The following supplement accompanies the article

Dramatic global decrease in the range and reproduction rate of the European hamster *Cricetus cricetus*

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Note: All references except the 4 listed at the end of this Supplement are either mentioned in the main text or were used to create the figures in the main text and are thus found in the Literature Cited list of the main article

Data on the European range

Table S1. Range changes and IUCN status of the European hamster populations in European countries. IUCN status: **EX**-Extinct, **CR**-Critically endangered, **EN**-Endangered, **VU**-Vulnerable, **NT**-Near Threatened, **LC**-Least Concern, **DD**-Data Deficient, **NE**-Not Evaluated. Fig. 1 is based on these data

Country	Past range	Current range (as of 2015)	Population trend	IUCN status
Austria	north-eastern part of the country i.e. the river valleys of Burgenland, Lower Austria and Vienna (Spitzenberger 1998)	the range seems not to be changed, but the number of localities is continuously decreasing (Spitzenberger 2001, Enzinger et al. 2010, Schmelzer & Herzig-Straschil 2013)	stable range, decrease in number of localities	VU
Belarus	the south-east (vicinity of Gomel city) and the south-west part of the country (vicinity of Brest city) (Niethammer 1982)	disappeared from south-eastern part, while in south-west the distribution area shrank by 70-80% (Demyanchik 2004)	decrease	VU

continuation Table S1				
Belgium	in Flanders and Wallonia, a small belt from the Dutch border westwards; this range rapidly shrank to two small populations: Bertem and Widooie (Nechay 2000, Weinhold 2008)	the Bertem population is extinct (2012), the Widooie population is strongly depleted in numbers (La Haye & Müskens 2014) and Maurice La Haye, pers. com. 09/2015)	decrease, will probably become extinct very soon without breeding and reintroduction program	CR
Bulgaria	northern part of the country, i. e. Danube lowland and its tributaries (Markov 1998)	no current monitoring, presumably unchanged (personal comm. Nedyalkov 2015)	unknown, presumably unchanged	DD, assumed by (Weinhold 2008)
Czech Republic	whole country except high mountains (Grulich 1975)	lowlands in river valleys, hilly areas of Bohemia and Moravia are abandoned (Tkadlec et al. 2012)	decrease	EN
France	regions Haut-Rhine and Bas-Rhine in Alsace (Nechay 2000, Weinhold 2008)	vanished from 75% of the Alsatian areas which in 1997 were still inhabited (Amand et al. 2012, Reiners et al. 2014)	decrease despite protection program	EN
Germany	present in most federal states: Bavaria, Baden-Württemberg, Rhineland-Palatinate, Hesse, Northrhine-Westphalia, Lower Saxony, Thuringia, Saxony-Anhalt, Saxony and Brandenburg (Weinhold 2008)	started to decline in 60s – 70s of the 20th century and is still declining, as the species has lost 90 out of 290 grid-squares since 1998 [compare (Weidling & Stubbe 1998) and national FFH Report of Germany 2013 (Bundesamt-für-Naturschutz 2013)].	decrease	EN
Hungary	whole country (Nechay et al. 1977)	1/3 of the area is abandoned, notably in the western part of the country where only some isolated populations remained (Bihari 2003)	decrease and fragmentation in western part of the country	DD, assumed by (Weinhold 2008)

continuation Table S1				
Moldova	whole country (Munteanu 1998)	no current monitoring, presumably still present all over the country (Kiku et al. 2011)	unknown, presumably unchanged	DD, assumed by (Weinhold 2008)
Netherlands	the Limburg province (Nechay 2000, Weinhold 2008)	nearly extinct by 1999, the last animals were collected for a conservation breeding program (Müskens et al. 2003, Kuiters et al. 2011)	decrease, reintroduced populations survive thanks to breeding programs	CR
Poland	central and southern part of the country except high mountains plus isolated populations in vicinity of Szczecin (Surdacki 1971)	ca 25% of distribution left i.e. Lublin Upland with Roztocze, Małoplska Upland, Upper Silesia and Sandomierz Basin (Ziomek & Banaszek 2007)	decrease and fragmentation	DD (although all the data are submitted with suggestion of EN)
Romania	Moldavian and Vallachian lowlands outside the Carpathians arch and Transylvania and Pannonian lowland (Nechay et al. 1977, Nechay 2000)	unchanged in Transylvania and Pannonian lowland (Hegyeli et al. 2015), no current monitoring of the distribution outside the mountains. In the red list of Romania (Botnariuc & Tatole 2005)	unchanged within the arch of the Carpathians.	VU
Slovakia	lowlands in eastern and western part of the country (Grulich 1975)	in western part the distribution is reduced (Ambros et al. 2003), no current monitoring in the eastern part, just known it is present [(Čanády 2013) pers. comm., Banaszek 2015)]	decrease in western part, presumably unchanged in eastern part	LC
Slovenia, Serbia, Croatia (former Yugoslavia)	the valley of Drava and Vojvodina region (Ružić 1978)	no current data, personal comm. of Paunovic in (Weinhold 2008) “the population trend is declining … although it is currently still vital and fluctuating with the last population peak recorded in 2007”	details unknown, decrease	LC/NT

