somehow, at some point in the evolution of the squirrel family, the ancestors of this animal must have split off from the rest and established themselves as an independent breeding population. What was it in the environment that made possible their isolation as a new form of life? The new trend must have started out in a small way, with a group of squirrels in one area becoming slightly changed and better adapted to the particular conditions there. But at this stage they would still be able to inter-breed with their relatives nearby. The new form would , be at :. slight advantage in its special region, but it would be no more than a race of the basic species and could be sh□amped out, reabsorbed into the mainstream at any point. If, as time passed, the new squirrels became' more and more perfectly tuned-in to their particular environment, the moment would eventually arrive when it would be advantageous for them to become isolated from possible contamination by their neighbours. At this stage their social and sexual behaviour would undergo special modifications, making inter- breeding with other kinds of squirrels unlikely and eventually impossible. At first, their anatomy may have changed and become better at coping with the special food of the district, but later their mating calls and