# Report on the Conservation Status of the Common Quail (*Coturnix coturnix*) and Turtle Dove (*Streptopelia turtur*)

## 2016 update

**Wild Birds Regulation Unit**
**Parliamentary Secretariat for Agriculture, Fisheries and Animal Rights**
**Ministry for Sustainable Development, the Environment and Climate Change**

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## Key to conservation status codes

| Category | European species of global conservation concern | Conservation status in Europe | Global population or range concentrated in Europe |
|---|---|---|---|
| **SPEC 1** | Yes | – | – |
| **SPEC 2** | No | Unfavourable | Yes |
| **SPEC 3** | No | Unfavourable | No |
| **Non-SPEC[E]** | No | Favourable | Yes |
| **Non-SPEC** | No | Favourable | No |

Source: BirdLife International (2004: xiii)

## Categories of Species of European Conservation Concern (SPECs) and Non-SPECs

| | |
|---|---|
| Each species is initially assessed against the IUCN Red List Criteria (IUCN 2001) at a European level, and then against the additional criteria derived mainly from Birds in Europe I (Tucker and Heath 1994). All population size thresholds refer to minimum population estimates. In descending order of threat, a species is evaluated as: | |
| **Critically Endangered (CR)** | if its European population meets any of the IUCN Red List Criteria (A to E) for Critically Endangered. Such species have an Unfavourable conservation status in Europe because they are considered to be facing an extremely high risk of extinction in the wild (IUCN 2001). |
| **Endangered (EN)** | if its European population meets any of the IUCN Red List Criteria (A to E) for Endangered. Such species have an Unfavourable conservation status in Europe because they are considered to be facing a very high risk of extinction in the wild (IUCN 2001). |
| **Vulnerable (V)** | if its European population meets any of the IUCN Red List Criteria (A to E) for Vulnerable. Such species have an unfavourable conservation status in Europe because they are considered to be facing a high risk of extinction in the wild (IUCN 2001). |
| **Declining (D)** | if its European population does not meet any IUCN Red List Criteria, but declined by more than 10% over 10 years (i.e. 1990–2000) or three generations, whichever is longer. Such species have an Unfavourable conservation status in Europe because they are unable to maintain their populations and/or natural ranges in the long-term. [Birds in Europe I classified species as SPECs if the size of their population or range declined between 1970–1990 by **20%** or more in 33–65% of the population (or by 50% or more in 12–24% of the population). Given the shorter time period covered by Birds in Europe II, an overall decline exceeding **10%** is comparable with this approach.] |
| **Rare (R)** | if its European population does not meet any IUCN Red List Criteria and is not Declining, but numbers fewer than 10,000 breeding pairs (*or* 20,000 breeding individuals *or* 40,000 wintering individuals), and is not marginal to a larger non-European population. Such species have an Unfavourable conservation status in Europe because the small size of their population renders them more susceptible to accelerated declines as a result of:<br>• break-up of social structure;<br>• loss of genetic diversity;<br>• large-scale population fluctuations and catastrophic chance events;<br>• existing or potential exploitation, persecution or disturbance by humans. |
| **Depleted (H)** | if its European population does not meet any IUCN Red List Criteria and is not Rare or Declining, but has not yet recovered from a moderate or large decline suffered during 1970–1990, which led to its classification as Endangered, Vulnerable or Declining in Birds in Europe I. Such species have an Unfavourable conservation status in Europe because they have already undergone a population decline of the type that various directives, conventions and agreements intend to prevent, and have not yet recovered. |

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| **Localised (L)** | if its European population does not meet any IUCN Red List Criteria and is not Declining, Rare or Depleted, but is heavily concentrated, with more that 90% of the European population occurring at 10 or fewer sites (as listed in Heath and Evans 2000). Such species have an Unfavourable conservation status in Europe because their dependence on a small number of sites renders them more susceptible to accelerated declines as a result of:<br>• large-scale population fluctuations and catastrophic chance events;<br>• existing or potential exploitation, persecution and disturbance by humans. |
| **Secure (S)** | if its European population does not meet any of the criteria listed above. Such species have a Favourable conservation status in Europe. |
| In addition, a species is considered to be: | |
| **Data Deficient (DD)** | if there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A species in this category may be well studied, and its biology well known, but appropriate data on its abundance and/or distribution in Europe are lacking. Data Deficient is therefore not a category of threat (IUCN 2001). |
| **Not evaluated (NE)** | if its European population has not yet been evaluated against the criteria. |
| Source: BirdLife International (2004: 8) | |

