



THE IUCN RED LIST  
OF THREATENED SPECIES™



## ***Dendrocopos major* (Great Spotted Woodpecker)**

### **European Red List of Birds**

### **Supplementary Material**

The European Union (EU27) Red List assessments were based principally on the official data reported by EU Member States to the European Commission under Article 12 of the Birds Directive in 2013-14. For the European Red List assessments, similar data were sourced from BirdLife Partners and other collaborating experts in other European countries and territories. For more information, see BirdLife International (2015).

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#### **Recommended citation**

BirdLife International (2015) European Red List of Birds. Luxembourg: Office for Official Publications of the European Communities.

#### **Further information**

<http://www.birdlife.org/datazone/info/euroredlist>

<http://www.birdlife.org/europe-and-central-asia/european-red-list-birds-0>

<http://www.iucnredlist.org/initiatives/europe>

<http://ec.europa.eu/environment/nature/conservation/species/redlist/>

#### **Data requests and feedback**

To request access to these data in electronic format, provide new information, correct any errors or provide feedback, please email [science@birdlife.org](mailto:science@birdlife.org).

*Dendrocopos major* (Great Spotted Woodpecker)

**Table 1.** Reported national breeding population size and trends in Europe<sup>1</sup>.

Country (or territory) <sup>2</sup>	Population estimate				Short-term population trend <sup>4</sup>				Long-term population trend <sup>4</sup>				Subspecific population (where relevant)
	Size (pairs) <sup>3</sup>	Europe (%)	Year(s)	Quality	Direction <sup>5</sup>	Magnitude (%) <sup>6</sup>	Year(s)	Quality	Direction <sup>5</sup>	Magnitude (%) <sup>6</sup>	Year(s)	Quality	
Albania	500-1,000	<1	2002-2012	poor	0	0	2002-2012	poor	-	10-20	1980-2012	poor	
Andorra	200-300	<1	1999-2001	medium	?				?				
Armenia	1,000-2,000	<1	2002-2012	medium	?				?				
Austria	100,000-150,000	1	2001-2012	medium	+	10-20	2000-2011	medium	?				all others
Azerbaijan	5,000-20,000	<1	1996-2000	poor	?				?				
Belarus	300,000-500,000	2	2000-2012	medium	0	0	2000-2012	medium	0	0	1980-2012	medium	
Belgium	40,000-50,000	<1	2008-2012	poor	+	1-23	2000-2012	medium	+	264-355	1973-2012	medium	all others
Bosnia & HG	80,000-100,000	1	2010-2014	poor	?				?				
Bulgaria	90,000-150,000	1	2005-2012	medium	F	5-15	2000-2012	medium	F	5-15	1980-2012	medium	all others
Croatia	50,000-100,000	<1	2014	poor	?				?				
Czech Rep.	272,800-545,600	2	2012	medium	+	21-43	2000-2012	good	+	28-52	1982-2012	good	all others
Denmark	38,500	<1	2011	medium	+	25-50	1999-2011	good	+	25-50	1980-2011	good	all others
Estonia	40,000-80,000	<1	2008-2012	medium	0	0-10	2001-2012	medium	0	0-10	1980-2012	medium	all others
Finland	210,000-560,000	2	2006-2012	good	F	0	2001-2012	good	+	52-107	1983-2012	good	all others
France	250,000-400,000	2	2008-2012	medium	+	15	2001-2011	medium	+	75	1989-2011	medium	all others
Georgia	Present	<1			?				?				
Germany	680,000-1,050,000	5	2005-2009	medium	+	7-19	1998-2009	good	+	6-29	1990-2009	good	all others
Greece	1,000-2,000	<1	2008-2012	poor	?				?				all others
Hungary	274,000-349,000	2	2000-2012	medium	+	21	1999-2012	medium	?				all others
Rep. Ireland	19-34	<1	2012	medium	+	171-386	2009-2012	medium					all others
Italy	70,000-150,000	1	2007	poor	+	65-75	2000-2012	medium	+	65-75	1990-2012	poor	all others
Kosovo	20,000-40,000	<1	2009-2014	medium	?				?				
Latvia	193,404-334,147	2	2011	good	0	0-20	2005-2012	good	+	0-200	1994-2010	medium	all others
Liechtenstein	80-100	<1	2009-2014	medium	0	0	2003-2014	medium	0	0	1980-2014	medium	
Lithuania	50,000-100,000	<1	2008-2012	medium	0	0	2001-2012	medium	0	0	1980-2012	medium	all others
Luxembourg	3,000-5,000	<1	2008-2012	medium	0	0	2000-2012	poor	?				all others
FYRO Macedonia	500-1,000	<1	2001-2012	poor	?				?				
Moldova	3,500-4,000	<1	2000-2010	medium	0	0	2000-2010	medium	0	0	1980-2010	medium	
Montenegro	10,000-20,000	<1	2002-2012	poor	?				?				
Netherlands	72,027-85,123	<1	2008-2011	medium	+	18-45	2002-2011	medium	+	69-136	1984-2011	medium	all others
Norway	10,000-35,000	<1	2000-2013	poor	F	0	2008-2013	good	0.0	0	1980-2013	good	
Poland	620,000-911,000	5	2008-2012	good	+	20-40	2000-2012	good	?				all others

