

1 **High early life mortality in free-ranging dogs is largely influenced by humans**

2

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4

5 **Supplementary Information**

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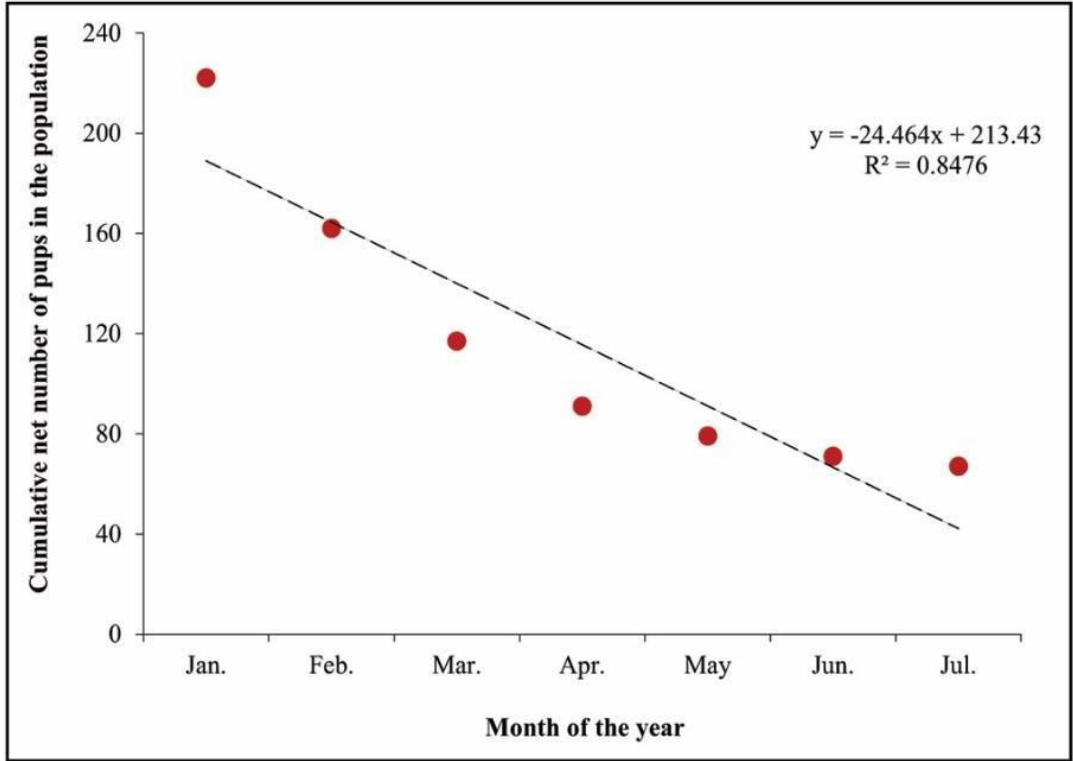
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21

22

23 **Supplementary Information 1**

24



25

26 **Supplementary Figure 1:** Line graph showing the significant decrease in the cumulative net

27 number of pups in the population (Linear regression:  $R^2 = 0.848$ , std.  $\beta = -0.921$ ,  $P = 0.003$ ) from

28 the month of January.

29

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31

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34

35 **Supplementary Information 2**

36

37 **Details of the Cox proportional hazard (PH) model**

38 The used variables are:

39 Litter size- **Ls**

40 Sex of the individual pup- **fsx** (Male- **M**, Female- **F**)

41 Habitat types- **fhb** (Urban- **UR**, Suburban- **SU**)

42 Year of data collection- **fyr**

43 Litter identity- **flt**

44

45 We started with the full model:

46 **Model 1 <- coxme(Surv(Age,Srv)~Ls\*fsx\*fhb+(1|fyr/flt))**

47

48 **Fixed coefficients**

	<b>coef</b>	<b>exp(coef)</b>	<b>se(coef)</b>	<b>z</b>	<b>p</b>
Ls	0.01570455	1.0158285	0.07715722	0.20	0.8400
fsxM	0.84094228	2.3185507	0.48797975	1.72	0.0850
fhbUR	-1.43324636	0.2385333	0.53548240	-2.68	<b>0.0074</b>
Ls:fsxM	-0.09957380	0.9052231	0.09994753	-1.00	0.3200
Ls:fhbUR	0.09531852	1.1000092	0.09495200	1.00	0.3200
fsxM:fhbUR	0.30250525	1.3532448	0.65003978	0.47	0.6400
Ls:fsxM:fhbUR	0.01859136	1.0187653	0.11831918	0.16	0.8800

49

50 **Random effects**

51	<b>Group</b>	<b>Variable</b>	<b>Std Dev</b>	<b>Variance</b>
52				
53	fyr/flt	(Intercept)	0.29959233	0.08975556

54 fyr (Intercept) 0.27205404 0.07401340

55

56 AIC- 2570.593 BIC- 2656.297

57 Since the three-way interaction is not significant, we have dropped the term and run the model  
58 again.

59 -----

60

61 **Model 2: Surv(Age, Srv) ~ Ls \* fsx + Ls \* fhb + fsx \* fhb + (1 | fyr/flt)**

62

63 **Fixed coefficients**

64

	<b>coef</b>	<b>exp(coef)</b>	<b>se(coef)</b>	<b>z</b>	<b>p</b>
Ls	0.008998816	1.0090394	0.06416382	0.14	0.8900
fsxM	0.779890845	2.1812342	0.29713058	2.62	<b>0.0087</b>
fhbUR	-1.483858605	0.2267610	0.42607622	-3.48	<b>0.0005</b>
Ls:fsxM	-0.086267492	0.9173488	0.05319201	-1.62	0.1000
Ls:fhbUR	0.104993312	1.1107032	0.07196555	1.46	0.1400
fsxM:fhbUR	0.394229189	1.4832405	0.28747741	1.37	0.1700

65 **Random effects**

66

67	<b>Group</b>	<b>Variable</b>	<b>Std Dev</b>	<b>Variance</b>
68				
69	fyr/flt	(Intercept)	0.29896284	0.08937878
70	(Intercept)		0.27207534	0.07402499

71

72 We have compared our recent model with the previous one and the result represents no  
73 difference between these two models. Model comparisons justify the dropping of the three-way  
74 term.