**Species trends in Birds in Europe (2004)**

| 'Worst case' trend scenario 1990–2000 | 1990–2000 trend category | Criteria met |
|---|---|---|
| >30% decline | Large decline | IUCN Red List Criteria |
| 10–29% decline | Moderate decline | Declining |
| <10% decline and <10% increase | Stable | - |
| 10–29% increase | Moderate increase | - |
| >30% increase | Large increase | - |
| Unknown (insufficient data) | Unknown | - |

Source: BirdLife International (2004)

## IUCN Categories

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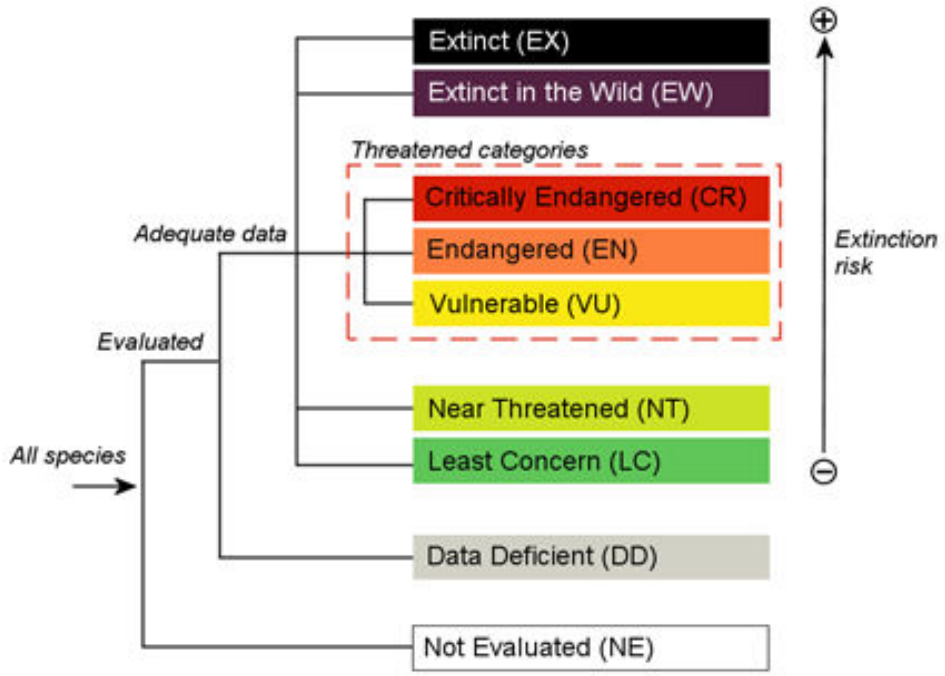
|---|---|
| **EXTINCT (EX)** | A taxon is Extinct when there is no reasonable doubt that the last individual has died. A taxon is presumed Extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form. |
| **EXTINCT IN THE WILD (EW)** | A taxon is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalized population (or populations) well outside the past range. A taxon is presumed Extinct in the Wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form. |
| **CRITICALLY ENDANGERED (CR)** | A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered (see Section V), and it is therefore considered to be facing an extremely high risk of extinction in the wild. |
| **ENDANGERED (EN)** | A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered (see Section V), and it is therefore considered to be facing a very high risk of extinction in the wild. |
| **VULNERABLE (VU)** | A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable (see Section V), and it is therefore considered to be facing a high risk of extinction in the wild. |
| **NEAR THREATENED (NT)** | A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future. |
| **LEAST CONCERN (LC)** | A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category. |
| **DATA DEFICIENT (DD)** | A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. Data Deficient is therefore not a category of threat. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate. It is important to make positive use of whatever data are available. In many cases great care should be exercised in choosing between DD and a threatened status. If the range of a taxon is suspected to be relatively circumscribed, and a considerable period of time has elapsed since the last record of the taxon, threatened status may well be justified. |
| **NOT EVALUATED (NE)** | A taxon is Not Evaluated when it has not yet been evaluated against the criteria. |

