> library(Distance)

> data(ducknest)

> rightunits <- convert\_units("meter", "kilometer", "square kilometer")

> hr <- ds(ducknest, key="hr", convert\_units = rightunits)

> summary(hr)

Summary for distance analysis

Number of detections used in model

Number of observations : 534

Distance range : 0 - 2.4

Left and right truncation values in analysis

Model : Hazard-rate key function

Detection function model fitted

AIC : 929.7934

Detection function parameters

Parameter estimates of key function

Scale coefficient(s):

estimate se

Scale coefficient is σ, printed value is *ln(σ)*

(Intercept) 0.9190194 0.2081124

Shape coefficient is β, printed value is *ln(*β*)*. Only for hazard rate key function; adjustment term coefficient estimates would appear here.

Shape coefficient(s):

estimate se

(Intercept) 0.2899026 0.6393473

Estimate SE CV

Average p 0.8890651 0.04957232 0.05575780

N in covered region 600.6309061 34.59068785 0.05759059

Summary statistics:

Encounter rate:   
detections per unit effort

Region Area CoveredArea Effort n k ER se.ER cv.ER

1 Default 12.36 12.36 2575 534 20 0.2073786 0.007970756 0.03843576

Total line length

# transects

a

Density:

Label Estimate se cv lcl ucl df

1 Total 48.59473 3.290922 0.06772179 42.51734 55.54082 158.1078

if study area size was provided, abundance would also be estimated