

**Table S1:** Table summarizing mean  $N_e/N_c$  ratios (and the range of  $N_e/N_c$  values reported at the study level) calculated from values reported in studies originally reviewed by Frankham (1995), Palstra & Fraser (2012), and Montes et al. (2016). We complemented the table with ratios extracted from studies post-dating Palstra & Fraser's review (2012). These studies were added through a literature search performed with the ISI Web of Science portal (Clarivate Analytics) on May 7th 2020, using the search term “ $N_e/N_c$ ”. We also included  $N_e/N_c$  ratios extracted from technical reports and from published studies that were not included in any of the previous reviews, nor in the results of our ISI Web of Science research. Ratios calculated for humans in Frankham (1995) were not included, and we were unable to find / extract  $N_e/N_c$  ratios for three studies reviewed in Palstra & Fraser (Kaueffer et al 2007, Kanno et al 2011, Ursenbacher et al 2009). NOTE: The mean values reported here are indicative, as they average all the values reported at the study level, hence averaging values across populations and/or having used different  $N_e$  and/or  $N_c$  (demographic estimator) methods. We recommend checking the original references before applying one of these ratios to obtain more details on the methods and context for the calculation of these ratios, including understanding variation across populations. Although our table will be useful for guidance & to provide a state-of-the-art of what ratios have been calculated to date and for which species, the final decision on the applicability of these ratios to a given species/population should be critically assessed by the practitioner by looking at these original publications. \* indicate studies for which 95% confidence intervals in  $N_e/N_c$ , or variability in  $N_e/N_c$  estimates due to accounting for variability in  $N_e$  estimate, have been reported instead of the range of  $N_e/N_c$  values.

Taxonomic group	Species	Reference	Reviewed in:	Mean $N_e/N_c$ (and/or range) per study
Algae	<i>Fucus serratus</i>	Coyer et al (2008)	Palstra & Fraser (2012)	0.001075 (0.00035 - 0.0018)
Amphibians	<i>Bufo bufo</i>	Coles et al (2019)	Hoban et al (2020)	0.213 (0.07 - 0.67)
Amphibians	<i>Bufo calamita</i>	Rowe & Beebee (2004)	Palstra & Fraser (2012)	0.0975 (0.02 - 0.17)
Amphibians	<i>Bufo marinus</i>	Easteal & Floyd (1986)	Frankham (1995)	0.052 (0.016 - 0.088)
Amphibians	<i>Notophthalmus viridescens</i>	Gill (1978)	Frankham (1995)	0.073
Amphibians	<i>Pelophylax lessonae</i> (local pop)	Sjögren (1991)	Hoban et al (2020) (Box 2)	0.36 (0.289 - 0.443)
Amphibians	<i>Pelophylax lessonae</i> (metapop.)	Sjögren (1991)	Hoban et al (2020) (Box 2)	0.082 (0.078 - 0.086)
Amphibians	<i>Pelophylax perezi</i>	Marzo et al (2020)	Hoban et al (2020)	0.414 (0.358 - 0.469)