75 **anova(Model 1,Model 2)**

76 Analysis of Deviance Table

77

78 **Cox model:** response is Surv(Age, Srv)

79 Model 1: ~Ls \* fsx \* fhb + (1 | fyr/flt)

80 Model 2: ~Ls \* fsx + Ls \* fhb + fsx \* fhb + (1 | fyr/flt)

81

82	<b>loglik</b>	<b>Chisq</b>	<b>Df</b>	<b>P(&gt; Chi)</b>
83				
84	1 -1282.2			
85	2 -1282.2	0.0255	1	<b>0.8731</b>

86

87		<b>AIC</b>	<b>BIC</b>
88			
89	<b>Model 1</b>	2570.593	2656.297
90	<b>Model 2</b>	2568.74	2650.93

91

92 Since the last three two-way interactions (Ls:fsxM, Ls:fhbUR, fsxM:fhbUR) have no significant  
 93 effect on the survival of the pups, we have dropped those terms one by one and run the model  
 94 (please see Model 3 to Model 7) and have compared them with Model 2.

95 -----

96

97 **Model 3: Surv(Age, Srv) ~ Ls \* fsx + fsx \* fhb + (1 | fyr/flt)**

98

99 **Fixed coefficients**

100

	<b>coef</b>	<b>exp(coef)</b>	<b>se(coef)</b>	<b>z</b>	<b>p</b>
Ls	0.07372565	1.0765114	0.04698772	1.57	1.2e-01
fsxM	0.78701974	2.1968395	0.30807567	2.55	<b>1.1e-02</b>
fhbUR	-0.96819539	0.3797678	0.23222708	-4.17	<b>3.1e-05</b>
Ls:fsxM	-0.08268252	0.9206434	0.05453325	-1.52	1.3e-01
fsxM:fhbUR	0.34832693	1.4166953	0.28312017	1.23	2.2e-01

**Random effects**

<b>Group</b>	<b>Variable</b>	<b>Std Dev</b>	<b>Variance</b>
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101 fyr/flt (Intercept) 0.31669814 0.10029771 fyr

102 (Intercept) 0.26152076 0.06839311

103

104 anova (Model 2, **Model 3**)

105 Model 2:  $\sim Ls * fsx + Ls * fhb + fsx * fhb + (1 | fyr/flt)$

106 Model 3:  $\sim Ls * fsx + fsx * fhb + (1 | fyr/flt)$

107

108 **loglik** **Chisq** **Df** **P(>|Chi|)**

109

110 1 -1282.2

111 2 -1283.2 2.0782 1 **0.1494**

112

113 **AIC** **BIC**

114

115 **Model 2** 2568.74 2650.93

116 **Model 3** 2569.095 2653.573

117 -----

118

119 **Model 4: Surv(Age, Srv) ~ Ls \* fhb + fsx \* fhb + (1 | fyr/flt)**

120

121 **Fixed coefficients**

122

	<b>coef</b>	<b>exp(coef)</b>	<b>se(coef)</b>	<b>z</b>	<b>p</b>
Ls	-0.03471206	0.9658835	0.05779131	-0.60	0.55000
fhbUR	-1.37040645	0.2540037	0.40691242	-3.37	<b>0.00076</b>
fsxM	0.38180764	1.4649303	0.16814933	2.27	<b>0.02300</b>
Ls:fhbUR	0.09520048	1.0998793	0.07106405	1.34	0.18000
fhbUR:fsxM	0.29710307	1.3459540	0.27756514	1.07	0.28000

123

124 **Random effects**

125

126 **Group Variable Std Dev Variance**

127

---

128 fyr/flt (Intercept) 0.29156310 0.08500904 fyr (Intercept) 0.26369259  
 129 0.06953378

130

131 anova(Model 2, **Model 4**)

132 Model 2: ~Ls \* fsx + Ls \* fhb + fsx \* fhb + (1 | fyr/flt)

133 Model 4: ~Ls \* fhb + fsx \* fhb + (1 | fyr/flt)

134

135 **loglik Chisq Df P(>|Chi)**

136

137 1 -1282.2

138 2 -1283.5 2.6155 1 **0.1058**

139

140 **AIC BIC**

141

---

142 **Model 2** 2568.74 2650.93

143 **Model 4** 2569.801 2646.503

144 -----

145

146

147 **Model 5: Surv(Age, Srv) ~ Ls \* fsx + Ls \* fhb + (1 | fyr/flt)**

148

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149 **Fixed coefficients**

	<b>coef</b>	<b>exp(coef)</b>	<b>se(coef)</b>	<b>z</b>	<b>p</b>
Ls	0.004841435	1.0048532	0.06526170	0.07	0.9400
fsxM	0.850131724	2.3399551	0.29287713	2.90	<b>0.0037</b>
fhbUR	-1.223097327	0.2943172	0.37821047	-3.23	<b>0.0012</b>
Ls:fsxM	-0.070718539	0.9317241	0.05184056	-1.36	0.1700
Ls:fhbUR	0.095917285	1.1006680	0.07254510	1.32	0.1900