*Dendrocopos major* (Great Spotted Woodpecker)

**Table 1.** Reported national breeding population size and trends in Europe<sup>1</sup>.

Country (or territory) <sup>2</sup>	Population estimate				Short-term population trend <sup>4</sup>				Long-term population trend <sup>4</sup>				Subspecific population (where relevant)
	Size (pairs) <sup>3</sup>	Europe (%)	Year(s)	Quality	Direction <sup>5</sup>	Magnitude (%) <sup>6</sup>	Year(s)	Quality	Direction <sup>5</sup>	Magnitude (%) <sup>6</sup>	Year(s)	Quality	
Portugal	100,000-500,000	1	2008-2012	medium	0	0	2004-2011	medium	?				all others
Romania	300,000-500,000	2	2010-2013	medium	F	0-20	2001-2013	medium	?				all others
Russia	7,800,000-10,000,000	56	2000-2008	medium	+	5-30	2000-2012	poor	-	5-30	1980-2012	medium	
Serbia	110,000-175,000	1	2008-2012	medium	0	0	2000-2012	medium	0	0	1980-2012	medium	
Slovakia	30,000-60,000	<1	2002	medium	0	0	2000-2012	medium	0	0	1980-2012	medium	all others
Slovenia	52,000-105,000	<1	2002-2010	medium	?				?				all others
Spain	256,500-474,000	2	2004-2006	good	+	76	1998-2012	good	+		1980-2012	medium	all others
ES: Canary Is	1,000	<1	1997-2003	poor	?				+		1980-2012	poor	D. m. thanneri
ES: Canary Is	200	<1	1997-2003	poor	+		2001-2012	poor	+		1980-2012	medium	D. m. canariensis
Sweden	144,000-269,000	1	2008-2012	medium	+	41-65	2001-2012	good	0	0	1980-2012	good	all others
Switzerland	40,000-60,000	<1	2008-2012	medium	+	15-43	2001-2012	good	+	90-159	1990-2012	medium	
Turkey	25,000-100,000	<1	2013	medium	-	0-19	2000-2012	good	-	0-19	1990-2013	poor	
Ukraine	450,000-1,130,000	5	2000	medium	0	0	2001-2012	medium	0	0	1980-2012	medium	
United Kingdom	130,000-150,000	1	2009	medium	+	97	1998-2010	good	+	141	1980-2010	good	all others
<b>EU27</b>	<b>4,020,000-7,020,000</b>	<b>34</b>			<b>Increasing</b>								
<b>Europe</b>	<b>12,900,000-19,300,000</b>	<b>100</b>			<b>Increasing</b>								

<sup>1</sup> See 'Sources' at end of factsheet, and for more details on individual EU Member State reports, see the Article 12 reporting portal at <http://bd.eionet.europa.eu/article12/report>.

<sup>2</sup> The designation of geographical entities and the presentation of the material do not imply the expression of any opinion whatsoever on the part of IUCN or BirdLife International concerning the legal status of any country, territory or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

<sup>3</sup> In the few cases where population size estimates were reported in units other than those specified, they were converted to the correct units using standard correction factors.

<sup>4</sup> The robustness of regional trends to the effects of any missing or incomplete data was tested using plausible scenarios, based on other sources of information, including any other reported information, recent national Red Lists, scientific literature, other publications and consultation with relevant experts.

<sup>5</sup> Trend directions are reported as: increasing (+); decreasing (-); stable (0); fluctuating (F); or unknown (?).

<sup>6</sup> Trend magnitudes are rounded to the nearest integer.

## Trend maps

A symbol appears in each country where the species occurs: the shape and colour of the symbol represent the population trend in that country, and the size of the symbol corresponds to the proportion of the European population occurring in that country.