**Structure of IUCN categories**




Source: IUCN Red List Categories and Criteria Ver. 3.1 2nd edition. Available at: https://portals.iucn.org/library/efiles/documents/RL-2001-001-2nd.pdf

**IUCN CRITERIA FOR CRITICALLY ENDANGERED, ENDANGERED AND VULNERABLE TAXA**

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| **CRITICALLY ENDANGERED (CR)** | A taxon is Critically Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing an extremely high risk of extinction in the wild:<br><br>A. Reduction in population size based on any of the following:<br><br>1. An observed, estimated, inferred or suspected population size reduction of ≥90% over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any of the following:<br><br>(a) direct observation<br>(b) an index of abundance appropriate to the taxon<br>(c) a decline in area of occupancy, extent of occurrence and/or quality of habitat<br>(d) actual or potential levels of exploitation<br>(e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.<br><br>2. An observed, estimated, inferred or suspected population size reduction of ≥80% over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.<br><br>3. A population size reduction of ≥80%, projected or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.<br><br>4. An observed, estimated, inferred, projected or suspected population size reduction of ≥80% over any 10 year or three generation period, whichever is longer (up to a maximum of 100 |

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| | years in the future), where the time period must include both the past and the future, and where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.<br><br>B. Geographic range in the form of either B1 (extent of occurrence) OR B2 (area of occupancy) OR both:<br><br>1. Extent of occurrence estimated to be less than 100 $km^2$, and estimates indicating at least two of a-c:<br><br>a. Severely fragmented or known to exist at only a single location.<br><br>b. Continuing decline, observed, inferred or projected, in any of the following:<br>(i) extent of occurrence<br>(ii) area of occupancy<br>(iii) area, extent and/or quality of habitat<br>(iv) number of locations or subpopulations<br>(v) number of mature individuals.<br><br>c. Extreme fluctuations in any of the following:<br>(i) extent of occurrence<br>(ii) area of occupancy<br>(iii) number of locations or subpopulations<br>(iv) number of mature individuals.<br><br>2. Area of occupancy estimated to be less than 10 $km^2$, and estimate indicating at least two of a-c:<br><br>a. Severely fragmented or known to exist at only a single location.<br><br>b. Continuing decline, observed, inferred or projected, in any of the following:<br>(i) extent of occurrence<br>(ii) area of occupancy<br>(iii) area, extent and/or quality of habitat<br>(iv) number of locations or subpopulations<br>(v) number of mature individuals.<br><br>c. Extreme fluctuations in any of the following:<br>(i) extent of occurrence<br>(ii) area of occupancy<br>(iii) number of locations or subpopulations<br>(iv) number of mature individuals.<br><br>C. Population size estimated to number fewer than 250 mature individuals and either:<br><br>1. An estimated continuing decline of at least 25% within three years or one generation, whichever is longer, (up to a maximum of 100 years in the future) OR<br><br>2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b):<br><br>a. Population structure in the form of one of the following:<br>(i) no subpopulation estimated to contain more than 50 mature individuals,<br>OR<br>(ii) at least 90% of mature individuals in one subpopulation.<br><br>b. Extreme fluctuations in number of mature individuals.<br><br>D. Population size estimated to number fewer than 50 mature individuals.<br><br>E. Quantitative analysis showing the probability of extinction in the wild is at least 50% within 10 years or three generations, whichever is the longer (up to a maximum of 100 years). |

