

Supplementary Material 4 – Sensitivities of identification models

Table S25. Sensitivity 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	0.000	0.111	0.000	0.000
Jumping	0.056	0.056	0.000	0.000
Rubbing	0.136	0.476	0.612	0.986
Trotting	0.022	0.022	0.707	0.435
Walking	0.508	0.648	1.000	0.990
Lying	0.883	0.947	1.000	1.000
Sitting	0.731	0.815	0.998	0.999
Standing	0.586	0.584	0.995	0.992
Grooming	0.727	0.839	0.999	0.999
Littering	0.354	0.354	0.865	0.542
Digging	0.000	0.141	0.000	0.958
Eating	0.863	0.933	1.000	0.999
Scratching	0.462	0.448	0.793	0.524
Shaking	0.053	0.027	0.389	0.283
Allogrooming	0.000	0.069	0.000	0.000

Table S26. Sensitivity 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	0.522	0.639	1.000	0.988
Lying	0.886	0.956	1.000	1.000
Sitting	0.740	0.805	0.999	1.000
Standing	0.584	0.585	0.994	0.995
Grooming	0.739	0.838	0.999	1.000
Littering	0.375	0.417	0.979	1.000
Eating	0.867	0.920	1.000	0.999
Scratching	0.448	0.407	0.903	0.938

Table S27. Sensitivity 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	0.539	0.652	0.881	0.996
Lying	0.890	0.951	0.935	1.000
Sitting	0.735	0.785	0.997	0.999
Standing	0.560	0.576	0.989	0.991
Grooming	0.752	0.835	0.931	1.000
Eating	0.868	0.926	1.000	1.000

Table S28. Sensitivity 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	0.807	0.788	0.997	0.997
Inactive	0.837	0.858	1.000	1.000
Maintenance	0.839	0.829	1.000	0.999