continuation Table S1				
Switzerland	the species appeared only as rarity around Binningen in the vicinity of Basel and in the Klettgau in the Canton Schaffhausen (Hediger 1944, Mohr 1954)	no recent records are available	extinct	EX
Ukraine	whole country (Gershenson 1945a, Neronov 1965)	disappeared from the steppe zone, reduced distribution and fragmentation in the rest of the country; present in north-eastern Ukraine, Western Ukraine and Crimea (Korbut et al. 2013, Rusin et al. 2013)	decrease and fragmentation	NE

Table S2: Methods used to investigate the current European hamster presence in Central and Eastern Europe. quest = questionnaires/interviews/reports of locals, fw = field work, lit. = literature, plp = regular monitoring of plant protection services, Cvm = Common vole monitoring program, BioLib = public server, mus = museums, ht = hair-traps

Study	country	quest	fw	lit.	plp	Cvm	BioLib	mus	ht
(Bihari 2003)	Hungary	✓	✓	✓	✓				
(Demyanchik 2004)	Belarus	✓	✓	✓					
(Ziomek & Banaszek 2007)	Poland	✓	✓						
(Tkadlec et al. 2012)	Czech	✓	✓			✓	✓		
(Rusin et al. 2013)	Ukraine	✓	✓	✓				✓	
(Korbut et al. 2013)	Ukraine		✓	✓					✓
(Hegyeli et al. 2015)	Romania	✓	✓	✓				✓	

Data on relative abundance in the eastern range

Table S3: Sources of information of European hamster abundance in Russian, Belarussian, Ukrainian and Moldavian provinces in the past (until 1970) and in the present (thereafter). Figs. 2-4 in the main article are based on these data. The regional IUCN classification is given when known (further details as in Table S1). Numbers in parentheses refer to the numbering in Figs. 2–4 in the main article

Provinces (P.) or Republics (R.)	**The abundance before 1970, literature and other sources**	**The abundance after 1970, literature and other sources**	**regional IUCN state**
Adygea R. (1)	Abundant (Neronov 1965)	Still abundant (Local people reports 2015)	
Altay P. & R. (2+3)	Abundant (Karaseva 1962, Kuilik 1962, Neronov 1965)	Still abundant (Prokopov 2008)	
Astrakhan P. (4)	Rare (Mironov et al. 1965)	Rare. Occurs permanently in the vicinity of Baskunchak lake (Karpenko 2013)	
Bashkortostan R. (5)	Abundant (Kirikov 1952, Karaseva 1962, Neronov 1965)	Abundant. Occurs all around the Bashkortostan besides the continuous forests and marshes (Bayanov & Kucherov 1995)	
Belgorod P. (6)	Rare (Neronov 1965)	Rare (II) (Prisny 2004) (Local people reports 2013-2014)	EN
Bryansk P. (7)	Rare (Mishta & Sitnikova 2005)	Rare species without protection status (Mishta & Sitnikova 2005)	
Chechnya R. (8)	Common (Neronov 1965)	Common (Reports of locals, 2014-2015)	
Chelyabinsk P. (9)	Common (Neronov 1965)	Common (Reports of locals, 2013)	
Chuvashia R. (10)	Common (Neronov 1965)	Rare (I endangered) (Isaev & Dmitriev 2010)	CR
Crimea R. (11)	Abundant (Ognev 1916, Neronov 1965)	Common (in peninsula) (Surov et al. 2016). Abundant (in Simferopol). (Tovpinetz et al. 2006, Feoktistova et al. 2016)	
Ingushetia R. (12)	Abundant (Neronov 1965)	Abundant (Reports of locals 2015)	
Ivanovo P. (13)	Rare (Neronov 1965)	Rare or extinct (Melnikov & Buslaev 2012)	CR
Kabardino-Balkaria R. (14)	Abundant (Neronov 1965)	Abundant (Reports of locals 2013-2015).	
Kalmykia R. (15)	Common (Neronov 1965)	Rare (I-endangered or extinct). Last proof from the 1970s (Muzaev 2013)	CR
Kaluga P. (16)	Rare (Neronov 1965)	Extinct (The list of extinct species in Kaluga region (http://www.admoblkaluga.ru/sub/ecology/OxranaOC/Krasnaa_kniga/).	CR