Amphibians	<i>Rana latastei</i>	Ficetola et al (2010)	Hoban et al (2020)	0.315 (0.13 - 0.54)
Amphibians	<i>Rana pipiens</i>	Hoffman et al (2004)	Hoban et al (2020)	0.286 (0.273 - 0.299)
Amphibians	<i>Rana pipiens</i>	Merrell (1968)	Frankham (1995)	0.34 (0.01 - 0.67)
Amphibians	<i>Rana sylvatica</i>	Berven & Grudzien (1990)	Frankham (1995)	0.44

Amphibians	<i>Rana temporaria</i>	Schmeller & Merilä (2007)	Palstra & Fraser (2012)	0.95 (0.23 - 1.67)
Amphibians	<i>Triturus marmoratus</i>	Jehle et al (2001)	Palstra & Fraser (2012)	0.1275 (0.09 - 0.17)
Amphibians	<i>Triturus marmoratus</i>	Jehle et al (2005)	Palstra & Fraser (2012)	0.237 (0.04 - 0.65)
Birds	<i>Accipiter gentilis</i>	Reed, Doerr & Walters (1986)	Frankham (1995)	0.41
Birds	<i>Aphelocoma coerulescens</i>	Koenig (1988)	Frankham (1995)	0.48
<b>Birds</b>	<b><i>Apteryx owenii</i></b>	<b>Ramstad et al (2013)</b>	<b>Hoban et al (2020)</b>	<b>0.1 (0.01 - 0.39)*</b>
Birds	<i>Cairina scutulata</i>	Tomlinson et al. (1991)	Frankham (1995)	0.052
Birds	<i>Cairina scutulata</i>	Tomlinson et al. (1991)	Frankham (1995)	0.094
Birds	<i>Falco peregrinus</i>	Brown et al (2007)	Palstra & Fraser (2012)	0.39
Birds	<i>Geospiza conirostris</i>	Grant & Grant (1989)	Frankham (1995)	0.28
Birds	<i>Geospiza fortis</i>	Grant & Grant (1992)	Frankham (1995)	0.31
Birds	<i>Geospiza scandens</i>	Grant & Grant (1992)	Frankham (1995)	0.4
Birds	<i>Grus japonensis</i>	Mace (1986)	Frankham (1995)	0.45
Birds	<i>Gymnorhinus cyanocephalus</i>	Marzluff & Balda (1989)	Frankham (1995)	0.74
<b>Birds</b>	<b><i>Jabiru mycteria</i></b>	<b>Lopes et al (2013)</b>	<b>Hoban et al (2020)</b>	<b>0.09</b>
Birds	<i>Malurus splendens</i>	Rowley, Russell & Brooker (1993)	Frankham (1995)	0.3
Birds	<i>Melanerpes formicivorus</i>	Koenig (1988)	Frankham (1995)	0.09
Birds	<i>Notiomystis cincta</i>	Brekke et al (2011)	Palstra & Fraser (2012)	0.164 (0.014 - 0.29)
Birds	<i>Parus major</i>	Nunney & Elam (1994)	Frankham (1995)	0.67
Birds	<i>Passer domesticus</i>	Fleischer (1983)	Frankham (1995)	0.74
<b>Birds</b>	<b><i>Passer domesticus</i></b>	<b>Baalsrud et al (2014)</b>	<b>Hoban et al (2020)</b>	<b>1.111 (0.207 - 6.35)</b>
<b>Birds</b>	<b><i>Phyllastrephus cabanisi</i></b>	<b>Husemann et al (2015)</b>	<b>Hoban et al (2020)</b>	<b>0.566 (0.05 - 2.02)</b>
Birds	<i>Picoides borealis</i>	Blackwell et al. (1995)	Frankham (1995)	0.39 (0.32 - 0.46)
Birds	<i>Picoides borealis</i>	Reed et al. (1993)	Frankham (1995)	0.715 (0.63 - 0.8)
Birds	<i>Porphyrio hochstetteri</i>	Grueber & Jamieson (2011)	Palstra & Fraser (2012)	0.451
Birds	<i>Puffinus puffinus</i>	Nunney & Elam (1994)	Frankham (1995)	0.7
Birds	<i>Strix occidentalis</i>	Koenig (1988)	Frankham (1995)	0.39
Birds	<i>Tymanuchus cupido</i>	Johnson et al (2004)	Palstra & Fraser (2012)	0.905 (0.317 - 2.044)
Birds	<i>Tymanuchus pallidicinctus</i>	Pruett et al (2011)	Palstra & Fraser (2012)	0.043 (0.0087 - 0.1147)