**Random effects**

<b>Group</b>	<b>Variable</b>	<b>Std Dev</b>	<b>Variance</b>
fyr/flt	(Intercept)	0.31310339	0.09803373
	(Intercept)	0.26550228	0.07049146

anova (Model 2, **Model 5**)

Model 2: ~Ls \* fsx + Ls \* fhb + fsx \* fhb + (1 | fyr/flt)

Model 5: ~Ls \* fsx + Ls \* fhb + (1 | fyr/flt)

<b>loglik</b>	<b>Chisq</b>	<b>Df</b>	<b>P(&gt; Chi )</b>
---------------	--------------	-----------	---------------------

1 -1282.2  
 2 -1283.1 1.9027 1 **0.1678**

**AIC BIC**

150 **Model 2** 2568.74 2650.93 **Model 5** 2568.349 2650.918

151 -----

152

153 **Model 6: Surv(Age, Srv) ~ Ls + fhb \* fsx + (1 | fyr/flt)**

154

155 **Fixed coefficients**

	<b>coef</b>	<b>exp(coef)</b>	<b>se(coef)</b>	<b>z</b>	<b>p</b>
Ls	0.02617522	1.0265208	0.03558231	0.74	4.6e-01
fhbUR	-0.91849163	0.3991206	0.22668846	-4.05	<b>5.1e-05</b>
fsxM	0.39377100	1.4825610	0.16821560	2.34	<b>1.9e-02</b>
fhbUR:fsxM	0.28426561	1.3287858	0.27811186	1.02	3.1e-01

**Random effects**

**Group Variable Std Dev Variance**

156 fyr/flt (Intercept) 0.30561067 0.09339788 fyr

157 (Intercept) 0.25462376 0.06483326

158

159 anova (Model 2,**Model 6**)

160 Model 2: ~Ls \* fsx + Ls \* fhb + fsx \* fhb + (1 | fyr/flt)

161 Model 6: ~Ls + fhb \* fsx + (1 | fyr/flt)

162

163 **loglik** **Chisq** **Df** **P(>|Chi|)**

---

164 1 -1282.2

165 2 -1284.4 4.3705 2 **0.1124**

167

168 **AIC** **BIC**

---

169 **Model 2** 2568.74 2650.93

170 **Model 6** 2569.932 2647.916

---

173

174 **Model 7: Surv (Age, Srv) ~ Ls + fhb + fsx + (1 | fyr/flt)**

175

176 **Fixed coefficients**

177

---

178 **coef** **exp(coef)** **se(coef)** **z** **p**

---

181 Ls 0.02612448 1.0264687 0.03600451 0.73 4.7e-01 fhbUR -0.76601451 0.4648621

182 0.16541716 -4.63 **3.6e-06** fsxM 0.50049802 1.6495426 0.13346754 3.75 **1.8e-04**

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184

185 **Random effects**

186

187 **Group Variable Std Dev Variance**

188

---

189 fyr/flt (Intercept) 0.31801808 0.10113550 fyr (Intercept) 0.24977424  
 190 0.06238717

191

192 anova(Model 2, **Model 7**)

193 Model 2: ~Ls \* fsx + Ls \* fhb + fsx \* fhb + (1 | fyr/flt)

194 Model 7: ~Ls + fhb + fsx + (1 | fyr/flt)

195

196 **loglik Chisq Df P(>|Chi)**

197

---

198 1 -1282.2  
 198 2 -1284.9 5.4174 3 **0.1437**

**AIC BIC**

199

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200 **Model 2** 2568.74 2650.93

201 **Model 7** 2568.76 2646.738

202 -----

203

204

205

206 **Supplementary Information 3**

207

208 **Cumulative Incidence Curve for Habitats**

209 Survived- **0**

210 Natural death-**1**

211 Taken by human- **2**

212 Murdered by human- **3**

213 Death in road accident- **4**

214 No information about their death but disappeared from the population- **5**

215

216 **The frequency distribution for the different habitats is as follows:**

217

218 Category            **0**    **1**    **2**    **3**    **4**    **5**

219 -----

220 Suburban (SU)    19    **70**    27    **16**    18    64

221 Urban (UR)        50    24    20    0    13    43

222 \_\_\_\_\_

223 Disappearance due to natural causes and death by human are significantly higher in suburban  
224 population in compare to the urban population.

225

226 **Category**            **stat**                    **p**                    **df**

227 \_\_\_\_\_

228

229	1	11.10519852	<b>0.0008608607</b>	1
230	2	0.01882155	0.8908792995	1
231	3	11.67067374	<b>0.0006349301</b>	1
232	4	0.02139737	0.8837016160	1
233	5	0.18833068	0.6643096252	1

234 

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250 **Supplementary 4**

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252 **Simulation model for mortality in dog populations**