### KEY

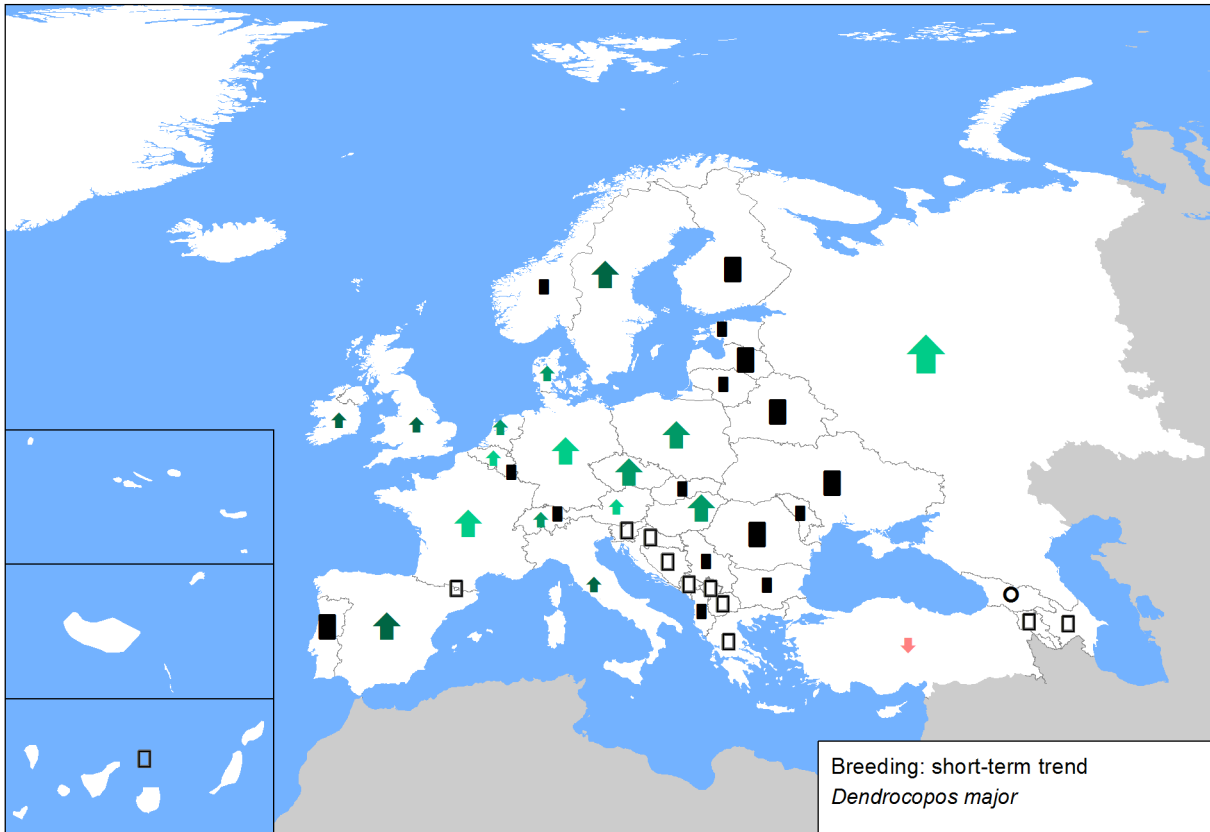
- |   |                                  |
|---|----------------------------------|
| ↑ Large increase ( $\geq 50\%$ )        | ↓ Large decrease ( $\geq 50\%$ ) |
| ↑ Moderate increase (20–49%)            | ↓ Moderate decrease (20–49%)     |
| ↑ Small increase ( $< 20\%$ )           | ↓ Small decrease ( $< 20\%$ )    |
| ↑ Increase of unknown magnitude         | ↓ Decrease of unknown magnitude  |
| ■ Stable or fluctuating                 |                                  |
| □ Unknown                               |                                  |
| ○ Present (no population or trend data) |                                  |
| × Extinct since 1980                    |                                  |

Each symbol, with the exception of Present and Extinct, may occur in up to three different size classes, corresponding to the proportion of the European population occurring in that country.