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| **ENDANGERED (EN)** | A taxon is Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a very high risk of extinction in the wild:<br><br>A. Reduction in population size based on any of the following:<br><br>1. An observed, estimated, inferred or suspected population size reduction of ≥70% over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any of the following:<br><br>(a) direct observation<br>(b) an index of abundance appropriate to the taxon<br>(c) a decline in area of occupancy, extent of occurrence and/or quality of habitat<br>(d) actual or potential levels of exploitation<br>(e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.<br><br>2. An observed, estimated, inferred or suspected population size reduction of ≥50% over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.<br><br>3. A population size reduction of ≥50%, projected or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.<br><br>4. An observed, estimated, inferred, projected or suspected population size reduction of ≥50% over any 10 year or three generation period, whichever is longer (up to a maximum of 100 years in the future), where the time period must include both the past and the future, AND where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.<br><br>B. Geographic range in the form of either B1 (extent of occurrence) OR B2 (area of occupancy) OR both:<br><br>1. Extent of occurrence estimated to be less than 5,000 $km^2$, and estimates indicating at least two of a-c:<br><br>a. Severely fragmented or known to exist at no more than five locations.<br><br>b. Continuing decline, observed, inferred or projected, in any of the following:<br>(i) extent of occurrence<br>(ii) area of occupancy<br>(iii) area, extent and/or quality of habitat<br>(iv) number of locations or subpopulations<br>(v) number of mature individuals.<br><br>c. Extreme fluctuations in any of the following:<br>(i) extent of occurrence<br>(ii) area of occupancy<br>(iii) number of locations or subpopulations<br>(iv) number of mature individuals.<br><br>2. Area of occupancy estimated to be less than 500 $km^2$, and estimates indicating at least two of a-c:<br><br>a. Severely fragmented or known to exist at no more than five locations.<br><br>b. Continuing decline, observed, inferred or projected, in any of the following:<br>(i) extent of occurrence<br>(ii) area of occupancy<br>(iii) area, extent and/or quality of habitat<br>(iv) number of locations or subpopulations |

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| | (v) number of mature individuals.<br><br>c. Extreme fluctuations in any of the following:<br>(i) extent of occurrence<br>(ii) area of occupancy<br>(iii) number of locations or subpopulations<br>(iv) number of mature individuals.<br><br>C. Population size estimated to number fewer than 2,500 mature individuals and either:<br><br>1. An estimated continuing decline of at least 20% within five years or two generations, whichever is longer, (up to a maximum of 100 years in the future) OR<br><br>2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b):<br><br>a. Population structure in the form of one of the following:<br>(i) no subpopulation estimated to contain more than 250 mature individuals,<br>OR<br>(ii) at least 95% of mature individuals in one subpopulation.<br><br>b. Extreme fluctuations in number of mature individuals.<br><br>D. Population size estimated to number fewer than 250 mature individuals.<br><br>E. Quantitative analysis showing the probability of extinction in the wild is at least 20% within 20 years or five generations, whichever is the longer (up to a maximum of 100 years). |
| **VULNERABLE (VU)** | A taxon is Vulnerable when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a high risk of extinction in the wild:<br><br>A. Reduction in population size based on any of the following:<br><br>1. An observed, estimated, inferred or suspected population size reduction of ≥50% over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any of the following:<br><br>(a) direct observation<br>(b) an index of abundance appropriate to the taxon<br>(c) a decline in area of occupancy, extent of occurrence and/or quality of habitat<br>(d) actual or potential levels of exploitation<br>(e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.<br><br>2. An observed, estimated, inferred or suspected population size reduction of ≥30% over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.<br><br>3. A population size reduction of ≥30% projected or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.<br><br>4. An observed, estimated, inferred, projected or suspected population size reduction of ≥30% over any 10 year or three generation period, whichever is longer (up to a maximum of 100 years in the future), where the time period must include both the past and the future, AND where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.<br><br>B. Geographic range in the form of either B1 (extent of occurrence) OR B2 (area of occupancy) OR both: |