253

254 **Variables used:**

255 Total number of male pups survived- **m**

256 Total number of female pups survived- **f**

257 Number of male pups died per 100 pups- **mdp**

258 Number of female pups died per 100 pups- **fdp**

259

260 **The details of the program** mortality

261 <- function(m,f,mdp,tdp){

262

263 # Total number of male and female at the beginning

264 m\_init <- m f\_init <- f

265

266 # Male death percentage

267 MDP <- mdp/100

268

269 # Total death percentage

270 TDP <- tdp/100

271

```

272 # Number of male alive (after removing dead males)
273 m_dead <- m_init*MDP  m_alive <- m_init -
274 m_dead
275
276 # Total number of male and females alive
277 tot_alive <- m_alive + f_init
278
279 # Total number of individual dies
280 tot_death <- tot_alive*TDP
281
282 # Creating blank lists for putting 1000 iteration values
283 m_res <- numeric(1000)  f_res <- numeric(1000)
284
285 # Iterating mortality in one age class 1000 times
286 for (j in 1:1000){  list <- c("M", "F")  death
287 <- numeric(tot_death)  for (i in 1:tot_death){
288 death[i] <- sample(list, 1)
289   }
290   m_res[j] = m_alive - length(subset(death, death == "M")) # Dead males
291   f_res[j] = f_init - length(subset(death, death == "F")) #Dead females
292 }
293

```



```
294 # Average of 1000 iterations of mortality in one age class
295 m_res_avg <- mean(m_res) # Males f_res_avg <-
296 mean(f_res) # Females
297
298 # Final result result <- c("Males Alive=", m_res_avg, "Females
299 Alive=", f_res_avg) return(result)
300 }
```

## Supplementary 5

Raw data showing details of the 95 litters used for the analysis of pup survival up to 7th month of age.

Year of data collection	Mother's identity	Litter size	Pup's identity	Sex	Age in days	Survived till 7 month of pup age*	Cause of death	Habitat type
2010-2011	M1	7	P1	M	136	1	Being taken by human	Suburban
2010-2011	M1	7	P2	M	136	1	Being taken by human	Suburban
2010-2011	M1	7	P3	F	136	1	Being taken by human	Suburban
2010-2011	M1	7	P4	F	136	1	Being taken by human	Suburban
2010-2011	M1	7	P5	F	136	1	Being taken by human	Suburban
2010-2011	M1	7	P6	F	136	1	Being taken by human	Suburban
2010-2011	M1	7	P7	F	136	1	Being taken by human	Suburban
2010-2011	M2	4	P8	F	211	0		Suburban
2010-2011	M2	4	P9	M	211	0		Suburban
2010-2011	M2	4	P10	F	149	1	Disease	Suburban
2010-2011	M2	4	P11	M	126	1	Inter group fight	Suburban
2010-2011	M3	8	P12	M	128	1	Missing	Suburban
2010-2011	M3	8	P13	M	128	1	Missing	Suburban
2010-2011	M3	8	P14	F	128	1	Missing	Suburban
2010-2011	M3	8	P15	F	128	1	Missing	Suburban
2010-2011	M3	8	P16	F	149	1	Missing	Suburban
2010-2011	M3	8	P17	M	188	1	Missing	Suburban
2010-2011	M3	8	P18	M	182	1	Missing	Suburban

2010-2011	M3	8	P19	F	169	1	Road accident	Suburban
2010-2011	M4	2	P20	M	129	1	Disease	Suburban
2010-2011	M4	2	P21	F	211	0		Suburban
2010-2011	M5	4	P22	M	92	1	Poison	Suburban
2010-2011	M5	4	P23	F	92	1	Poison	Suburban
2010-2011	M5	4	P24	F	92	1	Poison	Suburban
2010-2011	M5	4	P25	F	211	0		Suburban
2010-2011	M6	1	P26	M	121	1	Disease	Suburban
2010-2011	M7	4	P27	U	57	1	Poison	Suburban
2010-2011	M7	4	P28	U	57	1	Poison	Suburban
2010-2011	M7	4	P29	U	57	1	Poison	Suburban
2010-2011	M7	4	P30	U	57	1	Poison	Suburban
2010-2011	M8	3	P31	M	67	1	Disease	Suburban
2010-2011	M8	3	P32	F	67	1	Disease	Suburban
2010-2011	M8	3	P33	F	67	1	Disease	Suburban
2010-2011	M9	4	P34	U	50	1	Poison	Suburban
2010-2011	M9	4	P35	U	50	1	Poison	Suburban
2010-2011	M9	4	P36	U	50	1	Poison	Suburban
2010-2011	M9	4	P37	U	50	1	Poison	Suburban
2010-2011	M10	5	P38	M	79	1	Missing	Suburban
2010-2011	M10	5	P39	F	96	1	Road accident	Suburban
2010-2011	M10	5	P40	F	127	1	Road accident	Suburban
2010-2011	M10	5	P41	F	122	1	Inter group fight	Suburban
2010-2011	M10	5	P42	F	160	1	Missing	Suburban

2010-2011	M11	4	P43	M	92	1	Missing	Suburban
2010-2011	M11	4	P44	M	92	1	Missing	Suburban
2010-2011	M11	4	P45	M	92	1	Missing	Suburban
2010-2011	M11	4	P46	F	92	1	Missing	Suburban
2010-2011	M12	3	P47	M	181	1	Missing	Suburban
2010-2011	M12	3	P48	F	82	1	Missing	Suburban
2010-2011	M12	3	P49	F	82	1	Missing	Suburban