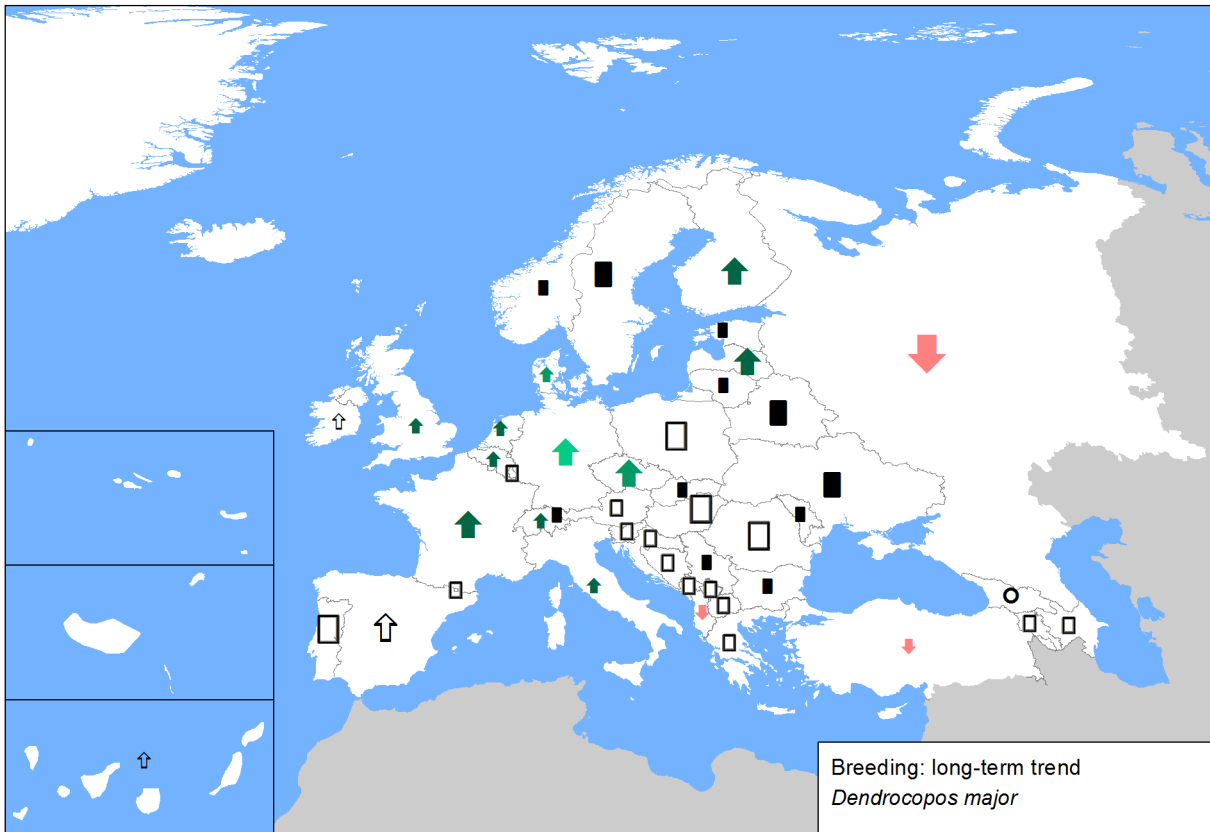
- ↑ Large:  $\geq 10\%$  of the European population
- ↑ Medium: 1–9% of the European population
- ↑ Small:  $< 1\%$  of the European population

The designation of geographical entities and the presentation of the material do not imply the expression of any opinion whatsoever on the part of IUCN or BirdLife International concerning the legal status of any country, territory or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

**Figure 1.** Breeding population sizes and short-term trends across Europe.



**Figure 2.** Breeding population sizes and long-term trends across Europe.



*Dendrocopos major* (Great Spotted Woodpecker)

## Sources

### Albania

**Breeding population size:** Bino pers. obs.

**Breeding short-term trend:** Bino pers. obs.

**Breeding long-term trend:** Bino pers. obs.

### Andorra

**Breeding population size:** BirdLife International 2004

### Armenia

**Breeding population size:** ASPB data

### Austria: all others

**Breeding population size:** BirdLife Austria, extrapolation on the basis of available unpublished and published population and density data

**Breeding short-term trend:** N. Teufelbauer based on data from the Austrian Common Breeding Bird Monitoring

### Azerbaijan

**Breeding population size:** BirdLife International 2004

### Belarus

**Breeding population size:** Zhuravliev D.V. - personal communication

**Breeding short-term trend:** BirdLife International (2004) Birds in Europe: population estimates, trends and conservation status. Cambridge, UK: BirdLife International. (BirdLife Conservation Series, No 12).

**Breeding long-term trend:** Nikiforov M.E., Kozulin A.V., eds. Belarussian birds at the beginning of XXI century: status, numbers, distribution. - 1997. - Minsk. - 187 p.

### Belgium: all others

**Breeding population size:** Data Breeding Bird atlas Wallonia (Jacob et al 2010), Brussels (Weiserbs 2012) and Flanders (Vermeersch et al 2004) in combination with trend data.