continuation Table S3			
Provinces (P.) or Republics (R.)	**The abundance before 1970, literature and other sources**	**The abundance after 1970, literature and other sources**	**regional IUCN state**
Karachaevo-Cherkessia R. (17)	Abundant (Neronov 1965)	Abundant (Reports of locals 2015)	
Kemerovo P. (18)	Abundant (Neronov 1965)	Common. Since 2012 hunting is prohibited. (Babina 2009-2010)	
Khakassia R. (19)	Common (Neronov 1965)	Rare. (IV) (Savchenko 2014)	NT
Kirov P. (20)	Rare (Zlobin & Plesski 1978)	Rare (Lyapunov 2008)	
Kostroma P. (21)	Rare (Neronov 1965)	Extinct. No proof since the 1930s.	
Krasnodar P. (22)	Abundant (Neronov 1965)	Common (Reports of locals 2015)	
Krasnoyarsk P. (23)	Common (Neronov 1965, Yudin et al. 1979)	Common (Berdyugin & Bolshakov 1998)	
Kurgan P. (24)	Abundant (Neronov 1965, Starikov et al. 1989)	Common (Reports of locals 2013-2015)(Berdyugin & Bolshakov 1998)	
Kursk P. (25)	Rare (Neronov 1965)	Rare (Report of locals 2014) Internet page of Kursk reserve, contribution of A. A. Vlasov http://zapoved-kursk.ru/zhivotnye/mlekopitayuschie.html	
Lipetsk P.(26)	Rare (Neronov 1965)	Rare (III) (Konstantinov 2006)	VU
Mariy El R. (27)	Rare (Neronov 1965)	Rare (Baldaev 2002)	NT
Mordovia R. (28)	Common. (Morozova-Turova 1938)	Common (Andreychev & Kuznetsov 2012)	
Moscow city (29)	Rare. Zoological museum of Moscow State University; (Karaseva et al. 1999)	Rare. Occurred in some city districts mostly in Southern parts. (Karaseva et al. 1999); Reports of locals (2015).	
Moscow P. (30)	Rare. Zoological museum of Moscow State University; (Karaseva et al. 1999)	Extinct or very rare. Any recent proof is absent. (Karaseva et al. 1999, Varlygina et al. 2008)	
Nizhny Novgorod P. (31)	Common (Neronov 1965)	Common (Gelashvili et al. 1999)	
Northern Ossetia R. (32)	Abundant (Ognev 1916, Neronov 1965)	Abundant (Reports of locals 2014)	
Novosibirsk P. (33)	Abundant (Laptev 1958, Glotov 1969)	Common. (Sidorov et al. 2011)	
Omsk P. (34)	Abundant (Neronov 1965).	Common (Sidorov et al. 2011)	
Orenburg P. (35)	Abundant (Neronov 1965)	Common (Reports of locals 2013-2015) (Simak 1990, Berdyugin & Bolshakov 1998)	
Oryol P. (36)	Common. (Gorbachev 1915, Neronov 1965)	Rare (Vyshegorodskih 2015)	

continuation Table S3			
Provinces (P.) or Republics (R.)	**The abundance before 1970, literature and other sources**	**The abundance after 1970, literature and other sources**	**regional IUCN state**
Penza P. (37)	Common. (Guryleva 1968)	Common. There might be tendencies for population growth (Ilin et al. 2006)	
Perm P. (38)	Common (Neronov 1965, Voronov 1982)	Common (Voronov 1993)	
Rostov P. (39)	Abundant all around the province (Mironov et al. 1965)	Rare, exist mainly in western regions of the province (Minoransky & Dobrovolsky 2013)	
Ryazan P. (40)	Rare (Neronov 1965)	Rare (III) (Ivanchev & Kazakova 2011)	VU
Samara P. (41)	Abundant (Popov 1960, Neronov 1965)	Common (Reports of locals, 2014)	
Saratov P. (42)	Abundant (Larina et al. 1968)	Rare (Shlyakhtin et al. 2009)	
Smolensk P. (43)	Rare (Neronov 1965)	Rare (Chebakova 1996)	
Stavropol P. (44)	Abundant (Neronov & Prokofieva 1969)	Common (Reports of locals, 2015)	
Sverdlovsk P. (45)	Common (Neronov 1965, Marvin 1966)	Common (Berdyugin & Bolshakov 1998) Report of locals, 2013-2015	
Tambov P. (46)	Common (Neronov 1965)	Rare (Reports of locals 2013)	
Tatarstan R. (47)	Common(Popov 1960, Neronov 1965)	Common (Berdyugin & Bolshakov 1998) Report of locals, 2013-2015	
Tomsk P.(48)	Common (Laptev 1958, Neronov 1965)	Common (Moskvitiona & Sushkova 1988) (Reports of zoologists from Tomsk State University 2014-2015)	
Tula P. (49)	Common (Neronov 1965, Myasnikov 1977)	Rare (Reports of locals 2014).	
Tver P. (50)	Rare (Neronov 1965)	Extinct or rare (Sorokin 2002)	VU
Tyumen P. (51)	Abundant (Neronov 1965)	Abundant (Sazonova & Gashev 1999)	
Udmurtia R. (52)	Common (Neronov 1965)	Common. (Kapitonov 2009)	
Ulyanovsk P. (53)	Common (Neronov 1965)	Rare (Reports of locals, 2014)	
Vladimir P. (54)	Rare (Sysoev 1970)	Rare (Kuzmin 2006)	
Volgograd P. (55)	Abundant (Mironov et al. 1965, Neronov 1965)	Rare (Lindeman et al. 2005); (Reports of locals 2015)	
Voronezh P.(56)	Common (Neronov 1965)	Rare (Negrobov 2011)	
Yaroslavl P. (57)	Rare (Neronov 1965)	Very rare species (IV). (Voronin 2004)	NT
Belarus, Brest P. (58)	Common in most parts of the region (Neronov 1965)	Rare in some parts only (Baranovichi, Brest) (Demyanchik 2004)	VU
Belarus, Gomel P. (59)	Rare (Neronov 1965)	Extinct (Demyanchik 2004)	VU

