APPENDIX: REPORTED OCCURRENCE OF FOSSIL LAVA TREE MOULDS, CASTS & CAVES

A summary of the principal data sources available on the location of where trees are known to have been engulfed by contemporaneous lavas is presented below. Reviews also feature in Armitage (1910), Battey (1951), Walker (1962) and Lockwood & Williams (1978), and the subject was most recently covered, in part, by Carveni *et al.* (2011). See attached Supplementary Reference List for details.

1. RECENT & HISTORICAL

LOCATION/ FORMATION	SOURCE/ REFERENCES
Oceanic Islands:	
United States of America: Hawaii In General; Hawaii Volcanoes & Puuhonua o Honaunau National Parks & Lava Tree State Monument (LTSM)	Dana (1849); Lyman (1849); De la Beche (1853); Perret (1913); Finch (1931); Moore & Richter (1962); Swanson *et al.* (1971, 1979); Swanson (1973); Walker (1995); Woodcock & Kalodimos (2003, 2005); Thornberry-Ehrilich (2009); Parcheta *et al.* (2012); MacGowan (2010); LTSM (2015)
Tonga Group	Jaggar (1930); Marriot (1931)
Galápagos Islands (Santiago Island)	Jackson (1933); Fitter *et al.* (2000)
Rapa Nui (Easter Island)	e.g., Wikipedia (2012a)
Reunion	Bory de St. Vincent (1804); Dana (1849) ; De la Beche (1853)
Japanese Islands	Yagi (1933); Ogawa (1980); Sameshima *et al.* (1988); Tachihara (1997); Honda (1999; 2000; 2001; 2002); Ogawa *et al.* (1999);Tachihara *et al.* (2002); Gaal (2004)
Continental United States of America:	
Mt. St. Helens (Washington)	Greeley & Hyde (1972); Neiland & Neiland (1994)
Canada (British Columbia):	
Lava Fork Volcano Nisga'a Memorial Lava Bed Provincial Park	Edwards & Russell (2000); Edwards (2012) Wikipedia (2012b)
Africa:	
Nyiragongo Volcano, Democratic Republic of Congo	Roscoe (2015)
Europe:	
Mt. Etna, Sicily, Italy	Reclus (1865, 1871); Sylvestri (1867); Carveni *et al.* (2011)

In addition to these, and particularly with reference to the increasing popularity of 'Geotourism', there are many websites operated by local governments, tour operators and specialist groups, which publicise the presence of 'lava trees' and tree moulds (molds) associated with lavas on active and recently active volcanoes.

2. HOLOCENE & PLEISTOCENE

LOCATION/ FOMATION	SOURCE/ REFERENCES
Continental United States of America:	
Lava Cast Forest Geologic Area & Newberry National Volcanic Monument (Oregon)	Nichols & Stearns (1938, 1965); Nichols (1941); Peterson & Groh (1969); Smith (1998); Jensen *et al.* (2009)
Medicine Lake Volcano, Fourmile Hill Tree Molds Geologic Area (within Klamath National Forest) & Lava Beds National Monument (N. California)	Johnston & Donnelly-Nolan (1981); Bell (2009); USDA (2009); Donnelly-Nolan (2010); Santucci *et al.* (2012); KellerLynn (2014)
Craters of the Moon National Park & Reserve (Idaho)	Stearns (1924, 1928); Greeley (1982); Kuntz *et al.* (2007a, b); KellerLynn (2012); Owen & Melanda (2013)
Belknap Lava Field, Williamette National Forest (Washington)	Taylor (1965); Sherrod *et al.* (2004)
Zuni-Bandera Volcanic Field (New Mexico): El Malpais National Monument (New Mexico)	Nichols (1946); KellerLynn (2012)
Canada:	
Clearwater-Wells Gray Volcanic Field, British Columbia	Hickson & Souther (1984)
Africa:	
Cameroon	Hyde (1951)
Oceanic Islands:	
San Miguel, Azores	Hyde (1951); Walker (1962); Nunes *et al.* (2002)
Canary Islands	Rodriguez-Gonzalez *et al.* (2009)
Wallis Islands	Stearns (1945)
Raoul Island, Kermadec Group	Brothers & Searle (1970)
Japanese Islands:	
Rishiri Volcano, Kurile Arc	Kuritani (1998)
New Zealand:	
Takapuna	Searle (1964); Allen & Smith (1991); Hayward & Hayward (1995)
Hokianga	Bartrum (1925, 1941, 1947)
Penrose	Searle (1958)

3. NEOGENE, PALAEOGENE, MESOZOIC & PALAEOZOIC

LOCATION/ FORMATION	SOURCE/ REFERENCES
Australia:	
Crinum, central Queensland (mid-Eocene)	Snelling (2000)
Newer Volcanic Group, Victoria (late-Pliocene)	Walcott (1900); Armitage (1910)
Continental United States of America:	
Columbia River Basalt Group (Oregon & Washington States) (Miocene)	Chappel (1936); Beck (1937); Nichols (1941); Wilkinson & Allen (1959); Freed (1979); Beeson *et al.* (1985); Tolan *et al.* (1991); Self *et al.* (1997); Thordarson & Self (1998); Wheeler & Dillhoff (2009); Dillhoff (2012)
Mainland Europe:	
Slovakia (Middle Miocene)	Balciar *et al*. (2010)
Romania (Pliocene)	Moldovan & Torpan (2013)
United Kingdom - North Atlantic/ British Palaeogene Igneous Province:	
Ardmeanach, SW Mull, NW Scotland	MacCulloch (1819); Bailey *et al.* (1924); Emeleus & Gyopari (1992); Bell & Williamson (2002); Emeleus & Bell (2005); Williamson & Bell (2012)
Quinish, Mull, NW Scotland	McNab (1986); Bell & Williamson (2002)
Carraig Mor, SW Mull, NW Scotland	Bell & Williamson (2002); Jolley *et al.* (2009); Williamson & Bell (2012)
Traigh Cadh'an Easa, SW Mull, NW Scotland	Williamson & Bell (2012)
Salen, Mull, NW Scotland	Walker (1962)
Rum, NW Scotland	Tomkeieff & Blackburn (1942)
Antrim, Northern Ireland	Lamplugh *et al.* (1904); Walker (1962)
Iceland	Walker (1962); Freidrich (1968); Hickson & Souther (1984); Gudmundsson & Kjartansson (1996); Sigurgeirsson & Jacobsson (1997); Oskarsson & Riishuus (2011; 2013)
Faroe Islands:	
Faroe Islands Basalt Group	Passey & Bell (2007); Passey (2008); Passey & Jolley (2009)
East Greenland:	
Gronau West Nunatak	Heister *et al*. (2011)
Northern & Southern Victoria Land, Antarctica (Jurassic):	
Ferrar Super Group - Kirkpatrick Basalt Group,	Elliott *et al*. (1982, 1983); Jefferson *et al.* (1983); Garland *et al*. (2007); Bomfleur *et al.* (2011)
Midland Valley Scotland (United Kingdom) (Carboniferous) (Dinantian)**:**	
Bathgate Hills Volcanic Formation	Cadell (1892, 1925)
Kinghorn Volcanic Formation	Rex & Scott (1987); Scott (1990)