**Breeding short-term trend:** Common bird monitoring schemes

**Breeding long-term trend:** Comparison between 2008-2012 estimate and Devillers, 1989 (Atlas of the Belgian Breeding Bird) population estimate

### Bosnia and Herzegovina

**Breeding population size:** unpublsh data

### Bulgaria: all others

**Breeding population size:** Iankov, P. (ed.) 2007. Atlas of breeding birds in Bulgaria. Bulgarian Society for the Protection of Birds, Conservation Series, Book 10. Sofia, BSPB. Common birds monitoring scheme in Bulgaria BSPB Bird Database SPA mapping of breeding birds 2012

**Breeding short-term trend:** Common birds monitoring scheme <http://bspb.org/monitoring/bg/product-view/3/25.html> (Population trend estimate covers the period 2005-2012) Iankov, P. (ed.) 2007. Atlas of breeding birds in Bulgaria. Bulgarian Society for the Protection of Birds, Conservation Series, Book 10. Sofia, BSPB. BSPB Bird Database SPA mapping of breeding birds 2012

**Breeding long-term trend:** Iankov, P. (ed.) 2007. Atlas of breeding birds in Bulgaria. Bulgarian Society for the Protection of Birds, Conservation Series, Book 10. Sofia, BSPB. BSPB Bird Database

### Croatia

**Breeding population size:** BiE III Work group, Croatia

**Breeding short-term trend:** BiE III Work group, Croatia

**Breeding long-term trend:** BiE III Work group, Croatia

### Czech Republic: all others

**Breeding population size:** STASTNY K., BEJCEK V. & HUDEK K. 2006: Atlas hnízdního rozšíření ptáku v České republice. Aventinum Praha. JPSP: <http://jpsp.birds.cz/vysledky.php?taxon=668>

**Breeding short-term trend:** JPSP: <http://jpsp.birds.cz/vysledky.php?taxon=668>

**Breeding long-term trend:** JPSP: <http://jpsp.birds.cz/vysledky.php?taxon=668>

### Denmark: all others

**Breeding population size:** BIRDLIFE INTERNATIONAL (2004) Birds in Europe: population estimates, trends and conservation status. Wageningen, The Netherlands: BirdLife International. (BirdLife Conservation Series No. 12) Heldbjerg, H. & Lerche-Jørgensen, M. (2012): Overvågning af de danske almindlige fuglearter i Danmark 1975-2011. Årsrapport for Punkttællingsprojektet. Dansk Ornitologisk Forening. (The Danish Point Count Census for breeding birds during the period 1999-2011)

**Breeding short-term trend:** Heldbjerg, H. & Lerche-Jørgensen, M. (2012): Overvågning af de danske almindlige fuglearter i Danmark 1975-2011. Årsrapport for Punkttællingsprojektet. Dansk Ornitologisk Forening. (The Danish Point Count Census for breeding birds during the period 1999-2011)

**Breeding long-term trend:** Heldbjerg, H. & Lerche-Jørgensen, M. (2012): Overvågning af de danske almindlige fuglearter i Danmark 1975-2011. Årsrapport for Punkttællingsprojektet. Dansk Ornitologisk Forening. (The Danish Point Count Census for breeding birds during the period 1980-2011)

## *Dendrocopos major* (Great Spotted Woodpecker)

### Estonia: all others

**Breeding population size:** Elts, J., Leito, A., Leivits, A., Luigujõe, L., Mägi, E., Nellis, Rein, Nellis, Renno, Ots, M., Pehlak, H. 2013. Status and numbers of Estonian birds, 2008–2012. *Hirundo* 26(2): 80–112. URL: [http://www.eoy.ee/hirundo/file\\_download/149/Elts\\_et\\_al\\_2013\\_2.pdf](http://www.eoy.ee/hirundo/file_download/149/Elts_et_al_2013_2.pdf)

**Breeding short-term trend:** Elts, J., Leito, A., Leivits, A., Luigujõe, L., Mägi, E., Nellis, Rein, Nellis, Renno, Ots, M., Pehlak, H. 2013. Status and numbers of Estonian birds, 2008–2012. *Hirundo* 26(2): 80–112. URL: [http://www.eoy.ee/hirundo/file\\_download/149/Elts\\_et\\_al\\_2013\\_2.pdf](http://www.eoy.ee/hirundo/file_download/149/Elts_et_al_2013_2.pdf)

**Breeding long-term trend:** Elts, J., Leito, A., Leivits, A., Luigujõe, L., Mägi, E., Nellis, Rein, Nellis, Renno, Ots, M., Pehlak, H. 2013. Status and numbers of Estonian birds, 2008–2012. *Hirundo* 26(2): 80–112. URL: [http://www.eoy.ee/hirundo/file\\_download/149/Elts\\_et\\_al\\_2013\\_2.pdf](http://www.eoy.ee/hirundo/file_download/149/Elts_et_al_2013_2.pdf)

