

Introduction to Distance Sampling







Line transect estimation using Distance: Ducknests

GETTING STARTED ON THE COMPUTER







SOLUTIONS












- Please have a look at the solutions video, where we work through the exercise step by step.
- When you have the Ducknest project open in Distance and click on the Data tab, your screen should look like this:

File View Tools Data Window Help







Project Browser





Data layers



Study area

Region

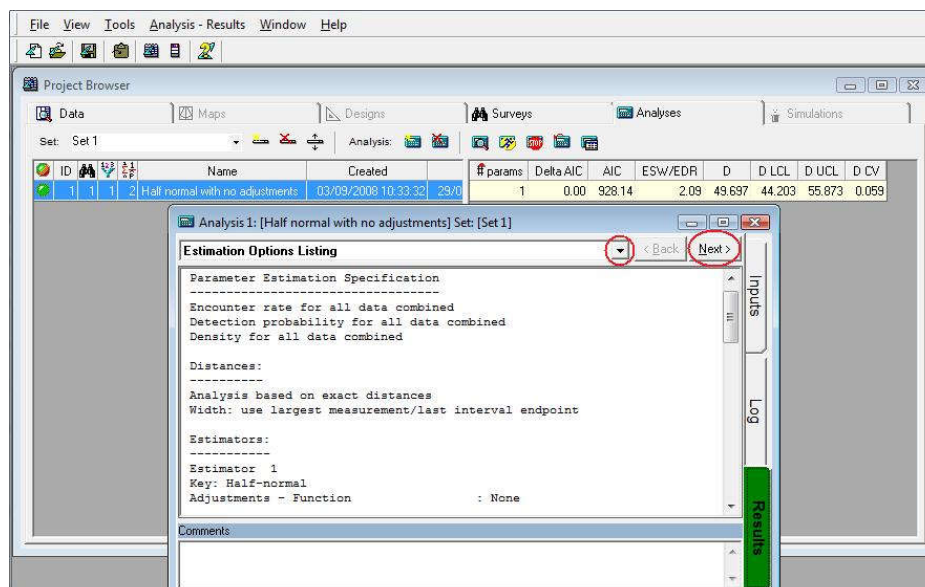
Line transect

Observation

Contents of Observation layer 'Observation' and all fields from higher layers

Study area		Region		Line transect			Observation	
ID	Label	ID	Label	Area	ID	Label	ID	Perp distance
ID	Label	ID	Label	Decimal	ID	Label	Decimal	Decimal
n/a	n/a	n/a	n/a	km2	n/a	n/a	n/a	m
Int	Int	Int	Int	Int	Int	Int	Int	Int
							1	0.06
							2	0.07
							3	0.04
							4	0.01
							5	0.37
							6	0.36
							7	0.51
							8	0.45
							9	0.32
							10	0.61
							11	0.61
							12	0.66
							13	0.69
							14	1.02
							15	1.15
							16	1
1	Monte Vista NWR	1	Default	0	1	1	128.75	

- Once you've run the analysis, and open the Analysis Details window for that analysis, your screen should look something like this (see below). Distance gets a density estimate of 49.697 nests km^{-2} , which is very similar to the value we obtained by hand of 48.9 nests km^{-2} .



ID	Name	Created	# params	Delta AIC	AIC	ESW/EDR	D	D LCL	D UCL	D CV	
1	Half normal with no adjustments	03/09/2008 10:33:32	29/0	1	0.00	928.14	2.09	49.697	44.203	55.873	0.059

Analysis 1: [Half normal with no adjustments] Set: [Set 1]	
Estimation Options Listing	
Parameter Estimation Specification	
Encounter rate for all data combined	
Detection probability for all data combined	
Density for all data combined	
Distances:	
Analysis based on exact distances	
Width: use largest measurement/last interval endpoint	
Estimators:	
Estimator 1	
Key: Half-normal	
Adjustments - Function : None	
Comments	