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| | 1. Extent of occurrence estimated to be less than 20,000 km$^2$, and estimates indicating at least two of a-c:<br><br>a. Severely fragmented or known to exist at no more than 10 locations.<br><br>b. Continuing decline, observed, inferred or projected, in any of the following:<br>(i) extent of occurrence<br>(ii) area of occupancy<br>(iii) area, extent and/or quality of habitat<br>(iv) number of locations or subpopulations<br>(v) number of mature individuals.<br><br>c. Extreme fluctuations in any of the following:<br>(i) extent of occurrence<br>(ii) area of occupancy<br>(iii) number of locations or subpopulations<br>(iv) number of mature individuals.<br><br>2. Area of occupancy estimated to be less than 2,000 km$^2$, and estimates indicating at least two of a-c:<br><br>a. Severely fragmented or known to exist at no more than 10 locations.<br><br>b. Continuing decline, observed, inferred or projected, in any of the following:<br>(i) extent of occurrence<br>(ii) area of occupancy<br>(iii) area, extent and/or quality of habitat<br>(iv) number of locations or subpopulations<br>(v) number of mature individuals.<br><br>c. Extreme fluctuations in any of the following:<br>(i) extent of occurrence<br>(ii) area of occupancy<br>(iii) number of locations or subpopulations<br>(iv) number of mature individuals.<br><br>C. Population size estimated to number fewer than 10,000 mature individuals and either:<br><br>1. An estimated continuing decline of at least 10% within 10 years or three generations, whichever is longer, (up to a maximum of 100 years in the future) OR<br><br>2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b):<br><br>a. Population structure in the form of one of the following:<br>(i) no subpopulation estimated to contain more than 1,000 mature individuals, OR<br>(ii) all mature individuals in one subpopulation.<br><br>b. Extreme fluctuations in number of mature individuals.<br><br>D. Population very small or restricted in the form of either of the following:<br><br>1. Population size estimated to number fewer than 1,000 mature individuals.<br><br>2. Population with a very restricted area of occupancy (typically less than 20 km$^2$) or number of locations (typically five or fewer) such that it is prone to the effects of human activities or stochastic events within a very short time period in an uncertain future, and is thus capable of becoming Critically Endangered or even Extinct in a very short time period.<br><br>E. Quantitative analysis showing the probability of extinction in the wild is at least 10% within 100 years. |

## 1. Conservation Status of the Common Quail (*Coturnix coturnix*)

1.1 Common Quail (*Coturnix coturnix*) is a species of gamebird found in cropland and grassland ecosystems. BirdLife International (2016a)[1] notes that this species has an extremely large range, and hence does not approach the thresholds for Vulnerable under the range size criterion (Extent of Occurrence <20,000 km$^2$ combined with a declining or fluctuating range size, habitat extent/quality, or population size and a small number of locations or severe fragmentation). Despite the fact that the population trend appears to be decreasing, the decline is not believed to be sufficiently rapid to approach the thresholds for Vulnerable under the population trend criterion (>30% decline over ten years or three generations). The population size is extremely large, and hence does not approach the thresholds for Vulnerable under the population size criterion (<10,000 mature individuals with a continuing decline estimated to be >10% in ten years or three generations, or with a specified population structure). For these reasons the species is evaluated as Least Concern (BirdLife International, 2016a).

### Threats

1.2 BirdLife International (2016a) maintains that this species is declining owing to netting of migrating birds and that local declines may be caused by changing agricultural practices, especially increased use of pesticides.

### Breeding Population

1.3 In Europe, the breeding population is estimated to number 2,800,000–4,700,000 breeding pairs, equating to 8,400,000–14,100,000 individuals. Europe forms 5–24% of the global range, so a very preliminary estimate of the global population size is 35,000,000–300,000,000 individuals, although further validation of this estimate is needed (BirdLife International, 2016a). The European Environment Agency (EEA, 2014)[2] notes that in the EU27, *Coturnix coturnix* has a breeding population size of 1,260,000–2,980,000 calling males and a breeding range size of 2,950,000 km$^2$.

1.4 The EU Management plan for Quail 2009-2011 (Perennou 2009) aims *inter alia* to "**restore the species to a favourable conservation status through reversing the declines in SE Europe and maintaining its natural genetic diversity"**. The Management Plan notes that the conservation status of Quail

[1] http://www.birdlife.org/datazone/speciesfactsheet.php?id=194
[2] http://bd.eionet.europa.eu/article12/summary?period=1&subject=A113

within the EU Territory is favourable (Perennou 2009:10), with the EU Quail population numbering some 884,000–1,912,000 calling males. Perennou (2009) also notes that the analysis of the population estimates and trends for Quail is imprecise, resulting in large differences between minimum and maximum numbers which are due to a combination of reasons, including:

- methodological difficulties, which stem from the fact that breeding females are very difficult to detect and because, once paired, the males stop crowing. This often leads to broad ranges for national estimates, most of which do not actually rely on any field census at all. Therefore, national population estimates cannot be reliably summed up at the European level.