### Finland: all others

**Breeding population size:** Bird monitoring schemes of the Finnish Museum of Natural History, University of Helsinki.

**Breeding short-term trend:** Bird monitoring schemes of the Finnish Museum of Natural History, University of Helsinki.

**Breeding long-term trend:** Bird monitoring schemes of the Finnish Museum of Natural History, University of Helsinki.

### France: all others

**Breeding population size:** <http://www.atlas-ornitho.fr/> MEURET J-Ph. 2010 Pic épeiche *Dendrocopos major*, Delachaux & Niestlé, Paris, p. 258-261

**Breeding short-term trend:** <http://vigienature.mnhn.fr/page/pic-epeiche>

**Breeding long-term trend:** <http://vigienature.mnhn.fr/page/pic-epeiche>

### Georgia

**Breeding population size:** BirdLife International 2004

### Germany: all others

**Breeding population size:** Gedeon, K., C. Grüneberg, A. Mitschke & C. Sudfeldt (in Vorb.): Atlas Deutscher Brutvogelarten. SVD & DDA, Münster.

**Breeding short-term trend:** Monitoring häufiger Brutvögel

**Breeding long-term trend:** Monitoring häufiger Brutvögel

### Greece: all others

**Breeding population size:** BirdLife International 2004. Birds in Europe - Population estimates, trends and conservation status. Cambridge, UK, BirdLife International (BirdLife Conservation Series No 12).

### Hungary: all others

**Breeding population size:** National common bird monitoring scheme (MMM) database. Szép, T., Nagy, K., Nagy, Zs. & Halmos, G. (2012): Population trends of common breeding and wintering birds in Hungary, decline of long-distance migrant and farmland birds during 1999-2012. *Ornis Hungarica* 2012. 20(2): 13-63.

**Breeding short-term trend:** National common bird monitoring scheme (MMM) database. Szép, T., Nagy, K., Nagy, Zs. & Halmos, G. (2012): Population trends of common breeding and wintering birds in Hungary, decline of long-distance migrant and farmland birds during 1999-2012. *Ornis Hungarica* 2012. 20(2): 13-63.

### Republic of Ireland: all others

**Breeding population size:** Expert opinion - R. Coombes, BirdWatch Ireland; <http://birdwatchireland.ie/> McDevitt, A.D., Mazgajski, T.D., Carden, R.F., Coscia, I., Osthoff, C., Coombes, R.H. & Wilson, F. (2011). The origins of Great Spotted Woodpeckers (*Dendrocopos major*) colonizing Ireland, revealed by mitochondrial DNA. *Bird Study* 58, 361-364. Hillis, J.P. (2010) Rare Irish Breeding Birds, 2009 The Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) *Irish Birds* 9:67-76. Hillis, J.P. (2011) Rare Irish Breeding Birds, 2010 The Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) *Irish Birds* 9: 241-250. Hillis, J.P. (2012) Rare Irish Breeding Birds, 2011 The Annual Report of the Irish Rare Birds Panel (IRBBP) *Irish Birds* 9: 411-420.

**Breeding short-term trend:** Expert opinion - R. Coombes (BirdWatch Ireland)

**Breeding long-term trend:** This species was first proven to breed on the island of Ireland in 2006 and in the Republic in 2009. As the species is a recent colonist a long term trend cannot be provided. The short-term trend reflects this colonisation and expansion from seven confirmed nests in 2009 to 19 confirmed nests in 2012, with a further 15 territories held (R. Coombes, BirdWatch Ireland). Using all possible records for 2012, the population has increased by 386% since 2009. The trend data has been categorised as moderate in quality as it is derived from the nest-finding study in the Co. Wicklow Great Spotted Woodpecker stronghold and it is likely that more than 10% of possible breeding records are not detected (expert opinion - R. Coombes, BirdWatch Ireland). Given Co. Wicklow holds the majority of breeding birds, the population trends there are considered to reflect the national trend.

### Italy: all others

**Breeding population size:** Brichetti P & Fracasso G. 2007. *Ornitologia italiana*. Vol.4 (Apodidae-Prunellidae). Alberto Perdisa Editore, Bologna

**Breeding short-term trend:** Rete Rurale Nazionale & LIPU 2013. Uccelli comuni in Italia. Aggiornamento degli andamenti di popolazione al 2012

**Breeding long-term trend:** BirdLife International 2004. Birds in Europe: population estimates, trends and conservation status Cambridge, UK: BirdLife International. BirdLife Conservation Series No. 12 Rete Rurale Nazionale & LIPU 2013. Uccelli comuni in Italia. Aggiornamento degli andamenti di popolazione al 2012

### Kosovo

**Breeding population size:** NGO "Finch" (2014)

### Latvia: all others

**Breeding population size:** Calculation based on data collected in Latvian Breeding bird monitoring scheme: Aunins A., Keišs O. 2012. [Monitoring for the Farmland Bird Population Index. Final report for the year 2012.]. Latvian Ornithological society, 47 pp

**Breeding short-term trend:** Aunins A. 2012. [Changes in the Abundance of Common Birds in Latvia during the Previous Seven Years]. *Putni Dabā* 2013/1, 10 - 13. Aunins A., Keišs O. 2012. [Monitoring for the Farmland Bird Population Index. Final report for the year 2012.]. Latvian Ornithological society, 47 pp.

