Table 1: Sample locations, along with dive information, time frame, and *Osedax* species identities for specimens used in this study.

Whale	Dive no.[4]	Date	Time frame (months)	*Osedax* species present
Davidson[1*]	H1796	Oct 2019	8	n.sp
(3239m)	H1825	Oct 2020	20	*lonnyi*
Monterey[2]	T916	Nov 2005	13	*roseus*
(1018m)	T919	Nov 2005	13	*roseus*
	T931	Jan 2006	15	*roseus*
	T1049	Oct 2006	24	*packdorum*
	DR009	Mar 2009	52	*talkovici*
	DR095	Nov 2009	61	*talkovici*
	DR928	Feb 2017	148	*packdorum*
	DR966	July 2017	154	*packdorum*
	DR1029	May 2018	164	*packdorum/talkovici*
	DR1105	Dec 2018	171	*packdorum/talkovici*
	DR1112	Jan 2019	172	*packdorum/talkovici/randyi*
Monterey[3*]	T769	Nov 2004	34[†]	*frankpressi*
(2891m)	T991	May 2006	51	*frankpressi*

[1] Natural whalefall discovered October 2019 (35.582°N/122.629°W)
[2] Artificial whalefall implanted October 2004 (36.772°N/122.083°W)
[3] Natural whalefall discovered February 2002 (36.613°N/122.434°W)
[4] H = ROV Hercules, T = ROV Tiburon, DR = ROV Doc Ricketts
[†] Used for metagenomics only
[*] Both natural whalefalls were estimated to have been on the seafloor at least 8 months, based on tissue condition, which was remarkably similar (compare Figure 1 to Goffredi et al. 2004 Figure 1; time frame = initial visit + 8 months)