Birds	<i>Zonotrichia leucophrys</i>	Baker (1981)	Frankham (1995)	0.324
Bony Fish (Anadromous)	<i>Oncorhynchus keta</i>	Small et al (2009)	Palstra & Fraser (2012)	0.105 (0.01 - 0.37)
Bony Fish (Anadromous)	<i>Oncorhynchus kisutch</i>	Simon, McIntyre & Hemmingsen (1986)	Frankham (1995)	0.24
<b>Bony Fish (Anadromous)</b>	<b><i>Oncorhynchus gorbuscha</i></b>	<b>Kovach et al (2013)</b>	<b>Hoban et al (2020)</b>	<b>0.618 (0.09 - 1.35)</b>
Bony Fish (Anadromous)	<i>Oncorhynchus mykiss</i>	Bartley et al. (1992)	Frankham (1995)	0.9
Bony Fish (Anadromous)	<i>Oncorhynchus mykiss</i>	Heath et al (2002)	Palstra & Fraser (2012)	0.153 (0.058 - 0.29)
Bony Fish (Anadromous)	<i>Oncorhynchus mykiss</i>	Nielsen et al (2011)	Palstra & Fraser (2012)	0.673 (0.31 - 0.89)
Bony Fish (Anadromous)	<i>Oncorhynchus tshawytscha</i>	Bartley et al. (1992)	Frankham (1995)	0.028 (0.013 - 0.043)
Bony Fish (Anadromous)	<i>Oncorhynchus tshawytscha</i>	Shrimpton & Heath (2003)	Palstra & Fraser (2012)	0.165 (0.021 - 0.566)
Bony Fish (Anadromous)	<i>Salmo salar</i>	Consuegra et al (2005)	Palstra & Fraser (2012)	0.064 (0.009 - 0.18)

Bony Fish (Anadromous)	<i>Salmo salar</i>	Spidle et al (2004)	Palstra & Fraser (2012)	0.878 (0.0721 - 1.051)*
Bony Fish (Anadromous)	<i>Salmo salar</i>	Fraser et al (2007)	Palstra & Fraser (2012)	0.175 (0.011 - 0.455)
Bony Fish (Anadromous)	<i>Salmo salar</i>	Palstra et al (2009)	Palstra & Fraser (2012)	0.389 (0.03 - 0.95)
Bony Fish (Anadromous)	<i>Salmo salar</i>	Perrier et al (2016)	Hoban et al (2020)	0.35 (0.15 - 0.77)
Bony Fish (Anadromous)	<i>Salvelinus alpinus</i>	Shikano et al (2015)	Hoban et al (2020)	0.02
Bony Fish (Anadromous)	<i>Salvelinus fontinalis</i>	Belmar-Lucero et al (2012)	Palstra & Fraser (2012)	0.139 (0.03 - 0.251)
Bony Fish (Cataclomous)	<i>Lates calcarifer</i>	Loughnan et al (2013)	Hoban et al (2020)	0.422 (0.31 - 0.51)
Bony Fish (Freshwater)	<i>Esox lucius</i>	Miller & Kapuscinski (1997)	Palstra & Fraser (2012)	0.083 (0.03 - 0.14)
Bony Fish (Freshwater)	<i>Cyprinodon nevadensis</i>	Martin (2010)	Palstra & Fraser (2012)	1.723 (0.123 - 5.316)
Bony Fish (Freshwater)	<i>Esox lucius</i>	Aguilar et al (2005)	Palstra & Fraser (2012)	0.028
Bony Fish (Freshwater)	<i>Hybognathus amarus</i>	Alò & Turner (2005)	Palstra & Fraser (2012)	0.027 (0.0003 - 0.053)
Bony Fish (Freshwater)	<i>Hybognathus amarus</i>	Turner et al (2006)	Palstra & Fraser (2012)	0.00065 (0.0003 - 0.001)
Bony Fish (Freshwater)	<i>Moxostoma hubbsi</i>	Lippe et al (2006)	Palstra & Fraser (2012)	1.395 (0.85 - 1.94)
Bony Fish (Freshwater)	<i>Oregonichthys crameri</i>	DeHaan et al (2012)	Palstra & Fraser (2012)	0.056 (0.037 - 0.073)
Bony Fish (Freshwater)	<i>Salmo trutta</i>	Charlier et al (2011)	Palstra & Fraser (2012)	0.11 (0.06 - 0.26)
Bony Fish (Freshwater)	<i>Sander vitreus</i>	Franckowiak et al (2009)	Palstra & Fraser (2012)	0.074 (0.02 - 0.28)
