

Table S2. Aquatic and terrestrial sample sizes for each turtle for EMG variables for statistics

Variable	Turtles (aquatic cycles; terrestrial cycles)
Coracobrachialis	
All EMG timing variables	TS09 (20; 0); TS11 (20; 0); TS14 (20; 0); TS31 (0; 24); TS36 (20; 4)
Normalized amplitude	TS36 (20; 4)
Pectoralis Burst 1*	
All EMG variables	TS09 (20; 20); TS11 (18; 18); TS99 (2; 17)
Pectoralis Burst 2*	
All EMG variables	TS02 (16; 17); TS09 (20; 20); TS11 (20; 18); TS31 (20; 26); TS99 (20; 17)
Latissimus dorsi 'Burst 1'	
All EMG variables	TS11 (20; 18); TS31 (20; 24); TS36 (20; 4)
Latissimus dorsi 'Burst 2'	
All EMG variables	TS11 (20; 17); TS31 (20; 21); TS36 (20; 4)
Deltoid 'Burst 1'	
All EMG variables	TS09 (20; 20); TS11 (9; 5); TS14 (20; 5); TS31 (20; 26); TS99 (20; 21)
Deltoid 'Burst 2'	
All EMG variables	TS09 (7; 9); TS14 (14; 3); TS31 (1; 12); TS99 (20; 20)
Triceps Burst 1	
All EMG timing variables	TS02 (16; 17); TS11 (20; 8); TS14 (20; 16); TS31 (20; 10); TS99 (20; 22)
Normalized amplitude	TS11 (20; 8); TS14 (20; 16); TS31 (5; 10); TS99 (20; 22)
Triceps Burst 2	
All EMG timing variables	TS02 (16; 17); TS11 (11; 8); TS14 (10; 16); TS31 (15; 9); TS99 (20; 22)
Normalized amplitude	TS11 (11; 8); TS14 (10; 16); TS31 (4; 9); TS99 (20; 22)
Subscapularis (lat approach)	
All EMG variables	TS11 (20; 17)
Subscapularis (cor approach)	
All EMG variables	TS11 (20; 18); TS14 (20; 16)
Supracoracoideus (ant head)	
All EMG variables	TS14 (18; 12)

All EMG timing variables are: onset; relative onset; offset; relative offset; and duration.

All EMG variables are: all EMG timing variables and normalized amplitude.

Burst 1 and Burst 2 are used to indicate early and late activity, respectively, of a muscle exhibiting continuous activity that spans the retraction to protraction phase shift. These muscles include the deltoid and latissimus dorsi.

*Aquatic EMGs for the pectoralis showed early and late bursts of activity; but terrestrial EMGs showed only a single, late burst. Because the pectoralis burst common to both habitats was later in the limb cycle, it is coded as Burst 2 even if there was only a single burst. Because terrestrial EMGs only showed a single burst, statistical comparisons were run in two ways: aquatic Burst 1 vs terrestrial burst and aquatic Burst 2 vs terrestrial burst.