2010-2011	M13	4	P50	F	29	1	Missing	Suburban
2010-2011	M13	4	P51	F	29	1	Missing	Suburban
2010-2011	M13	4	P52	F	29	1	Missing	Suburban
2010-2011	M13	4	P53	M	154	1	Missing	Suburban
2010-2011	M14	5	P54	F	125	1	Malnutrition	Suburban
2010-2011	M14	5	P55	F	145	1	Malnutrition	Suburban
2010-2011	M14	5	P56	F	159	1	Road accident	Suburban
2010-2011	M14	5	P57	F	161	1	Missing	Suburban
2010-2011	M14	5	P58	M	45	1	Being taken by human	Suburban
2010-2011	M15	13	P59	F	95	1	Missing	Urban
2010-2011	M15	13	P60	F	95	1	Missing	Urban
2010-2011	M15	13	P61	F	95	1	Missing	Urban
2010-2011	M15	13	P62	F	95	1	Missing	Urban
2010-2011	M15	13	P63	F	175	1	Missing	Urban
2010-2011	M15	13	P64	F	175	1	Missing	Urban
2010-2011	M15	13	P65	F	175	1	Missing	Urban
2010-2011	M15	13	P66	M	149	1	Disease	Urban

2010-2011	M15	13	P67	M	149	1	Disease	Urban
2010-2011	M15	13	P68	M	149	1	Being taken by human	Urban
2010-2011	M15	13	P69	M	149	1	Being taken by human	Urban
2010-2011	M15	13	P70	M	149	1	Being taken by human	Urban
2010-2011	M15	13	P71	M	149	1	Being taken by human	Urban
2010-2011	M16	3	P72	M	86	1	Being taken by human	Urban
2010-2011	M16	3	P73	M	86	1	Being taken by human	Urban
2010-2011	M16	3	P74	F	141	1	Missing	Urban
2010-2011	M17	4	P75	F	114	1	Disease	Urban
2010-2011	M17	4	P76	F	211	0		Urban
2010-2011	M17	4	P77	F	197	1	Missing	Urban

2010-2011	M17	4	P78	M	211	0		Urban
2010-2011	M18	3	P79	M	54	1	Unknown	Urban
2010-2011	M18	3	P80	F	173	1	Missing	Urban
2010-2011	M18	3	P81	F	211	0		Urban
2010-2011	M19	4	P82	M	65	1	Missing	Urban
2010-2011	M19	4	P83	M	161	1	Missing	Urban
2010-2011	M19	4	P84	F	211	0		Urban
2010-2011	M19	4	P85	F	211	0		Urban
2010-2011	M20	4	P86	M	80	1	Missing	Urban
2010-2011	M20	4	P87	M	127	1	Missing	Urban
2010-2011	M20	4	P88	F	127	1	Unknown	Urban
2010-2011	M20	4	P89	M	127	1	Missing	Urban
2010-2011	M21	5	P90	M	60	1	Unknown	Urban

2010-2011	M21	5	P91	M	211	0		Urban
2010-2011	M21	5	P92	M	109	1	Missing	Urban
2010-2011	M21	5	P93	F	73	1	Missing	Urban
2010-2011	M21	5	P94	F	211	0		Urban
2011-2012	M22	3	P95	M	188	1	Missing	Suburban
2011-2012	M22	3	P96	M	211	0		Suburban
2011-2012	M22	3	P97	F	211	0		Suburban
2011-2012	M23	3	P98	M	65	1	Cold	Suburban
2011-2012	M23	3	P99	F	65	1	Cold	Suburban
2011-2012	M23	3	P100	F	211	0		Suburban
2011-2012	M24	5	P101	U	43	1	Missing	Suburban
2011-2012	M24	5	P102	U	43	1	Missing	Suburban
2011-2012	M24	5	P103	U	43	1	Missing	Suburban
2011-2012	M24	5	P104	U	43	1	Missing	Suburban
2011-2012	M24	5	P105	U	43	1	Missing	Suburban

2011-2012	M25	7	P106	M	82	1	Stomach infection	Suburban
2011-2012	M25	7	P107	F	141	1	Road accident	Suburban
2011-2012	M25	7	P108	F	120	1	Inter group fight	Suburban
2011-2012	M25	7	P109	F	63	1	Cold	Suburban
2011-2012	M25	7	P110	F	66	1	Inter group fight	Suburban
2011-2012	M25	7	P111	F	66	1	Inter group fight	Suburban
2011-2012	M25	7	P112	F	29	1	Disease	Suburban
2011-2012	M26	5	P113	M	85	1	Missing	Suburban
2011-2012	M26	5	P114	F	139	1	Missing	Suburban

2011-2012	M26	5	P115	M	173	1	Missing	Suburban
2011-2012	M26	5	P116	F	119	1	Inter group fight	Suburban
2011-2012	M26	5	P117	F	211	0		Suburban
2011-2012	M27	6	P118	M	211	0		Suburban
2011-2012	M27	6	P119	U	5	1	Suffocation	Suburban
2011-2012	M27	6	P120	U	5	1	Suffocation	Suburban
2011-2012	M27	6	P121	U	8	1	Suffocation	Suburban
2011-2012	M27	6	P122	U	8	1	Suffocation	Suburban
2011-2012	M27	6	P123	U	8	1	Suffocation	Suburban
2011-2012	M28	5	P124	F	99	1	Inter group fight	Suburban
2011-2012	M28	5	P125	M	75	1	Worm infection	Suburban
2011-2012	M28	5	P126	F	96	1	Disease	Suburban
2011-2012	M28	5	P127	F	168	1	Disease	Suburban
2011-2012	M28	5	P128	M	105	1	Beaten up by human	Suburban
2011-2012	M29	3	P129	M	2	1	Suffocation	Suburban
2011-2012	M29	3	P130	M	41	1	Being taken by human	Suburban
2011-2012	M29	3	P131	M	41	1	Being taken by human	Suburban
2011-2012	M30	4	P132	U	19	1	Missing	Suburban
2011-2012	M30	4	P133	U	20	1	Missing	Suburban
2011-2012	M30	4	P134	U	20	1	Missing	Suburban
2011-2012	M30	4	P135	U	20	1	Missing	Suburban
2011-2012	M31	3	P136	U	15	1	Unknown	Suburban
2011-2012	M31	3	P137	F	122	1	Disease	Suburban
2011-2012	M31	3	P138	F	149	1	Road accident	Suburban