Bony Fish (Marine)	<i>Atractoscion nobilis</i>	Bartley et al (1992)	Frankham (1995)	0.335 (0.27 - 0.4)
Bony Fish (Marine)	<i>Engraulis encrasicolus</i>	Montes et al (2016)	Hoban et al (2020)	$2.2 \times 10^{-5}$ ( $7.9 \times 10^{-7}$ - $5.7 \times 10^{-5}$ )
Bony Fish (Marine)	<i>Gadus morhua</i>	Hutchinson et al (2003)	Palstra & Fraser (2012)	0.000039
Bony Fish (Marine)	<i>Lutjanus campechanus</i>	Saillant and Gold (2006)	Montes et al 2016	0.001
Bony Fish (Marine)	<i>Merluccius merluccius</i>	Pita (2013)	Montes et al 2016	$2.67 \times 10^{-4}$ ( $1 \times 10^{-6}$ - $6 \times 10^{-4}$ )
Bony Fish (Marine)	<i>Morone saxatilis</i>	Diaz et al (2000)	Montes et al 2016	0.0003
Bony Fish (Marine)	<i>Mycteroperca microlepis</i>	Jue (2006)	Montes et al 2016	0.01
Bony Fish (Marine)	<i>Pagrus auratus</i>	Hauser et al (2002)	Palstra & Fraser (2012)	$2.865 \times 10^{-5}$ ( $1.7 \times 10^{-6}$ - $1.67 \times 10^{-4}$ )
Bony Fish (Marine)	<i>Pleuronectes platessa</i>	Hoarau et al (2005)	Palstra & Fraser (2012)	$2 \times 10^{-5}$
Bony Fish (Marine)	<i>Pleuronectes platessa</i>	Watts et al (2010)	Palstra & Fraser (2012)	$2.355 \times 10^{-5}$ ( $4.7 \times 10^{-6}$ - $3.76 \times 10^{-5}$ )
Bony Fish (Marine)	<i>Sardina pilchardus</i>	Laurent & Planes (2007)	Montes et al 2016	$1 \times 10^{-8}$
Bony Fish (Marine)	<i>Sciaenops ocellatus</i>	Turner et al (2002)	Palstra & Fraser (2012)	0.00085 (0.0007 - 0.001)
Bony Fish (Marine)	<i>Sebastes crameri</i>	Gomez-Uchida & Banks (2006)	Palstra & Fraser (2012)	0.00055 (0.001 - 0.0001)*
Bony Fish (Marine)	<i>Solea solea</i>	Cuveliers et al (2011)	Palstra & Fraser (2012)	$6.143 \times 10^{-6}$ ( $1 \times 10^{-6}$ - $1 \times 10^{-5}$ )
Bony Fish (Marine)	<i>Thunnus alalunga</i>	Laconcha et al (2015)	Montes et al 2016	0.005 (0.00262 - 0.00983)
Elasmobranch	<i>Carcharhinus plumbeus</i>	Portnoy et al (2009)	Palstra & Fraser (2012)	0.617 (0.5 - 0.84)
Elasmobranch	<i>Carcharhinus plumbeus</i>	Dudgeon and Overden (2015)	Hoban et al (2020)	0.5 (0.21 - 1)
Elasmobranch	<i>Carcharias taurus</i>	Dudgeon and Overden (2015)	Hoban et al (2020)	0.7 (0.21 - 1)
Elasmobranch	<i>Raja clavata</i>	Dudgeon and Overden (2015)	Hoban et al (2020)	$5.05 \times 10^{-4}$ ( $1 \times 10^{-5}$ - 0.001)
Elasmobranch	<i>Stegostoma fasciatum</i>	Dudgeon and Overden (2015)	Hoban et al (2020)	0.82 (0.49 - 1.15)
Crustacea	<i>Eudiaptomus gracilis</i>	Zeller et al (2008)	Palstra & Fraser (2012)	$5.5 \times 10^{-8}$ ( $1 \times 10^{-8}$ - $1.67 \times 10^{-7}$ )
Insects	<i>Aedes aegypti</i>	Saarman et al (2017)	Hoban et al (2020)	0.2 (0.1 - 0.3)
Insects	<i>Ceratitis capitata</i>	Debouzie (1980)	Frankham (1995)	0.41

Insects	<i>Coelopa frigida</i>	Butlin & Day (1989)	Frankham (1995)	0.0028 (0.0009 - 0.0047)
Insects	<i>Coenagrion mercuriale</i>	Watts et al (2007)	Palstra & Fraser (2012)	0.211 (0.006 - 0.42)
Insects	<i>Dacus oleae</i>	Nei & Tajima (1981)	Frankham (1995)	0.18
