Areas

A	Size of the study area : pl. m^2, ha , km^2	1 ha = 10 000 m^2 1 km^2 = 100 ha = 1 000 000 m^2
a	Size of one quadrat (pl. m^2, ha, km^2)	
r	**Number of studied quadrats** (pc)	
	Ratio of surveyed area	**r * a / A**
K	Maximum number of quadrats could cover the study area (pc)	**K = A / a**

kvadrats

i	The serial number of the surveyed quadrat	
n_i	**number of individuals in ith quadrat**	
n'	**mean number of individuals in quadrat**	$n' = \sum_{i=1}^{r} n_i \ / r$
$s_{n'}^2$	Variance	$s_{n'}^2 = \sum_{i=1}^{r} (n_i - n')^2 \ /(r-1)$

i	n_i	n_i-n'	$(n_i-n')^2$
1	5	0.5	0.25
2	0	-4.5	20.25
3	3	-1.5	2.25
4	2	-2.5	6.25
5	7	2.5	6.25
6	10	5.5	30.25
∑ =	27		65.5

$n' = \frac{27}{6} = 4.5$

itt: r = 6

$s_{n'}^2 = \frac{65.5}{6-1} = 13.1$

Population size

N'	Estimated population size (individual)	**N' = n' * K**
$S_{N'}^2$	Variance of the population estimate	$S_{N'}^2 = K * (K-r) / r * s_{n'}^2$
$S_{N'}$	Standard deviation of the population estimate	$S_{N'} = \sqrt{S_{N'}^2}$
N'_{min}	**N' 95 %-os confidencia-interval minimum**	**$N'_{min} = N' - 1{,}96 * S_{N'}$**
N'_{max}	**N' 95 %-os confidencia-interval maximum**	**$N'_{max} = N' + 1{,}96 * S_{N'}$**

Distributi

	distribution of individuals	**distribution = $s_{n'}^2$ / n'**