

1 **Additional file 5 (.pdf): Full variable importance table for random forest model.** Full
2 variable importance table for the random forest model classifying 6 behavioural states in female
3 grey seals, representing decreasing mean Gini for each feature variable. Top 10 most important
4 feature variables plotted in Figure 3. Feature variable derivations can be found as a summary in
5 Table 4.

Rank	Feature Variables	Mean Decrease Gini
1	stZ	4393.7
2	stX	3308.8
3	stY	3293.2
4	Roll	3276.6
5	Pitch	3262.7
6	PSD1X	2614.9
7	VeDBAs	2561.8
8	PSD2X	2264.8
9	PSD1Y	2231.4
10	PSD2Y	1905.2
11	PSD1Z	1822.9
12	PDBAX	1772.6
13	PSD2Z	1762.7
14	VeDBA	1735.9
15	jerkN	1667.0
16	PDBAY	1650.6
17	RatioZ	1603.6
18	PDBAZ	1596.1
19	dyX	1589.6
20	ODBA	1570.3
21	dyY	1544.7
22	RatioX	1535.9
23	RatioY	1526.2
24	dyZ	1516.9
25	Freq1Y	1246.8
26	Freq2Z	1217.0
27	Freq2Y	1134.4
28	Freq1Z	1090.0
29	Freq2X	1068.9
30	jerkY	1045.8
31	jerkX	1044.1
32	jerkZ	1025.8
33	Freq1X	949.28