Table S1. Characteristics and references of GFB datasets.

#	Dataset	Country	Tier	Sample size	Inventory year range (mean)	Dataset references	Allometric equations
1	FIA	USA	1	405,513	1968–2014 (1992)	O'Connell et al. (2014)(*79*)	Woodall et al. (2011)(*80*)
1	FIA	USA	2	167,197	1968–2014 (1992)	O'Connell et al. (2014)(*79*)	Woodall et al. (2011)(*80*)
2	FIA	US-Pacific Islands	1	399	2001–2013 (2005)	O'Connell et al. (2014)(*79*)	Woodall et al. (2011)(*80*)
3	CAFI	US-Alaska	1	708	1994–2015 (2003)	Malone and Liang (2009)(*81*)	Yarie et al. (2007)(*82*)
4	Ngovayang	Cameroon, Central Africa	1	34	2001–2014 (2009)	Baldauf et al. (2013)(*83*) Gonmadje (2012)(*84*)	BHF(*85*)
5	Bissombo	Cameroon	1	6	2006–2009 (2008)	Lewis et al. (2013)(*86*)	BHF(*85*)
6	NFI	Canada	2	840	1992–2007 (2003)	Gillis et al. (2005)(*87*)	Gillis et al. (2005)(*87*)
7	Provincials	Canada	1	6,802	1958–2013 (1985)	Chen and Luo (2015) (*88*)	Lambert et al. (2005) (*89*)
8	PEP-Québec	Canada	1	17,163	1970–2012 (1990)	Paquette and Messier (2011) (*7*)	Lambert et al.(2005)(*89*)
9	Queensland	Australia	1	2,570	1936–2011 (1978)	Beetson (1992)(*90*)	Ngugi et al. 2014(*91*)
10	NVS	New Zealand	1	4,026	1969–2015 (1992)	Wiser et al. (2001)(*92*)	BHF(*85*)
11	IFFSC	Brazil	1	56	2007–2015 (2012)	Vibrans et al. (2010)(*93*)	Vibrans et al. (2015)(*94*)
11	IFFSC	Brazil	2	384	2007–2011 (2009)	Vibrans et al. (2010)(*93*)	Vibrans et al. (2015)(*94*)
12	Bahia	Brazil	2	48	1993–2009 (2008)	Piotto et al. (2009)(*95*)	BHF(*85*)
13	FunDivEUROPE	Finland Germany Italy Poland Romania Spain	2	209	2007–2012 (2009)	Jucker et al. (2014)(*96*)	BHF(*85*)
14	Hyytiala	Finland	1	14	2008–2015 (2012)	Rautiainen et al. (2012)(*97*)	Heiskanen et al. (2015)(*98*)
15	Paracou	French Guiana	1	1,016	1985–2016 (2002)	Gourlet-Fleury et al. (2004) (*47*)	BHF(*85*)
16	Allipa	Chile	1	330	1981–2014 (2005)	Salas et al. (2006)(*99*)	Salas (2002)(*100*)
17	NFI	Japan	1	11,407	1999–2008 (2003)	JFA (2013)(*101*)	JFA (1970)(*102*, *103*)
18	Trentino	Italy	2	150	2002–2014 (2004)	Rodeghiero et al. (2010)(*104*)	Tabacchi et al. (2011)(*105*)
18	Trentino	Italy	2	783	2002–2014 (2004)	Tonolli et al. (2011)(*106*)	Di Cosmo et al. (2013)(*107*)
19	FVG	Italy	2	350	2003–2007 (2005)	Gasparini and Tabacchi (2001)(*108*)	Anfodillo et al. (2006)(*109*)
20	Biodiversity Exploratory	Germany	1	79	2009–2015 (2012)	Fischer et al. (2010)(*110*)	BHF(*85*)
21	CTFC	Syria	1	122	1988–2008 (1998)	de Miguel et al. (2010)(*111*)	BHF(*85*)
22	CTFC	Lebanon	1	100	1988–2008 (1998)	de Miguel et al. (2010)(*111*)	BHF(*85*)
23	NFI	Netherlands	1	1,121	2001–2013 (2008)	Schelhaas et al. (2014)(*112*)	Schelhaas et al. (2014)(*112*)
24	NFI	Spain	1	30,641	1986–2011 (1997)	ICONA (1996)(*113*) DGCN (2008)(*114*)	DGCN (2008)(*114*)

25	NFI	Portugal	2	6,351	1995–2005 (2000)	DNGF (2010)(*115*) ICNF (2013)(*116*)	DNGF (2010)(*115*) ICNF (2013)(*116*)
26	AMJ	Poland	2	160	2009–2015 (2013)	Unpublished	BHF(*85*)
27	Sudety	Poland	1	488	2012–2014 (2013)	Unpublished	BHF(*85*)
28	Siberia	Russia	2	66	1965-2000 (1984)	Usoltsev (2001)(*117*)	BHF(*85*)
29	West Sayan	Russia	2	411	1972	Parfenova and Tchebakova (2009)(*118*)	BHF(*85*)
30	NFI	China	2	278	1998–2011 (2001)	Lei et al. (2009)(*119*)	SFA (2014)(*120*)
31	FMPI	China	1	1,378	1997-2007 (2002)	He et al. (2013)(*121*)	JFA (2009)(*122*)
32	M'Baïki	Central African Republic	1	12	2009–2011 (2010)	Gourlet-Fleury et al. (2013)(*123*)	BHF(*85*)
33	Ipassa	Gabon	1	1	2009–2010 (2010)	Obiang et al. 2010(*124*)	BHF(*85*)
34	NFI	France	1	56,621	2005–2014 (2010)	IGN (2015)(*125*)	IGN (2015)(*125*)
35	NFI	France	1	10,856	2008–2012 (2010)	IGN (2015)(*125*)	IGN (2015)(*125*)
36	NFI	Germany	1	45,132	2002–2012 (2007)	BMELV (2011)(*126*)	Dahm (2006)(*127*) BMELV (2008)(*128*)
37	T3	Indonesia Panama Uganda Brazil Peru Suriname Cameroon Laos Republic of Congo Malaysia Madagascar Tanzania Costa Rica Panama Ecuador	1	406	2002–2015 (2011)	Team Network (2010)(*129*)	Team Network (2010)(*129*)
38	Naforma	Tanzania	1	19	2011–2015 (2013)	Vesa et al. (2010)(*130*)	BHF(*85*)
39		Uganda	1	58	1999–2014 (2005)	Unpublished	BHF(*85*)
40	Transbaikalia	Russia	2	208	1980	Parfenova and Tchebakova (2009)(*118*)	BHF(*85*)
41	NSW	Australia	1	2,092	1977–2009 (1997)	Muhairwe (2006)(*131*)	BHF(*85*)
42	Patagonia	Argentina	1	112	2008–2013 (2011)	Peri and Ormaechea (2013)(*132*)	Peri and Ormaechea (2013)(*132*)
43	NFI	Republic of Korea	1	260	1998–2012 (2005)	Lee et al. (working paper)	Son et al. (2012)(*133*)
44	CSP	China	1	25	2008-2010 (2009)	Barrufol et al. (2013)(*134*)	Barrufol et al. (2013)(*134*)

45	Russia	Russia	1	124	1965-2000 (1984)	Usoltsev (2001)(*117*)	BHF(*85*)

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