- inadequacy of large-scale compilations, due to the fact that the breeding pair in this species is an ephemeral phenomenon and consequently the number of singing males is widely considered by specialists to be a much more practical index of population abundance than the number of breeding pairs. Broad-scale compilations (e.g. Birdlife International 2004, Tucker & Heath 1994) often use the latter index, and also combine data relating to pairs (though inaccessible in practice, with rare exceptions) with data on calling birds (by nature unpaired).

1.5 There are also high inter-annual fluctuations in breeding numbers for any given country, which do not necessarily reflect the actual variability in the total population size for Quail, but rather a variability in the amplitude of the pre-breeding migration northwards. Perennou (2009) further states that Quail numbers seem to be growing strongly in Arabia and Morocco and probably in all the Maghreb countries. These birds do not constitute separate populations, but are part of the population that breeds in Europe in variable proportions from one year to the next. According to Perennou (2009), an overall analysis of Quail population trends in fact indicates that, following a decline in the 1970s (the precise quantitative amplitude of which is unknown because of the lack of earlier, reliable pan-European estimates or indexes), the overall population trend of sedentary and short migrants seems to be increasing over that of the long migrants in the Palearctic region, leading to an overall population trend which is now “likely increasing in the EU” with the exception of south-eastern Europe.

1.6 Similarly, Guyomarc'h (2003) states that figures for breeding pairs in different countries are considered inaccurate because these estimates are replicated from year to year without revision. They ignore variables such as: exchanges between the Maghreb and Europe; high mobility; possible multiple-breeding attempts; and successive pairs. Thirdly, counts of couples or pairs (a very ephemeral phenomenon in this species) are mixed with data from counts of singing males (by nature "unmated" single males). He also states that there was a decrease in the Quail population in the 1970's north of ca. 45º, but that in the 1990's an overall population increase seems to have taken place.

1.7 Guyomarc'h (2003) calculated a population range of 697,000 to 2,298,710 breeding pairs, based on information obtained from 26 countries (including Russia and Turkey, but excluding Former Yugoslavia) and between 3,749,000 and 7,725,000 calling males, based on data obtained from 19 countries. Perennou (2009) gives an estimate of approximately 2.7–4.6 million breeding pairs across a total of 30 countries, including Russia (European part), Turkey (estimate for Turkey being 300–800 thousand pairs) and Ukraine. He also gives an estimate of 2.8–5.3 million calling males, based on data from just 17 countries.

1.8 The European Commission's *Guide to Sustainable Hunting under the Birds Directive* (EC 2008) listed the Quail as a huntable species with unfavourable conservation status (SPEC 3: Vulnerable, Large Decline) (EC, 2008:90).

1.9 The most recent European Bird Census Council (EBCC) report presents updated population trends and indices of 169 species for the time period 1980–2013, published by the Pan-European Common Bird Monitoring Scheme (PECBMS) in 2015[3]. However, EBCC does not include the Quail in its pan-European index. Hence, no evaluation of the population trends for this species could be obtained through the Pan-European Common Bird Monitoring Scheme.

1.10 Article 12 reports for the reporting period 2008–2012 (EEA, 2014)[4] provides the latest information on the short-term and long-term trends of bird species at the EU27 level (viz. all Member States, excluding Croatia). The previous dataset, provided by Birds in Europe II [BirdLife International (2004)] had shown that the Quail population within the current territory of the European

[3] http://www.ebcc.info/index.php?ID=587
[4] http://bd.eionet.europa.eu/article12/summary?period=1&subject=A113

Union (EU 28, including Croatia) is Stable, with a change in the minimum number of pairs of -1.81% and a change in the maximum number of pairs of -0.56% (Table 1). According to EEA (2014), the breeding population trend in the EU27 is **Decreasing** in the short term and **Unknown** in the long-term. EEA (2014) maintains that the EU population status for *Coturnix coturnix* is **Unknown**, as the data reported were not sufficient to assess the population status of the species. The assessment carried out as part of this update has shown that, on the basis of Article 12 reports (EEA, 2014) (Table 2), at EU28 level, the Quail is **Increasing** in the long-term trend (Min. Pairs: +23.49%; Max. Pairs: +27.40%). However, this percentage increase should be interpreted with caution given that it is based on data pertaining to 74% of Quail population within EU28—the remaining 26% have an Unknown long-term trend.