continuation Table S3			
Provinces (P.) or Republics (R.)	**The abundance before 1970, literature and other sources**	**The abundance after 1970, literature and other sources**	**regional IUCN state**
Belarus, Mogilev P. (60)	Rare (Neronov 1965)	Extinct (Demyanchik 2004)	VU
Ukraine, Cherkassy P. (61)	Common (Neronov 1965)	Rare (Rusin et al. 2013)	
Ukraine, Chernigov P. (62)	Common (Gershenson 1945c, Neronov 1965)	Common (Rusin et al. 2013)	
Ukraine, Chernovtsy P. (63)	Abundant (Neronov 1965)	Common (Rusin et al. 2013)	
Ukraine, Dnepropetrovsk P. (64)	Abundant (Gershenson 1945c, Neronov 1965, Vorontsov 1982)	Rare (Rusin et al. 2013)	
Ukraine, Donetsk P. (65)	Common (Neronov 1965)	Extinct (Rusin et al. 2013)	
Ukraine, Ivano-Frankovsk P. (66)	Abundant (Neronov 1965)	Common (Rusin et al. 2013)	
Ukraine, Kharkov P. (67)	Common (Neronov 1965)	Rare (Rusin et al. 2013)	
Ukraine, Kherson P. (68)	Common (Neronov 1965)	Rare (Rusin et al. 2013)	
Ukraine, Khmelnitsk P. (69)	Common (Neronov 1965)	Rare (Rusin et al. 2013)	
Ukraine, Kiev P. (70)	Common (Neronov 1965)	Common (Rusin et al. 2013)	
Ukraine, Kirovograd P. (71)	Abundant (Neronov 1965)	Rare (Rusin et al. 2013)	
Ukraine, Lugansk P. (72)	Rare (Neronov 1965)	Extinct (Rusin et al. 2013)	
Ukraine, Lvov P. (73)	Common (Neronov 1965, Polushina et al. 1988)	Common (Rusin et al. 2013)	
Ukraine, Nikolaev P. (74)	Common (Neronov 1965)	Rare (Rusin et al. 2013)	
Ukraine, Odessa P. (75)	Abundant (Gershenson 1945b, d, Neronov 1965)	Rare (Rusin et al. 2013)	
Ukraine, Poltava P. (76)	Common (Gershenson 1945c, Neronov 1965)	Rare (Rusin et al. 2013)	
Ukraine, Rovno P. (77)	Common (Neronov 1965)	Rare (Rusin et al. 2013)	
Ukraine, Sumy P. (78)	Common (Neronov 1965)	Common (Rusin et al. 2013)	
Ukraine, Ternopol P. (79)	Common (Neronov 1965)	In general rare (Rusin et al. 2013) but in the region Hrymailiv common (Korbut et al. 2013)	

continuation Table S3			
Provinces (P.) or Republics (R.)	**The abundance before 1970, literature and other sources**	**The abundance after 1970, literature and other sources**	
Ukraine, Transcarpatian P. (80)	Abundant (Neronov 1965)	Rare (Rusin et al. 2013)	
Ukraine, Vinnitsa P. (81)	Common (Neronov 1965)	Rare (Rusin et al. 2013)	
Ukraine, Volyn P. (82)	Common (Neronov 1965)	Rare (Rusin et al. 2013) Absent in the northern part, common in the southern (Luck city) (Korbut et al. 2013)	
Ukraine, Zaporozhye P. (83)	Common (Neronov 1965)	Rare (Rusin et al. 2013)	
Ukraine, Zhitomir P. (84)	Common (Neronov 1965)	Rare (Rusin et al. 2013)	
Moldova (85)	Abundant (Neronov 1965)	Rare (Kiku et al. 2011)	

