

Supplementary Material 5 – Specificities of identification models

Table S29. Specificity for modelling round 1. CRF = Collar Random Forest, HRF = Harness Random Forest, CSOM = Collar Self-Organizing Map, HSOM = Harness Self-Organizing Map.

	CRF	HRF	CSOM	HSOM
Climbing	1.000	1.000	1.000	1.000
Jumping	1.000	0.999	1.000	1.000
Rubbing	1.000	0.995	0.991	1.000
Trotting	1.000	1.000	0.985	0.996
Walking	0.958	0.954	0.996	0.997
Lying	0.962	0.986	1.000	1.000
Sitting	0.955	0.969	1.000	1.000
Standing	0.909	0.918	1.000	0.998
Grooming	0.925	0.938	0.999	1.000
Littering	0.999	0.999	1.000	0.993
Digging	1.000	1.000	1.000	1.000
Eating	0.936	0.973	1.000	0.999
Scratching	0.999	0.999	1.000	0.990
Shaking	0.999	1.000	0.995	0.993
Allogrooming	1.000	1.000	1.000	1.000

Table S30. Specificity for modelling round 2. CRF = Collar Random Forest, HRF = Harness Random Forest, CSOM = Collar Self-Organizing Map, HSOM = Harness Self-Organizing Map.

	CRF	HRF	CSOM	HSOM
Active	0.967	0.957	0.998	0.999
Lying	0.963	0.986	1.000	1.000
Sitting	0.957	0.975	1.000	1.000
Standing	0.920	0.918	1.000	0.998
Grooming	0.933	0.940	1.000	0.999
Littering	0.999	0.999	1.000	1.000
Eating	0.941	0.980	1.000	1.000
Scratching	0.999	0.999	1.000	1.000

Table S31. Specificity for modelling round 3. CRF = Collar Random Forest, HRF = Harness Random Forest, CSOM = Collar Self-Organizing Map, HSOM = Harness Self-Organizing Map.

	CRF	HRF	CSOM	HSOM
Active	0.965	0.960	0.998	0.998
Lying	0.958	0.986	1.000	1.000
Sitting	0.959	0.974	1.000	1.000
Standing	0.921	0.917	1.000	1.000
Grooming	0.939	0.975	1.000	1.000
Eating	0.720	0.761	0.955	0.999

Table S32. Specificity for modelling round 4. CRF = Collar Random Forest, HRF = Harness Random Forest, CSOM = Collar Self-Organizing Map, HSOM = Harness Self-Organizing Map.

	CRF	HRF	CSOM	HSOM
Active	0.928	0.919	0.999	0.999
Inactive	0.911	0.925	1.000	1.000
Maintenance	0.904	0.896	1.000	1.000