1.11 During the current (2008–2012) Article 12 reporting period, the EU28 population of Common Quail had a **Stable maximum number of calling males** (-9.23%) but a **Decreasing minimum number of calling males** (-13.65%). The short-term trend classifications for the minimum and maximum number of calling males are based on 98% of the EU28 population since two Member States reported an Unknown short-term trend, namely Belgium and Greece (the latter surrogate data was provided by the Hellenic Ornithological Society, as specified by EEA, 2014).

**Table 1** **Quail EU Breeding Population** (Bold = Ring Recoveries)

| Country | EU Ring Recoveries in Malta (n=19) ∫ | Breeding Pairs (Min - Max) | | Trend | Mag. % (Max - Min) | | Max % Change (Min Pairs) | Max % Change (Max Pairs) | Max % Change (Average Pairs) |
|---|---|---|---|---|---|---|---|---|---|
| Austria | | 5,000 | 15,000 | Increase | 20 | 29 | 1450 | 4350 | 2900 |
| Belgium | | 2,400 | 5,700 | Stable | 0 | 19 | - | - | - |
| Bulgaria | | 8,000 | 15,000 | Decline | 0 | 19 | -1520 | -2850 | -2185 |
| Croatia | | 10,000 | 15,000 | Increase | 50 | 79 | 7900 | 11850 | 9875 |
| Cyprus | | 1,000 | 4,000 | Stable | 0 | 9 | - | - | - |
| Czech Rep. | | 5,000 | 10,000 | Increase | 50 | 79 | 3950 | 7900 | 5925 |
| Denmark | | 200 | 600 | Increase | 80 | 80 | 160 | 480 | 320 |
| Estonia | | 10 | 50 | Stable | 0 | 19 | - | - | - |
| Finland | | 10 | 100 | Increase | 500 | 500 | 50 | 500 | 275 |
| France | | 100,000 | 500,000 | Fluctuating | 20 | 29 | - | - | - |
| Germany | | 12,000 | 32,000 | Increase | 0 | 19 | 2280 | 6080 | 4180 |
| Greece | | 2,000 | 5,000 | Decline | 0 | 19 | -380 | -950 | -665 |
| **Hungary** | **8%** | **70,000** | **94,000** | **Stable** | **0** | **19** | **-** | **-** | **-** |
| Rep. Ireland | | 0 | 20 | Fluctuating | 20 | 29 | - | - | - |
| **Italy** | **92%** | **5,000** | **20,000** | **?** | **-** | **-** | **-** | **-** | **-** |
| Latvia | | 20 | 500 | Increase | 80 | 80 | 16 | 400 | 208 |
| Lithuania | | 1,000 | 2,000 | Increase | 30 | 49 | 490 | 980 | 735 |
| Luxembourg | | 10 | 25 | Stable | 0 | 19 | - | - | - |
| Malta | | 1 | 3 | Decline | 30 | 49 | 0 | -1 | -1 |
| Netherlands | | 2,000 | 6,500 | Increase | 64 | 64 | 1,280 | 4,160 | 2,720 |
| Poland | | 100,000 | 150,000 | Increase | ? | ? | - | - | - |
| Portugal | | 5,000 | 50,000 | Stable | 0 | 19 | - | - | - |
| Romania | | 160,000 | 220,000 | Decline | 0 | 19 | -30,400 | -41,800 | -36,100 |
| Slovakia | | 2,000 | 6,000 | Stable | 0 | 19 | - | - | - |
| Slovenia | | 1,000 | 2,000 | Stable | 0 | 19 | - | - | - |
| Spain | | 320,000 | 435,000 | ? | - | - | - | - | - |
| Sweden | | 10 | 40 | Fluctuating | 20 | 29 | - | - | - |
| UK | | 5 | 450 | Stable | 0 | 1 | - | - | - |
| **Totals** | **100%** | **811,666** | **1,588,988** | | | | **-14,724** | **-8,897** | **-11,811** |
| | | | | Percentage change | | | **-1.81%** | **-0.56%** | **-0.98%** |
| | | | | **Trend (EU Population)** | | | **Stable** | **Stable** | **Stable** |

Data sources: BirdLife International (2004); ∫ Raine (2007).