Data on fur-trapping

Table S4: numbers of **hamster furs** harvested per year and region

Region	**year**	**number of trapped hamsters per year**	**remarks**	**literature**
Germany	16th to 19th century		first reports	(Hofmeister 1965, Stubbe & Stubbe 1998)
Germany, county Aschersleben (383 km²)	early 20th century	100,000		(Soffel 1922)
Germany, county Aschersleben (383 km²)	1953-1966	>190,000		(Hubert 1968, Görner 2007)
Germany, county Aschersleben (383 km²)	1957	503,750		(Hubert 1968, Görner 2007)
Germany, district Halle (8771 km²)	1953-1966	580,000		(Hubert 1968, Görner 2007)
Germany, district Halle (8771 km²)	1957	1,305,657		(Hubert 1968, Görner 2007)
Germany, district Magdeburg (11526km²).	1953-1966	525,000		(Hubert 1968, Görner 2007)
Germany, district Magdeburg (11526km²).	1953	1,100,000		(Hubert 1968, Görner 2007)
Germany, Thuringia and Saxony-Anhalt	<1970s	similar numbers as above		(Sulzer 1774, Wendt 1984, Zimmermann 1995, Weinhold 1998, Adler & Zimmermann 2013)
East-Slovakia	1950-1957	442,500		(Grulich 1980)
East-Slovakia	1960	100,000		(Grulich 1980)
East-Slovakia	1961-1970	300,000		(Grulich 1980)
Soviet Union	1923-1970		in nearly the whole range, except the north-west, most intensely in 18 regions including Ukraine, Altai, and Bashkiria	(Neronov 1965)
Soviet Union	1950-1962	3,000,000	average	(Neronov 1965, Nechay 2008)
Soviet Union	1952&1953	16,000,000	maximum	(Neronov 1965, Nechay 2008)

continuation of Table S4				
Region	**year**	**number of trapped hamsters per year**	**remarks**	**literature**
Ukraine	1928	3,300,000		(Rusin et al. 2013)
Ukraine	1934-1939	2,000,000		(Rusin et al. 2013)
Bashkiria	1933 and 1937-1939	1,000,000		(Gershenson 1945a)
7 Hungarian counties	1973	1,500,000		(Nechay et al. 1977)
7 Hungarian counties	1974	2,400,000		(Nechay et al. 1977)
Romania, Arad county	1973	178,000		(Nechay et al. 1977)
Romania, Arad county	1974	244,000		(Nechay et al. 1977)

Data on embryo-numbers

Table S5: Rear data of **historic embryo numbers** of wild dead trapped females included in Fig. 5 in the main article. Means were either given in the reference (black) or calculated from minima and maxima (blue).

Historic embryo numbers						
Country / region	**min**	**max**	**mean**	**exceptions / remarks**	**year**	**source**
Germany	7	8	**7.5**	up to 12	1901	(Nehring 1901)
Germany	4	19	**12.12**		1984	(Weber & Stubbe 1984)
Bashkiria			**13**	data from A. Surov	1923	collection of Moscow State Univ.
Polesie			**6.8**		1929	(Kryshtal 1929)
Bashkiria			**13**	data from A. Surov	1932	collection of Moscow State Univ.
Kaluga Region Peremyshl village			**8**		1932	(Dukelskaja & Stepanova 1932)
Ilmen reserve			**12**		1932	(Dukelskaja & Stepanova 1932)
Bashkiria			**13.5**	data from A. Surov	1935	collection of Moscow State Univ.
Kazakhstan			**14**	data from A. Surov	1936	collection of Moscow State Univ.
Southern Ural			**14**	data from A. Surov	1938	collection of Moscow State Univ.
Volgograd region			**15.7**	data from A. Surov	1949	collection of Moscow State Univ.
Moldova			**15**		1952	(Kuznecov 1952)
Southern Ural			**13.2**		1953	(Kirikov 1952)
USSR	8	13	**10.5**	up to 20	1954	(Stroganova 1954)
Downstream Volga			**9**		1961	(Bašenina et al. 1961)
Moldova			**15**		1971	(Lozan 1971)
Hungary	7.8	11	**9.4**	the older the female the higher embryo numbers	1975	(Gyurkó 1975)
Poland			**10.3**		1977	(Górecki 1977)
Hungary			**9.88**		1977	(Nechay et al. 1977)
Kazakhstan			**17.4**	1st gestation	1977	(Sludsky 1977)
Kazakhstan			**16.1**	2nd gestation	1977	(Sludsky 1977)
Kazakhstan			**12**	3rd gestation	1977	(Sludsky 1977)
Russia		25		not in Fig. 5 since no mean available	1984	(Vinogradov & Gromov 1984)
Czechoslovakia	1	18	**10.5**		1986	(Grulich 1986)

Table S6: Rear data of **recent embryo numbers** of wild females included in Fig. 5 in the main article. Embryo-numbers in unpublished recent studies were determined by palpation.