Insects	<i>Drosophila melanogaster</i>	Prout (1954)	Frankham (1995)	0.256
Insects	<i>Drosophila melanogaster</i>	Crow & Morton (1955)	Frankham (1995)	0.75 (0.48 - 0.9)
Insects	<i>Drosophila melanogaster</i>	Nozawa (1963)	Frankham (1995)	0.305 (0.23 - 0.38)
Insects	<i>Drosophila melanogaster</i>	Nozawa (1970)	Frankham (1995)	0.599 (0.14 - 1.07)
Insects	<i>Drosophila melanogaster</i>	Murata (1970)	Frankham (1995)	0.138
Insects	<i>Drosophila melanogaster</i>	Wright (1977)	Frankham (1995)	0.687 (0.46 - 0.83)
Insects	<i>Drosophila melanogaster</i>	Hill (1981)	Frankham (1995)	0.36
Insects	<i>Drosophila melanogaster</i>	Malpica & Briscoe (1981)	Frankham (1995)	0.126 (0.038 - 0.25)
Insects	<i>Drosophila melanogaster</i>	Lopez-Fanjul & Torroja (1982)	Frankham (1995)	0.159 (0.078 - 0.285)
Insects	<i>Drosophila melanogaster</i>	Briscoe et al. (1992)	Frankham (1995)	0.027 (0.004 - 0.051)
Insects	<i>Drosophila pseudoobscura</i>	Briscoe et al. (1992)	Frankham (1995)	0.024 (0.012 - 0.036)
Insects	<i>Drosophila subobscura</i>	Begon (1977)	Frankham (1995)	0.09 (0.83 - 0.097)
Insects	<i>Panaxia dominula</i>	Wright (1978)	Frankham (1995)	0.1665 (0.077 - 0.256)
Insects	<i>Phalacrus substriatus</i>	Ingvarsson & Olsson (1997)	Palstra & Fraser (2012)	0.336 (0.042 - 0.92)
Insects	<i>Tribolium castaneum</i>	Wade (1980)	Frankham (1995)	0.855 (0.76 - 0.95)
Insects	<i>Tribolium castaneum</i>	Pray et al. (1996)	Frankham (1995)	0.91 (0.75 - 1.04)
Mammals	<i>Alces alces</i>	Ryman et al. (1981)	Frankham (1995)	0.28 (0.20 - 0.36)
Mammals	<i>Bos taurus</i>	Hall (2016)	Hoban et al (2020)	0.035 (0.02 - 0.05)
Mammals	<i>Bison bison</i>	Shull & Tipton (1987)	Frankham (1995)	0.19 (0.084 - 0.296)
Mammals	<i>Bison bison</i>	Berger & Cunningham (1995)	Frankham (1995)	0.069
Mammals	<i>Canis lupus</i>	Bruford (2015)	Hoban et al (2020)	0.246
Mammals	<i>Canis lupus</i>	Forslund (2019)	Hoban et al (2020)	0.24 (0.224 - 0.246)
Mammals	<i>Canis simensis</i>	Randall et al (2010)	Palstra & Fraser (2012)	0.407 (0.19 - 0.72)
Mammals	<i>Capra aegagrus hircus</i>	Hall (2016)	Hoban et al (2020)	0.071 (0.027 - 0.114)
Mammals	<i>Cercopithecus galeritus</i>	Kinnaird & O'Brien (1991)	Frankham (1995)	0.24 (0.19 - 0.29)
Mammals	<i>Cervus elaphus</i>	Reed et al (1986)	Frankham (1995)	0.23
Mammals	<i>Cervus elaphus</i>	Glenn (1990)	Frankham (1995)	0.41
Mammals	<i>Chletrionomys glareolus</i>	Borkowska & Ratkiewicz (2004)	Palstra & Fraser (2012)	1.115 (0.97 - 1.26)
Mammals	<i>Connochaetes taurinus</i>	Ralls & Ballou (1983)	Frankham (1995)	0.5
Mammals	<i>Cynomys ludocicianus</i>	Chepko-Sade et al. (1987)	Frankham (1995)	0.83
Mammals	<i>Dipodomys spectabilis</i>	Nunney & Elam (1994)	Frankham (1995)	0.56
Mammals	<i>Enhydra lutris</i>	Ralls, Ballou & Brownell (1983)	Frankham (1995)	0.555 (0.36 - 0.75)
Mammals	<i>Equus caballus</i>	Berg (1987)	Frankham (1995)	0.8
Mammals	<i>Equus caballus</i>	Nunney & Elam (1994)	Frankham (1995)	0.82