2011-2012	M32	5	P139	M	88	1	Disease	Suburban
2011-2012	M32	5	P140	M	38	1	Being taken by human	Suburban
2011-2012	M32	5	P141	F	47	1	Worm infection	Suburban
2011-2012	M32	5	P142	F	40	1	Worm infection	Suburban
2011-2012	M32	5	P143	F	106	1	Road accident	Suburban
2011-2012	M33	2	P144	M	28	1	Being taken by human	Suburban
2011-2012	M33	2	P145	F	211	0		Suburban
2011-2012	M34	4	P146	F	59	1	Disease	Suburban
2011-2012	M34	4	P147	M	59	1	Disease	Suburban
2011-2012	M34	4	P148	F	59	1	Disease	Suburban
2011-2012	M34	4	P149	M	56	1	Road accident	Suburban
2011-2012	M35	1	P150	U	57	1	Missing	Suburban
2011-2012	M36	6	P151	M	56	1	Being taken by human	Suburban
2011-2012	M36	6	P152	M	52	1	Missing	Suburban
2011-2012	M36	6	P153	F	118	1	Missing	Suburban
2011-2012	M36	6	P154	F	84	1	Road accident	Suburban
2011-2012	M36	6	P155	F	211	0		Suburban
2011-2012	M36	6	P156	M	86	1	Poison	Suburban
2011-2012	M37	3	P157	F	57	1	Missing	Suburban
2011-2012	M37	3	P158	F	89	1	Disease	Suburban
2011-2012	M37	3	P159	M	34	1	Missing	Suburban
2011-2012	M38	2	P160	M	86	1	Being taken by human	Suburban
2011-2012	M38	2	P161	M	29	1	Missing	Suburban
2011-2012	M39	4	P162	F	62	1	Inter group fight	Suburban



2011-2012	M39	4	P163	F	82	1	Natural	Suburban
2011-2012	M39	4	P164	M	4	1	Suffocation	Suburban
2011-2012	M39	4	P165	M	3	1	Suffocation	Suburban
2011-2012	M40	4	P166	M	71	1	Missing	Urban
2011-2012	M40	4	P167	M	211	0		Urban
2011-2012	M40	4	P168	F	136	1	Road accident	Urban
2011-2012	M40	4	P169	M	94	1	Being taken by human	Urban
2011-2012	M41	2	P170	M	211	0		Urban
2011-2012	M41	2	P171	M	146	1	Missing	Urban
2011-2012	M42	7	P172	F	172	1	Missing	Urban
2011-2012	M42	7	P173	F	211	0		Urban
2011-2012	M42	7	P174	F	211	0		Urban
2011-2012	M42	7	P175	M	73	1	Road accident	Urban
2011-2012	M42	7	P176	M	68	1	Being taken by human	Urban
2011-2012	M42	7	P177	M	211	0		Urban
2011-2012	M42	7	P178	F	68	1	Road accident	Urban
2011-2012	M43	5	P179	F	211	0		Urban
2011-2012	M43	5	P180	F	64	1	Road accident	Urban
2011-2012	M43	5	P181	M	211	0		Urban
2011-2012	M43	5	P182	F	70	1	Unknown	Urban
2011-2012	M43	5	P183	M	211	0		Urban
2011-2012	M44	3	P184	F	211	0		Urban
2011-2012	M44	3	P185	M	211	0		Urban
2011-2012	M44	3	P186	M	88	1	Being taken by human	Urban

2011-2012	M45	1	P187	M	211	0		Urban
2011-2012	M46	6	P188	U	16	1	Disease	Urban
2011-2012	M46	6	P189	M	211	0		Urban
2011-2012	M46	6	P190	M	114	1	Unknown	Urban
2011-2012	M46	6	P191	F	211	0		Urban
2011-2012	M46	6	P192	F	211	0		Urban
2011-2012	M46	6	P193	M	46	1	Being taken by human	Urban
2011-2012	M47	3	P194	M	211	0		Urban
2011-2012	M47	3	P195	F	68	1	Road accident	Urban
2011-2012	M47	3	P196	F	211	0		Urban
2011-2012	M48	4	P197	M	211	0		Urban
2011-2012	M48	4	P198	M	69	1	Being taken by human	Urban
2011-2012	M48	4	P199	M	211	0		Urban
2011-2012	M48	4	P200	M	127	1	Missing	Urban
2012-2013	M49	6	P201	M	58	1	Inter group fight	Suburban
2012-2013	M49	6	P202	M	58	1	Inter group fight	Suburban
2012-2013	M49	6	P203	M	62	1	Inter group fight	Suburban
2012-2013	M49	6	P204	F	58	1	Inter group fight	Suburban
2012-2013	M49	6	P205	F	42	1	Inter group fight	Suburban
2012-2013	M49	6	P206	F	211	0		Suburban
2012-2013	M50	3	P207	U	4	1	Missing	Suburban
2012-2013	M50	3	P208	U	4	1	Missing	Suburban
2012-2013	M50	3	P209	U	4	1	Missing	Suburban
2012-2013	M51	6	P210	M	51	1	Being taken by human	Suburban