Recent embryo numbers						
Region	**min**	**max**	**mean**	**exceptions/remarks**	**year**	**author**
Crimea, Simferopol			10.5		2006	(Tovpinetz et al. 2006)
Omsk			12		2007	(Novikova & Novikov 2007)
Crimea, Simferopol			9.1	pers. comm.	2012	Tovpinetz, unpublished
Crimea, Simferopol			8.2		2015	Surov, Feoktistova unpublished

Data on litter-numbers

Table S7: Rear data on **historic litter numbers** [litters per year and female] from wild female European hamsters included in Fig. 6 in the main article. Values as 2.5 are given when the literature source indicated 2-3 litters per year.

Country	**litter numbers**	**year of publ.**	**author**	**remarks**
France	**2.5**	1765	(Buffon 1765)	
Germany	**2.5**	1774	(Sulzer 1774)	at least 2
Germany	**2**	1838	(Oken 1838)	
Germany	**2**	1857	(Blasius 1857)	
France	**2**	1884	(Trouessart 1884)	
France	**2.5**	1910	(Martin 1910)	normally 2, older females 3
Germany	**2**	1914	(Brehm 1914)	
Germany	**2**	1922	(Soffel 1922)l	
Hungary	**2**	1927	(Lovassy 1927)	
Poland	**2**	1928	(Fedorowicz 1928)	
Belgium	**2.5**	1932	(Dupond 1932)	
France	**3.5**	1935	(Didier & Rode 1935)	
Germany	**2.5**	1936	(Petzsch 1936)	yearling 2, older females 3
France	**3.5**	1946	(Rode & Didier 1946)	
Niederlande	**3**	1949	(Husson 1949)	
France	**2.5**	1949	(Hainard 1949)	maybe from Switzerland
CSSR Slowakia	**2**	1950	(Turček 1950)	
USSR	**1.5**	1950	(Geptner et al. 1950)	
Germany	**2.5**	1951	(Gerber 1951)	
Germany	**2.5**	1952	(Petzsch 1952)	
USSR	**2.5**	1952	(Vinogradov & Gromov 1952)	
Moldova	**2**	1952	(Kuznecov 1952)	
Germany	**2.5**	1954	(Mohr 1954)	
CSSR Slovakia	**2**	1954	(Pfeffer 1954)	
Volga Valley	**2**	1954	(Stroganova 1954)	
USSR	**2.5**	1957	(Bašenina et al. 1957)	
Belgium	**2.5**	1958	(Frechkopf 1958)	
Germany	**2.5**	1959	(Zimmermann 1959)	
Romania	**2**	1959	(Hamar et al. 1959)	
Hungary	**2.5**	1960	(Manninger 1960)	normally 2, in good years 3
Netherlands	**3**	1961	(Glas 1961)	
mid-Europe	**2.5**	1961	(Gaffrey 1961)	
USSR	**2.5**	1963	(Gromov et al. 1963)	
Ukraine	**1.5**	1963	(Sokur 1963)	
Poland	**3**	1964	(Kowalski 1964)	

continuation of Table S7				
Country	**litter numbers**	**year of publ.**	**author**	**remarks**
CSSR	**2.5**	1965	(Feriancová-Masárová & Hanák 1965)	
USSR	**2**	1965	(Bobrinskiy et al. 1965)	
USSR	**2.5**	1965	(Flint et al. 1965)	
CSSR	**2.5**	1966	(Kratochvíl 1966)	
Romania	**2**	1967	(Hamar 1967)	
USSR	**2.5**	1968	(Polyakov 1968)	
Southern Ural	**2**	1968	(Marvin 1968)	
Germany	**2**	1969	(Grizmek 1969)	
USSR	**2.5**	1970	(Flint et al. 1970)	
Slovakia	**2.5**	1970	(Hanzák 1970)	
France	**1.5**	1973	(Saint Girons 1973)	
USSR	**2**	1975	(Kuznetsov 1975)	
Poland	**2**	1977	(Górecki 1977)	
Hungary	**4.5**	1977	(Nechay et al. 1977)	
Southern Ural	**2**	1977	(Bolšhakov 1977)	
France	**2**	1977	(Le Louarn & Saint Girons 1977)	in captivity 3
CSSR	**2.5**	1979	(Pelikán et al. 1979)	4-5 possible
CSSR Slovakia	**3**	1980	(Grulich 1980)	
CSSR Slovakia	**4.5**	1980	(Grulich 1980)	older females
Poland	**2.5**	1981	(Pucek 1981)	up to 3
Germany	**3**	1982	(Niethammer 1982)	
CSSR	**2.5**	1982	(Anděra & Horáček 1982)	
Slovakia	**2.5**	1985	(Sládek & Mošanský 1985)	in normal years
Slovakia	**4.5**	1985	(Sládek & Mošanský 1985)	in optimal years