Mammals	<i>Equus caballus</i>	Hall (2016)	Hoban et al (2020)	0.134 (0.024 - 0.243)
Mammals	<i>Equus grevyi</i>	Mace (1986)	Frankham (1995)	0.28

Mammals	<i>Felis catus</i>	Kaeuffer et al (2004)	Palstra & Fraser (2012)	0.395 (0.33 - 0.43)
Mammals	<i>Gulo gulo</i>	Nilsson (2013)	Hoban et al (2020)	0.363
Mammals	<i>Helogale parvula</i>	Chepko-Sade et al. (1987)	Frankham (1995)	0.16
Mammals	<i>Lasiorhinus krefftii</i>	Taylor et al. (1994)	Frankham (1995)	0.18
Mammals	<i>Lasiorhinus krefftii</i>	Taylor pers. comm. (1995)	Frankham (1995)	0.59
Mammals	<i>Lutra lutra</i>	Bjorklund & Arrendal (2008)	Palstra & Fraser (2012)	0.25
Mammals	<i>Lycaon pictus</i>	Marsden et al (2012)	Palstra & Fraser (2012)	0.095 (0.02 - 0.25)
Mammals	<i>Lynx lynx</i>	Nilsson (2013)	Hoban et al (2020)	0.36 (0.275 - 0.424)
Mammals	<i>Macaca fuscata and M. mulatto</i>	Nozawa (1972)	Frankham (1995)	0.65
Mammals	<i>Macaca mulatto</i>	Harpending & Cowan (1986)	Frankham (1995)	0.49 (0.45 - 0.53)
Mammals	<i>Mirounga angustirostris</i>	Nunney (1993)	Frankham (1995)	0.22
Mammals	<i>Odocoileus virginianus</i>	Ryman et al. (1981)	Frankham (1995)	0.385 (0.35 - 0.42)
Mammals	<i>Oryctolagus cuniculus</i>	Daly (1981)	Frankham (1995)	0.54 (0.42 - 0.65)
Mammals	<i>Oryx dammah</i>	Mace (1986)	Frankham (1995)	0.2
Mammals	<i>Ovis aries</i>	Hall (2016)	Hoban et al (2020)	0.095 (0.059 - 0.13)
Mammals	<i>Ovis canadensis nelsoni</i>	Epps et al (2006)	Palstra & Fraser (2012)	0.423 (0.041 - 1.026)
Mammals	<i>Ovis canadensis</i>	FitzSimmons, Buskirk & Smith (1995)	Frankham (1995)	0.44
Mammals	<i>Panthera tigris</i>	Smith & McDougal (1991)	Frankham (1995)	0.41 (0.054 - 0.07)
Mammals	<i>Panthera tigris altaica</i>	Henry et al (2009)	Palstra & Fraser (2012)	0.062 (0.054 - 0.07)
Mammals	<i>Perameles gunnii</i>	Sherwin & Brown (1990)	Frankham (1995)	0.135
Mammals	<i>Pteropus rodricensis</i>	Carroll & Mace (1988)	Frankham (1995)	0.305 (0.18 - 0.43)
Mammals	<i>Rhinoceros unicornis</i>	Dinerstein & McCracken (1990)	Frankham (1995)	0.61
Mammals	<i>Sciurus carolinensis</i>	Charlesworth (1980)	Frankham (1995)	0.59
Mammals	<i>Sus scrofa domesticus</i>	Hall (2016)	Hoban et al (2020)	0.328 (0.199 - 0.457)
Mammals	<i>Urocyon littoralis</i>	Wayne et al. (1991)	Frankham (1995)	0.5
Mammals	<i>Ursus americanus</i>	Chepko-Sade et al. (1987)	Frankham (1995)	0.69
Mammals	<i>Ursus arctos</i>	Allendorf, Harris & Metzgar (1991)	Frankham (1995)	0.28
Mammals	<i>Ursus arctos</i>	Miller & Waits (2003)	Palstra & Fraser (2012)	0.3 (0.27 - 0.32)
Mammals	<i>Ursus arctos</i>	Tallmon et al (2004)	Palstra & Fraser (2012)	0.1 (0.06 - 0.14)*
Mammals	<i>Ursus arctos</i>	Nilsson (2013)	Hoban et al (2020)	0.0999
Mammals	<i>Ursus arctos</i>	Kamath et al (2015)	Hoban et al (2020)	0.54 (0.42 - 0.66)
Mammals	<i>Ursus arctos</i>	Pérez et al (2014)	Hoban et al (2020)	0.307 (0.22 - 0.47)
