

Population Model - East Loch Ericht Deer Management Group
2016 - 2021 PROJECTED POPULATIONS

	Stags	Hinds	Calves	TOTALS
Opening Population Figures - 2016 pre-calving	1354	2555	944	4853
2016 Population Post Calving	1826	3027	1150	6003
2016/2017 Cull Target	330	475	143	948
2017 Population Post Cull Count	1496	2552	1008	5056
2017 Mortality Post Cull	30	51	60	141
2017 Population Pre Calving	1466	2501	947	4914
2017 Population Post Calving	1940	2975	1130	6045
2017/2018 Cull Target	335	480	144	959
2018 Projected Population Post Cull Count	1605	2495	986	5086
2018 Mortality Post Cull	32	50	59	141
2018 Population Pre Calving	1573	2445	927	4945
2018 Population Post Calving	2036	2908	1105	6050
2018/2019 Cull Target	340	485	146	971
2019 Projected Population Post Cull Count	1696	2423	960	5079
2019 Mortality Post Cull	34	48	19	102
2019 Population Pre Calving	1662	2375	940	4978
2019 Population Post Calving	2133	2845	1081	6059
2019/2020 Cull Target	350	490	147	987
2020 Projected Population Post Cull Count	1783	2355	934	5072
2020 Mortality Post Cull	36	47	56	139
2020 Population Pre Calving	1747	2308	878	4933
2020 Population Post Calving	2186	2747	1044	5977
2020/2021 Cull Target	375	495	149	1019
2021 Projected Population Post Cull Count	1811	2252	895	4958
2021 Mortality Post Cull	36	45	18	99
2021 Population Pre Calving	1775	2207	877	4859
2021 Population Post Calving	2213	2646	1005	5864
2021/2022 Cull Target	375	500	150	1025
2022 Projected Population Post Cull Count	1838	2146	855	4839
2022 Mortality Post Cull	37	43	51	131
2022 Population Pre Calving	1802	2103	804	4708
2022 Population Post Calving	2204	2505	952	5660

Average Target Cull 2016/17-2020/21 350 488 146 984

Assumptions	Stag	Hind	Calv	Total
Net open range area	290	km ²		
Recruitment factor	38%			
Adult mortality factor	2%			
Juvenile mortality factor	6%			
Net recruitment	30%			
Opening population figures are based on the closing figures for previous model				
Cull figures in red are actual achieved culls. Cull figures in green are targets (as agreed annually or by default as laid out in the DMP). Colours in blue are taken from actual count data.				
Average actual cull 2005-2010	388	449	137	974
Average actual cull 2011-2015	349	430	125	904

Target Population Pre Calving (Spring)						Count Population (Spring)					
Year	Stags	Hinds	Calves	Total	km ²	Stags	Hinds	Calves	Total	km ²	+/-
2016	1354	2555	944	4853	17						
2017	1466	2501	947	4914	17						
2018	1573	2445	927	4945	17						
2019	1662	2375	940	4978	17						
2020	1747	2308	878	4933	17						
2021	1775	2207	877	4859	17						
2022	1802	2103	804	4708	16						

Target Population Post Calving (Summer)						Cull as % of population					
Year	Stags	Hinds	Calves	Total	km ²	Sex ratio	Stags Available	stags	hinds	calves	
2016	1826	3027	1150	6003	21	1.66	310	18%	16%	12%	
2017	1940	2975	1130	6045	21	1.53	330	17%	16%	13%	
2018	2036	2908	1105	6050	21	1.43	346	17%	17%	13%	
2019	2133	2845	1081	6059	21	1.33	363	16%	17%	14%	
2020	2186	2747	1044	5977	21	1.26	372	17%	18%	14%	
2021	2213	2646	1005	5864	20	1.20	376	17%	19%	15%	
2022	2204	2505	952	5660	20	1.14	375				