Table S8: Rear data on **recent mean litter numbers** [litters per year and female] from wild female European hamsters which were followed for a whole season. Data are included in Fig. 6 in the main article

Country	**litters per year**	**year of publ.**	**author**	**remarks**
Germany	**1.6**	1998	(Weinhold 1998)	5 focal animals
Germany	**1.4**	2002	(Kayser & Stubbe 2002)	1.1 if 3 females with 0 litters were included
Austria	**1.9**	2004	(Franceschini & Millesi 2004)	1.75 if 1 female with 0 litters was included
Austria	**1.8**	2008	(Franceschini-Zink & Millesi 2008)	1.6 if 1 female with 0 litters was included
Austria	**1.7**	2011	(Hufnagl et al. 2011)	
Germany	**1.5**	2013	(Albert 2013)	1.4 if 1 female with 0 litters was included

Data on litter-size

Table S9: Historic litter-sizes of wild female European hamsters. If not indicated otherwise, the means are included in Figs. 7 and 8 in the main article. Means were either given in the reference (black) or calculated from minima and maxima (blue).

country/region	min	max	mean	exceptions/remarks	year of publ.	author
France	5	6	5.5		1765	(Buffon 1765)
Germany	8	14	11	if not 1st gestation never less than 6, sometimes 16-18	1774	(Sulzer 1774)
Germany	6	8	7	old females 4-5	1836	(Oken 1838)
Germany	4	13	8.5	up to 16	1857	(Blasius 1857)
France	6	8	7		1884	(Trouessart 1884)
France	6	10	8	the same for Belgium	1910	(Martin 1910)
Germany	6	18	12		1914	(Brehm 1914)
Germany	6	15	10.5		1922	(Soffel 1922)l
Hungary	6	12	9		1927	(Lovassy 1927)
Poland	6	15	10.5		1928	(Fedorowicz 1928)
France	6	16	11	speaks of "hamster". Though unlikely, it might be another than C.c.	1929	(Jennison 1929)
Belgium	8	12	10	rarely 6-7 or 15-16	1932	(Dupond 1932)
USSR	3	11	**8**		1932	(Dukelskaja & Stepanova 1932)
Austria	6	18	12		1933	(Rebel 1933)
France	5	12	8.5		1935	(Didier & Rode 1935)
France			**11**		1936	(Didier & Mathias 1936)
Germany	6	12	**7.8**	The pups had at counting an age of 1-23 days or even older.	1936	(Petzsch 1936)
Czech lands	5	18	11.5		1939	(Štěpánek & Baum 1939)
Ukraine	3	12	**8.5**		1941	(Gershenson 1941)
France	5	12	8.5		1946	(Rode & Didier 1946)
France	4	18	11	data maybe from Switzerland	1949	(Hainard 1949)
The Netherlands			**10**		1949	(Husson 1949)
Czech lands	4	18	11		1950	(Turček 1950)
USSR		15		not in graph since no mean available	1950	(Geptner et al. 1950)
Germany	6	12	9	mostly 6-12, range 4-18	1951	(Gerber 1951)
Germany		12		not in graph since no mean available	1952	(Petzsch 1952)
USSR			**10**	sometimes up to 18-20	1952	(Vinogradov & Gromov 1952)
Moldavia		15		not in graph since no mean available	1952	(Kuznecov 1952)