Mammals	<i>Ursus arctos</i>	Puranen-Li et al (2014)	Hoban et al (2020)	0.213
Mammals	<i>Ursus arctos</i>	Schregel et al (2012)	Hoban et al (2020)	0.604 (0.421 - 0.819)
Mammals	<i>Ursus maritimus</i>	Cronin et al (2009)	Palstra & Fraser (2012)	0.182
Molluscs	<i>Cepaea nemoralis</i>	Greenwood (1974)	Frankham (1995)	0.5
Molluscs	<i>Crassostrea gigas</i>	Hedgecock, Chow & Waples (1992)	Frankham (1995)	0.000001
Molluscs	<i>Lymnaea columella</i>	Crow & Morton (1955)	Frankham (1995)	0.75
Plants	<i>Agrostemma githago</i>	Heywood (1986)	Frankham (1995)	0.676

Plants	<i>Anagallis minima</i>	Heywood (1986)	Frankham (1995)	0.413
Plants	<i>Araucaria nemorosa</i>	Kettle et al (2012)	Palstra & Fraser (2012)	0.091 (0.011 - 0.247)
Plants	<i>Astrocaryum mexicanum</i>	Eguiarte et al. (1993)	Frankham (1995)	0.305 (0.18 - 0.43)
Plants	<i>Avena fatua</i>	Jain & Rai (1974)	Frankham (1995)	0.51
Plants	<i>Bidens cernua</i>	Heywood (1986)	Frankham (1995)	0.511
Plants	<i>Bidens tripartita</i>	Heywood (1986)	Frankham (1995)	0.517
Plants	<i>Blackstonia perfoliata</i>	Heywood (1986)	Frankham (1995)	0.212
Plants	<i>Cardamine hirsuta</i>	Heywood (1986)	Frankham (1995)	0.4805 (0.376 - 0.585)
Plants	<i>Centaureum erythraea</i>	Heywood (1986)	Frankham (1995)	0.379
Plants	<i>Chaenorhinum minus</i>	Heywood (1986)	Frankham (1995)	0.188
Plants	<i>Chamaecrista fasciculata</i>	Fenster (1991)	Frankham (1995)	0.855 (0.78 - 0.93)
Plants	<i>Cicendia filiformis</i>	Heywood (1986)	Frankham (1995)	0.676
Plants	<i>Crassula tillaea</i>	Heywood (1986)	Frankham (1995)	0.605
Plants	<i>Damasonium alisma</i>	Heywood (1986)	Frankham (1995)	0.485
Plants	<i>Diamophora smallii</i>	Heywood (1986)	Frankham (1995)	0.431
Plants	<i>Eichhornia paniculata</i>	Husband & Barrett (1992)	Frankham (1995)	0.1062 (0.002 - 0.174)
Plants	<i>Eichhornia paniculata</i>	Husband & Barrett (1992)	Frankham (1995)	0.1604 (0.008 - 0.341)
Plants	<i>Gaillardia pulchella</i>	Heywood (1986)	Frankham (1995)	0.386
Plants	<i>Impatiens pallida</i>	Heywood (1986)	Frankham (1995)	0.344
Plants	<i>Kickxia elatine</i>	Heywood (1986)	Frankham (1995)	0.265
Plants	<i>Kickxia spuria</i>	Heywood (1986)	Frankham (1995)	0.14
Plants	<i>Lapsana communis</i>	Heywood (1986)	Frankham (1995)	0.379
Plants	<i>Legousia hybrida</i>	Heywood (1986)	Frankham (1995)	0.194
Plants	<i>Linanthus androsaceus</i>	Heywood (1986)	Frankham (1995)	0.306
Plants	<i>Linum catharticum</i>	Heywood (1986)	Frankham (1995)	0.146
Plants	<i>Ludwigia leptocarpa</i>	Heywood (1986)	Frankham (1995)	0.227
Plants	<i>Matricaria matricarioides</i>	Heywood (1986)	Frankham (1995)	0.31
Plants	<i>Moenchia erecta</i>	Heywood (1986)	Frankham (1995)	0.62
Plants	<i>Myosurus minimus</i>	Heywood (1986)	Frankham (1995)	0.63
Plants	<i>Papaver dubium</i>	Crawford (1984)	Frankham (1995)	0.07
Plants	<i>Papaver dubium</i>	Heywood (1986)	Frankham (1995)	0.251
Plants	<i>Papaver rhoeas</i>	Heywood (1986)	Frankham (1995)	0.317