**Breeding long-term trend:** Kerus V. 2011. Latvijas ligzdojoso putnu stavokla parmainas laika no 1980. līdz 2010. gadam. Promocijas darbs. Rīga: Latvijas Universitāte Strazds M., Priednieks J., Vaverins G. 1994. Latvijas putnu skaits. – Putni daba, 4: 3–18.

## *Dendrocopos major* (Great Spotted Woodpecker)

### Liechtenstein

<b>Breeding population size:</b> Willi, G. (2014) Unpublished collection data
<b>Breeding short-term trend:</b> Willi, G. (2006) Die Vögel des Fürstentums Liechtenstein. Amtlicher Lehrmittelverlag, Vaduz (Naturkundliche Forschung im Fürstentum Liechtenstein, Bd. 22.
<b>Breeding long-term trend:</b> Willi, G. & M.F. Broggi (1985) Die Vogelwelt des Fürstentums Liechtenstein unter Berücksichtigung der benachbarten Gebiete; Teil II: Galliformes (Hühnervögel) – Piciformes (Spechtvögel). Ber. Bot.-Zool. Ges. Liechtenstein-Sargans-Werdenberg, Band 14, S. 103-143.; Willi, G. (2006) Die Vögel des Fürstentums Liechtenstein. Amtlicher Lehrmittelverlag, Vaduz (Naturkundliche Forschung im Fürstentum Liechtenstein, Bd. 22.

### Lithuania: all others

<b>Breeding population size:</b> Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) Jusys, V., Karalius, S., Raudonikis, L. 2012. Lietuvos paukščių pažinimo vadovas. Kaunas: „Lututė“, 288 p.
<b>Breeding short-term trend:</b> Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) Jusys, V., Karalius, S., Raudonikis, L. 2012. Lietuvos paukščių pažinimo vadovas. Kaunas: „Lututė“, 288 p. Kurlavičius, P. (ed.) 2006. Lietuvos perinčių paukščių atlasas. Kaunas: „Lututė“, 256 p. Raudonikis L. 2004. Lithuania. In: Birds in Europe: population estimates, trends, and conservation status. BirdLife International, BirdLife Conservation Series No 12, Cambridge, UK.
<b>Breeding long-term trend:</b> Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) BirdLife International/European Bird Census Council. 2000. European bird populations: estimates and trends. Cambridge, UK: BirdLife International (BirdLife Conservation Series No. 10). Kurlavičius, P. (ed.) 2006. Lietuvos perinčių paukščių atlasas. Kaunas: „Lututė“, 256 p.

### Luxembourg: all others

<b>Breeding population size:</b> LUXOR (2013): NATUR&EMWELT - BIRD-DATABASE, LUXEMBOURG Recorder (2013): database, Musée national d'histoire naturelle, Luxembourg Lorgé P., E. Melchior (2010): Die Vögel Luxemburgs. LNVL, Luxembourg. ISBN: 978-2-919920-01-3
<b>Breeding short-term trend:</b> LUXOR (2013): NATUR&EMWELT - BIRD-DATABASE, LUXEMBOURG Recorder (2013): database, Musée national d'histoire naturelle, Luxembourg Lorgé P., E. Melchior (2010): Die Vögel Luxemburgs. LNVL, Luxembourg. ISBN: 978-2-919920-01-3
<b>Breeding long-term trend:</b> LUXOR (2013): NATUR&EMWELT - BIRD-DATABASE, LUXEMBOURG Recorder (2013): database, Musée national d'histoire naturelle, Luxembourg Lorgé P., E. Melchior (2010): Die Vögel Luxemburgs. LNVL, Luxembourg. ISBN: 978-2-919920-01-3

### The Former Yugoslav Republic of Macedonia

<b>Breeding population size:</b> M. Velevski, unedited data
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### Moldova

<b>Breeding population size:</b> The Atlas of the Breeding Birds of Republic of Moldova. 2010. 100p.
<b>Breeding short-term trend:</b> The Atlas of the Breeding Birds of Republic of Moldova. 2010. 100p.
<b>Breeding long-term trend:</b> The Atlas of the Breeding Birds of Republic of Moldova. 2010. 100p. Аверин Ю. В., Ганя И.М., Успенский Г. Птицы Молдавии, том 2, Кишинев, 1971, Burfield I., Bommel van F., Birds in Europe. Population estimates, trends and conservation status. BirdLife International. Oxford, 2004. 374p.