2012-2013	M51	6	P211	M	92	1	Missing	Suburban
2012-2013	M51	6	P212	F	52	1	Road accident	Suburban
2012-2013	M51	6	P213	F	89	1	Missing	Suburban
2012-2013	M51	6	P214	F	51	1	Being taken by human	Suburban
2012-2013	M51	6	P215	F	111	1	Inter group fight	Suburban
2012-2013	M52	2	P216	F	86	1	Disease	Suburban
2012-2013	M52	2	P217	F	50	1	Disease	Suburban

2012-2013	M53	2	P218	M	3	1	Inter group fight	Suburban
2012-2013	M53	2	P219	M	197	1	Road accident	Suburban
2012-2013	M54	1	P220	U	1	1	At birth	Suburban
2012-2013	M55	4	P221	U	9	1	Missing	Suburban
2012-2013	M55	4	P222	U	9	1	Missing	Suburban
2012-2013	M55	4	P223	U	9	1	Missing	Suburban
2012-2013	M55	4	P224	U	9	1	Missing	Suburban
2012-2013	M56	6	P225	U	17	1	Missing	Suburban
2012-2013	M56	6	P226	U	17	1	Missing	Suburban
2012-2013	M56	6	P227	U	17	1	Missing	Suburban
2012-2013	M56	6	P228	F	17	1	Missing	Suburban
2012-2013	M56	6	P229	F	140	1	Road accident	Suburban
2012-2013	M56	6	P230	F	136	1	Stomach infection	Suburban
2012-2013	M57	5	P231	M	120	1	Road accident	Suburban
2012-2013	M57	5	P232	M	211	0		Suburban
2012-2013	M57	5	P233	F	176	1	Road accident	Suburban
2012-2013	M57	5	P234	F	211	0		Suburban

2012-2013	M57	5	P235	F	211	0		Suburban
2012-2013	M58	3	P236	M	31	1	Missing	Suburban
2012-2013	M58	3	P237	M	31	1	Missing	Suburban
2012-2013	M58	3	P238	M	31	1	Missing	Suburban
2012-2013	M59	4	P239	M	52	1	Being taken by human	Suburban
2012-2013	M59	4	P240	M	52	1	Being taken by human	Suburban
2012-2013	M59	4	P241	F	211	0		Suburban
2012-2013	M59	4	P242	F	59	1	Stomach infection	Suburban
2012-2013	M60	4	P243	M	65	1	Disease	Suburban
2012-2013	M60	4	P244	F	62	1	Disease	Suburban
2012-2013	M60	4	P245	F	58	1	Disease	Suburban
2012-2013	M60	4	P246	F	211	0		Suburban
2012-2013	M61	4	P247	M	42	1	Being taken by human	Suburban
2012-2013	M61	4	P248	F	42	1	Being taken by human	Suburban
2012-2013	M61	4	P249	F	42	1	Being taken by human	Suburban
2012-2013	M61	4	P250	F	211	0		Suburban
2012-2013	M62	3	P251	M	46	1	Disease	Suburban
2012-2013	M62	3	P252	F	46	1	Disease	Suburban
2012-2013	M62	3	P253	F	57	1	Disease	Suburban
2012-2013	M63	3	P254	M	17	1	Disease	Suburban
2012-2013	M63	3	P255	U	17	1	Disease	Suburban
2012-2013	M63	3	P256	F	84	1	Disease	Suburban
2012-2013	M64	3	P257	M	23	1	Being taken by human	Suburban
2012-2013	M64	3	P258	F	132	1	Missing	Suburban

2012-2013	M64	3	P259	F	118	1	Missing	Suburban
2012-2013	M65	2	P260	M	18	1	Unknown	Urban
2012-2013	M65	2	P261	F	211	0		Urban
2012-2013	M66	7	P262	M	19	1	Disease	Urban
2012-2013	M66	7	P263	M	19	1	Disease	Urban
2012-2013	M66	7	P264	M	19	1	Disease	Urban
2012-2013	M66	7	P265	M	19	1	Disease	Urban
2012-2013	M66	7	P266	F	19	1	Disease	Urban
2012-2013	M66	7	P267	F	211	0		Urban
2012-2013	M66	7	P268	F	211	0		Urban
2012-2013	M67	6	P269	M	58	1	Being taken by human	Urban
2012-2013	M67	6	P270	M	20	1	Unknown	Urban
2012-2013	M67	6	P271	M	211	0		Urban
2012-2013	M67	6	P272	F	34	1	Unknown	Urban
2012-2013	M67	6	P273	F	51	1	Road accident	Urban

2012-2013	M67	6	P274	F	211	0		Urban
2012-2013	M68	2	P275	F	63	1	Road accident	Urban
2012-2013	M68	2	P276	F	211	0		Urban
2012-2013	M69	5	P277	M	17	1	Disease	Urban
2012-2013	M69	5	P278	M	35	1	Being taken by human	Urban
2012-2013	M69	5	P279	M	211	0		Urban
2012-2013	M69	5	P280	M	17	1	Disease	Urban
2012-2013	M69	5	P281	F	17	1	Disease	Urban
2012-2013	M70	3	P282	M	59	1	Road accident	Urban

