Line (and Point) Transect Sampling

Line transect sampling is used to estimate the abundance or density of a biological population in a study area.

Line transect sampling establishes one or more lines of travel having known length L in the study area to determine a sample of target objects (e.g., animals).

This method of sampling is characterized by a <u>detectability function</u>, which gives the probability of detection (of an object or animal) at a given distance from the line.

Typically, the probability of detection decreases as the distance from the line increases.

Line Transect Sampling

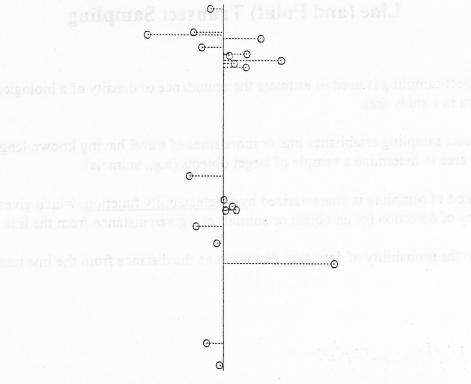


Figure 17.1. Observations of animals or other objects from a transect line.

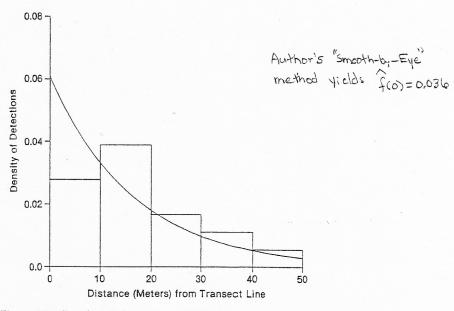


Figure 17.3. Density of detections with fitted exponential curve.