continuation Table S9						
country/region	Min	max	mean	exceptions/remarks	year of publ.	author
Germany	4	18	11		1954	(Mohr 1954)
Czechoslovakia	8	18	13		1954	(Pfeffer 1954)
Volga Region	8	13	10.5		1954	(Stroganova 1954)
USSR			**10**	up to 15-20	1957	(Bašenina et al. 1957)
Belgium	5	20	**10**		1958	(Frechkopf 1958)
Germany	4	12	8	sometimes up to 18	1959	(Zimmermann 1959)
Hungary			**9**	was singular observation	1959	(Eóry 1959)
Hungary	6	12	9		1960	(Manninger 1960)
France	2	12	7	questionaire. Says minima were mostly given between 2-8 and maxima mostly between 3-12	1961	(Aubry 1961-1962)
The Netherlands			**12**		1961	(Glas 1961)
Mid-Europe	4	18	11	gives 2 ranges without specification	1961	(Gaffrey 1961)
Mid-Europe	6	12	9	gives 2 ranges without specification	1961	(Gaffrey 1961)
Ukraine		10		sometimes 20, not in graph since no mean available	1963	(Sokur 1963)
USSR		20	**10**		1963	(Gromov et al. 1963)
Poland		12		not in graph since no mean available	1964	(Kowalski 1964)
Slovakia	4	10	7	up to 18	1965	Feriancová-Masárová & Hanak 1965)
USSR	7	12	9.5	up to 18-20	1965	(Flint et al. 1965)
USSR	6	8	7	up to 18	1965	(Bobrinskiy et al. 1965)
Czechoslovakia	4	5	4.5		1966	(Kratochvíl 1966)
Romania	8	12	10	rarely up to 20	1967	(Hamar 1967)
USSR	7	14	10.5	might range from 2 to 20	1968	(Marvin 1968)
USSR		18		not in graph since no mean available	1968	(Polyakov 1968)
Germany	4	12	8	rarely up to 18	1969	(Grizmek 1969)
Slovakia	4	12	8		1970	(Hanzák 1970)
Moldavia	3	12	7.5	up to 20	1971	(Lozan 1971)
France	3	12	7.5		1973	(Saint Girons 1973)
USSR	6	18	12		1975	(Kuznetsov 1975)
Poland		8	**6.8**		1977	(Górecki 1977)
Southern Ural			**10**		1977	(Bolšhakov 1977)
Czechoslovakia	4	12	8		1979	(Pelikán et al. 1979)
Poland		12		not in graph since no mean available	1981	(Pucek 1981)
Czechoslovakia	3	12	7.5		1982	(Anděra & Horáček 1982)
USSR		20		not in graph since no mean available	1984	(Vinogradov & Gromov 1984)
Slovakia	4	12	8		1985	(Sládek & Mošanský 1985)

Table S10: Recent litter-sizes of wild European hamster females. Means were included in Figs. 7 and 8 in the main article.

Country	min	max	mean	study year	year of publ.	author	remarks
Germany	2	7	**3.7**	1993-1995	1996	(Seluga et al. 1996)	
Germany	1	8	**3.28**		1998	(Weinhold 1998)	
Germany	1	9	**2.5**	1994-2000	2002	(Kayser & Stubbe 2002)	litter-size before harvest 3.2, after harvest 1.9
Austria	2.5	6.5	**4.5**	2003	2003	(Tauscher et al. 2003)	range: 1-9, min value corresponds to mean of 2nd litter, max value to mean of 1st
Austria			**3.92**	2004	2004	(Franceschini & Millesi 2004)	
Austria			**3.31**	2003	2004	(Franceschini & Millesi 2004)	
Austria	1	9	**4.34**	2003-2006	2008	(Franceschini-Zink & Millesi 2008)	
Austria			**4.3**	2003-2005	2011	(Hufnagl et al. 2011)	
Austria			**2.5**	2006	2011	(Hufnagl et al. 2011)	
Germany			**3.4**	2013	2013	(Albert 2013)	1st litter, range 1-7
Germany			**3**	2013	2013	(Albert 2013)	2nd litter, range 1-7
France			**2.4**	2014	pers. com. 2016	C. Kourkgy, ONCFS, unpublished data	

Table S11: Decline in mean litter-size of European hamsters in ten year intervals.

time-span	mean litter-size	SEM	n
1914-1925	**11.25**	**0.75**	**2**
1926-1935	**9.86**	**0.54**	**7**
1936-1945	**9.7**	**0.91**	**4**
1946-1955	**10.44**	**0.44**	**9**
1956-1965	**8.63**	**0.40**	**12**
1966-1975	**8.64**	**0.63**	**11**
1976-1985	**8.06**	**0.53**	**5**
1986-1995			
1996-2005	**3.54**	**0.28**	**6**
2006-2015	**3.32**	**0.35**	**6**

Data on reproduction onset in former times

Table S12: Onset of reproduction in European hamsters as given by different historical sources. The original specifications in months are given also as decades of the year (early-, mid-, and late April correspond to decades 10, 11, and 12) to enable the calculation of a mean.

Country/region /town	start of repro [months]	start of repro [decades]	literature
France	late April	12	(Trouessart 1884)
	May	14	(Martin 1910)
	April	11	(Le Louarn & Saint Girons 1977)
Germany	April	11	(Petzsch 1936)
	late April	12	(Gerber 1951)
	late April/mid-May	13	(Petzsch 1952)
Hungary	late April	12	(Manninger 1960)
mid-Europe	late April/early May	12.5	(Gaffrey 1961)
Moldova	March	8	(Lozan 1971)
Moscow	March/April	9.5	(Bašenina et al. 1957)
Romania	March/April	9.5	(Hamar 1967)
Russia	April	11	(Flint et al. 1965)
Slovakia	April	11	(Feriancová-Masárová & Hanák 1965)
	mid-March	8	(Grulich 1980)
South Ural	April	11	(Marvin 1968)
Ukraine	mid-April	11	(Samosh 1975)
Mean ± SEM	**mid-April**	**11.03 ± 0,43**	

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