2012-2013	M70	3	P283	M	50	1	Being taken by human	Urban
2012-2013	M70	3	P284	F	211	0		Urban
2012-2013	M71	1	P285	M	211	0		Urban
2012-2013	M72	3	P286	M	211	0		Urban
2012-2013	M72	3	P287	F	59	1	Unknown	Urban
2012-2013	M72	3	P288	F	211	0		Urban
2012-2013	M73	5	P289	M	9	1	Inter group fight	Urban
2012-2013	M73	5	P290	M	9	1	Inter group fight	Urban
2012-2013	M73	5	P291	M	211	0		Urban
2012-2013	M73	5	P292	M	19	1	Disease	Urban
2012-2013	M73	5	P293	F	211	0		Urban
2012-2013	M74	3	P294	M	25	1	Missing	Urban
2012-2013	M74	3	P295	F	25	1	Missing	Urban
2012-2013	M74	3	P296	F	211	0		Urban
2012-2013	M75	5	P297	M	74	1	Being taken by human	Urban
2012-2013	M75	5	P298	M	88	1	Being taken by human	Urban
2012-2013	M75	5	P299	M	211	0		Urban
2012-2013	M75	5	P300	F	211	0		Urban
2012-2013	M75	5	P301	F	81	1	Road accident	Urban
2013-2014	M76	4	P302	M	48	1	Unknown	Urban
2013-2014	M76	4	P303	M	64	1	Missing	Urban
2013-2014	M76	4	P304	M	211	0		Urban
2013-2014	M76	4	P305	F	75	1	Missing	Urban
2013-2014	M77	3	P306	U	23	1	Disease	Urban

2013-2014	M77	3	P307	U	23	1	Disease	Urban
2013-2014	M77	3	P308	U	23	1	Disease	Urban
2013-2014	M78	5	P309	M	46	1	Being taken by human	Urban
2013-2014	M78	5	P310	M	63	1	Missing	Urban
2013-2014	M78	5	P311	F	211	0		Urban
2013-2014	M78	5	P312	F	77	1	Road accident	Urban
2013-2014	M78	5	P313	F	211	0		Urban
2013-2014	M79	2	P314	M	56	1	Missing	Urban
2013-2014	M79	2	P315	M	93	1	Unknown	Urban
2013-2014	M80	3	P316	M	75	1	Unknown	Urban
2013-2014	M80	3	P317	F	211	0		Urban
2013-2014	M80	3	P318	F	65	1	Road accident	Urban
2013-2014	M81	2	P319	U	6	1	Natural	Urban
2013-2014	M81	2	P320	U	6	1	Natural	Urban
2013-2014	M82	4	P321	M	8	1	Disease	Urban
2013-2014	M82	4	P322	M	48	1	Being taken by human	Urban
2013-2014	M82	4	P323	M	211	0		Urban
2013-2014	M82	4	P324	F	41	1	Inter group fight	Urban
2013-2014	M83	3	P325	M	40	1	Missing	Urban
2013-2014	M83	3	P326	F	75	1	Unknown	Urban
2013-2014	M83	3	P327	F	211	0		Urban
2013-2014	M84	2	P328	M	40	1	Disease	Urban
2013-2014	M84	2	P329	M	40	1	Disease	Urban
2013-2014	M85	3	P330	M	21	1	Unknown	Urban

2013-2014	M85	3	P331	M	211	0		Urban
2013-2014	M85	3	P332	F	59	1	Road accident	Urban
2013-2014	M86	4	P333	M	69	1	Being taken by human	Urban
2013-2014	M86	4	P334	M	72	1	Being taken by human	Urban
2013-2014	M86	4	P335	F	58	1	Road accident	Urban
2013-2014	M86	4	P336	U	5	1	Unknown	Urban
2013-2014	M87	2	P337	F	211	0		Urban
2013-2014	M87	2	P338	F	211	0		Urban
2014-2015	M88	5	P339	M	95	1	Disease	Suburban
2014-2015	M88	5	P340	M	85	1	Being taken by human	Suburban
2014-2015	M88	5	P341	M	109	1	Natural	Suburban
2014-2015	M88	5	P342	F	88	1	Inter group fight	Suburban
2014-2015	M88	5	P343	M	103	1	Inter group fight	Suburban
2014-2015	M89	4	P344	M	79	1	Being taken by human	Suburban
2014-2015	M89	4	P345	F	93	1	Missing	Suburban
2014-2015	M89	4	P346	F	76	1	Road accident	Suburban
2014-2015	M89	4	P347	F	89	1	Missing	Suburban
2014-2015	M90	2	P348	M	81	1	Inter group fight	Suburban
2014-2015	M90	2	P349	F	103	1	Disease	Suburban
2014-2015	M91	2	P350	M	1	1	At birth	Suburban
2014-2015	M91	2	P351	U	1	1	At birth	Suburban
2014-2015	M92	2	P352	F	83	1	Missing	Suburban
2014-2015	M92	2	P353	F	102	1	Poison	Suburban
2014-2015	M93	4	P354	M	89	1	Road accident	Suburban



2014-2015	M93	4	P355	F	35	1	Road accident	Suburban
2014-2015	M93	4	P356	F	35	1	Road accident	Suburban
2014-2015	M93	4	P357	F	55	1	Worm infection	Suburban
2014-2015	M94	5	P358	M	46	1	Being taken by human	Suburban
2014-2015	M94	5	P359	M	61	1	Being taken by human	Suburban
2014-2015	M94	5	P360	F	54	1	Missing	Suburban
2014-2015	M94	5	P361	F	54	1	Missing	Suburban
2014-2015	M94	5	P362	F	47	1	Worm infection	Suburban
2014-2015	M95	2	P363	M	52	1	Being taken by human	Suburban
2014-2015	M95	2	P364	M	211	0		Suburban

\*Survived till 7 month of pup age- 0, Died before 7 month of pup age- 1