Plants	<i>Phlox drummondii</i>	Heywood (1986)	Frankham (1995)	0.355
Plants	<i>Picea glauca</i>	Brown & Schoen (1992)	Frankham (1995)	0.19
Plants	<i>Radiola linoides</i>	Heywood (1986)	Frankham (1995)	0.391
Plants	<i>Saxifraga tridactylites</i>	Heywood (1986)	Frankham (1995)	0.502
Plants	<i>Senecio sylvaticus</i>	Heywood (1986)	Frankham (1995)	0.619
Plants	<i>Solanum nigrum</i>	Heywood (1986)	Frankham (1995)	0.216
Plants	<i>Stephanomeria exigua</i>	Heywood (1986)	Frankham (1995)	0.299

Plants	<i>Veronica hederifolia</i>	Heywood (1986)	Frankham (1995)	0.66
Reptiles	<i>Crocodylus niloticus</i>	Bishop et al (2009)	Palstra & Fraser (2012)	0.077 (0.04 - 0.1)
Reptiles	<i>Crotalus willardi</i>	Holycross & Douglas (2007)	Palstra & Fraser (2012)	0.733
Reptiles	<i>Sceloporus olivaceus</i>	Kerster (1964)	Frankham (1995)	0.22
Reptiles	<i>Sistrurus catenatus</i>	Bradke et al (2018)	Hoban et al (2020)	0.285 (0.273 - 0.299)
Reptiles	<i>Uta stansburiana stejnegeri</i>	Tinkle (1965)	Frankham (1995)	0.675 (0.61 - 0.74)
Reptiles	<i>Vipera berus</i>	Ursenbacher et al (2009)b	Palstra & Fraser (2012)	3.144 (0.241 - 10.54)

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**Table S2:** Table summarizing mean and median  $N_e/N_c$  ratios within taxonomic groups calculated from values reported in studies originally reviewed by Frankham (1995), Palstra & Fraser (2012), Montes et al (2016) and the present study. 95% confidence intervals for the median were calculated using the R package 'asbio' (Aho, K. (2014) Foundational and Applied Statistics for Biologists using R. CRC/Taylor and Francis, Boca Raton, FL). Summary statistics were calculated for taxonomic groups with  $N>6$  reported values.

Taxonomic group	N	Mean ratio	Median ratio	CI 95% Inf (Median)	CI 95% Sup (Median)	Range
Amphibians	14	0.285	0.262	0.082	0.414	0.052 - 0.95
Birds	27	0.421	0.390	0.280	0.566	0.043 - 1.111
Bony Fish (Anadromous)	15	0.327	0.175	0.105	0.618	0.02 - 0.90
Bony Fish (Freshwater)	9	0.389	0.074	0.027	1.395	$6.5 \times 10^{-4}$ - 1.723
Bony Fish (Marine)	15	0.024	$2.67 \times 10^{-4}$	$2.2 \times 10^{-5}$	0.001	$1 \times 10^{-8}$ - 0.335
Insects	21	0.323	0.211	0.138	0.410	0.0028 - 0.91
Mammals	55	0.366	0.307	0.240	0.410	0.03 - 1.115
Plants	41	0.376	0.355	0.265	0.481	0.07 - 0.855
Overall (including taxonomic groups with $N \leq 6$ )	214	0.354	0.303	0.240	0.344	$1 \times 10^{-8}$ - 3.144

**Figure S1:** Boxplot of the mean  $N_e/N_c$  ratios calculated from values reported in studies included in Table S1 per taxonomic group. Thick lines represent median values. Up and lower hinges represent first and third quartiles, whiskers represent the range of data extending up to 1.5 times the interquartile range, and points represent data outside of this range (outliers). The horizontal dotted line corresponds to the recommended limit  $N_e/N_c$  ratio value of 0.1.