### Montenegro

<b>Breeding population size:</b> Puzovic, S., Simic, D., Saveljić, D., Gergelj, J., Tucakov, M., Stojnic, N., Hulo, I., Ham, I., Vizi, O., Sciban, M., Ruzic, M., Vucanovic, M., Jovanovic, T. (2004): Birds of Serbia and Montenegro – Size of nesting populations. I trends: 1990-2002. Ciconia 12,
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### Netherlands: all others

<b>Breeding population size:</b> NEM, Sovon en CBS, SOVON (2002)
<b>Breeding short-term trend:</b> NEM, Sovon en CBS, Boele et al. (2013)
<b>Breeding long-term trend:</b> NEM, Sovon en CBS

### Norway

<b>Breeding population size:</b> Shimmings P. & Øien, I.J. 2015. Bestandsestimater og trender for norske hekkefugler. NOF-rapport 2015-2.
<b>Breeding short-term trend:</b> Kålås, J.A., Husby, M., Nilsen, E.B., & Vang, R. 2014. Bestandsvariasjoner for terrestriske fugler i Norge 1996-2013. Norsk Ornitologisk Forening Rapport 4 / 2014.
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<b>Breeding population size:</b> Equipa Atlas (2008). Atlas das Aves Nidificantes em Portugal (1999-2005). Instituto da Conservação da Natureza e da Biodiversidade, Sociedade Portuguesa para o Estudo das Aves, Parque Natural da Madeira e Secretaria Regional do Ambiente e do Mar. Assírio e Alvim. Lisboa; Programa Censos de Aves Comuns (CAC)
<b>Breeding short-term trend:</b> Programa Censos de Aves Comuns (CAC)



## *Dendrocopos major* (Great Spotted Woodpecker)

### Romania: all others

**Breeding population size:** Romanian Commonbird Monitoring Programme, 2007-2012 SOR database, Milvus database

**Breeding short-term trend:** Romanian Commonbird Monitoring Programme, 2007-2012 SOR database, Milvus database

**Breeding long-term trend:** Romanian Commonbird Monitoring Programme, 2007-2012 SOR database, Milvus database

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**Breeding population size:** BPSSS (2014) Unpublished data

**Breeding short-term trend:** BPSSS (2014) Unpublished data

**Breeding long-term trend:** BPSSS (2014) Unpublished data

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**Breeding long-term trend:** Danko Štefan, Darolová Alžbeta, Krištín Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002.

### Slovenia: all others

**Breeding population size:** NOAGS (DOPPS neobjavljeno) - Katarina Denac (katarina.denac@dopps.si)

**Breeding short-term trend:** Kmecl, P. & Figelj, J. (2013): Monitoring splošno razširjenih vrst ptic za določitev slovenskega indeksa ptic kmetijske krajine - poročilo za leto 2013. – DOPPS, Ljubljana.

**Breeding long-term trend:** Geister, I. (1995): Ornitološki atlas Slovenije. DZS, Ljubljana. NOAGS (DOPPS neobjavljeno)

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### Switzerland

**Breeding population size:** Original estimate: Schmid, H., R. Luder, B. Naef-Daenzer, R. Graf & N. Zbinden (1998): Schweizer Brutvogelatlas. Verbreitung der Brutvögel in der Schweiz und im Fürstentum Liechtenstein 1993-1996/Atlas des oiseaux nicheurs de Suisse. Distribution des oiseaux nicheurs en Suisse et au Liechtenstein en 1993-1996. Schweizerische Vogelwarte/Station ornithologique suisse, Sempach. Swiss Ornithological Institute: Updated based on population trend.

**Breeding short-term trend:** Swiss Ornithological Institute. <http://www.vogelwarte.ch/monitoring-common-breeding-birds.html>. Min Max refer to 95% Confidence interval.

**Breeding long-term trend:** Swiss Ornithological Institute. <http://www.vogelwarte.ch/monitoring-common-breeding-birds.html>. Data before 1999 from less standardised survey. Min Max refer to 95% Confidence interval.

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**Breeding population size:** Cemil Gezgin, Zeynel Arslangündoğdu, Güven Eken personal communication. Arslangündoğdu Z.2005. İstanbul Belgrad Ormanının Ornitofaunası Üzerinde Araştırmalar (Studies on the Ornithofauna of Istanbul Belgrade Forests). İ.Ü Fenbilimleri Enstitüsü. Phd Thesis. Birdlife International (2004) Birds in Europe: population estimates, trends and conservation status, Cambridge UK: Birdlife International (Birdlife Conservation series no: 12) [www.kusbank.org](http://www.kusbank.org)

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