**Table 2** **Quail EU28 Breeding Population (calling males) in 2014** (Bold = Ring Recoveries)

| Country | EU Ring Recoveries in Malta (n=19)[] | Calling Males (Min - Max) | | Short-term Trend | Mag. % (Max - Min) | | Long-term Trend | Mag. % (Max - Min) | | Short-term | | Long-term | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Max % Change (Min) | Max % Change (Max) | Max % Change (Min) | Max % Change (Max) |
| Austria | | 5,000 | 10,000 | Fluctuating | - | - | Unknown | - | - | - | - | - | - |
| Belgium | | 2,700 | 3,400 | Unknown | - | - | Unknown | - | - | - | - | - | - |
| Bulgaria | | 15,000 | 35,000 | Decline | 40 | 60 | Decline | 20 | 40 | -6,000 | -21,000 | -3,000 | -14,000 |
| Croatia* | | 10,000 | 15,000 | Increase | 50 | 79 | | | | 5,000 | 11,850 | - | - |
| Cyprus | | 2,000 | 5,000 | Stable | 0 | 9 | Increase | 10 | 30 | - | - | 200 | 1,500 |
| Czech Rep.[1] | | 4,000 | 8,000 | Fluctuating | | | Increase | 6863 | 6863 | - | - | 274,520 | 549,040 |
| Denmark | | 1,830 | 1,830 | Increase | 100 | 1000 | Increase | 1000 | 10000 | 1,830 | 18,300 | 18,300 | 183,000 |
| Estonia | | 100 | 3,000 | Fluctuating | | | Fluctuating | | | - | - | - | - |
| Finland | | 150 | 500 | Stable | - | - | Increase | 1635 | 4082 | - | - | 2,453 | 20,410 |
| France | | 100,000 | 300,000 | Increase | 6.1 | 33.9 | Decline | 21.38 | 36.08 | 6,100 | 101,700 | -21,380 | -108,240 |
| Germany | | 26,000 | 49,000 | Fluctuating | - | - | Increase | 96 | 190 | - | - | 24,960 | 93,100 |
| Greece[2] | | 2,000 | 5,000 | Unknown | - | - | Unknown | - | - | - | - | - | - |
| **Hungary** | **5%** | **29,000** | **37,000** | **Decline** | **54** | **54** | **Unknown** | | | **-15,660** | **-19,980** | **-** | **-** |
| Rep. Ireland | | 1 | 20 | Stable | - | - | Stable | - | - | - | - | - | - |
| **Italy** | **95%** | **15,000** | **30,000** | **Increase** | **70** | **80** | **Unknown** | **-** | **-** | **10,500** | **24,000** | **-** | **-** |
| Latvia | | 589 | 956 | Fluctuating | - | - | Increase | 489 | 4680 | - | - | 2,880 | 44,741 |
| Lithuania | | 2,000 | 5,000 | Increase | 20 | 50 | Increase | | 50 | 400 | 2,500 | 0 | 2,500 |
| Luxembourg | | 50 | 100 | Fluctuating | - | - | Decline | 20 | 50 | - | - | -10 | -50 |
| Netherlands | | 1,284 | 15,467 | Increase | 47 | 104 | Increase | 62 | 284 | 603 | 16,086 | 796 | 43,926 |
| Poland | | 85,000 | 135,000 | Decline | 30 | 50 | Unknown | - | - | -25,500 | -67,500 | - | - |
| Portugal | | 100,000 | 500,000 | Stable | - | - | Unknown | - | - | - | - | - | - |
| Portugal (Azores) | | 11,000 | 21,000 | Stable | - | - | Unknown | - | - | - | - | - | - |
| Portugal (Madeira) | | 500 | 1,000 | Stable | - | - | Stable | - | - | - | - | - | - |
| Romania | | 575,000 | 1,150,000 | Fluctuating | - | - | Unknown | - | - | - | - | - | - |
| Slovakia | | 2,000 | 6,000 | Decline | | 20 | Decline | | 20 | 0 | -1,200 | 0 | -1,200 |
| Slovenia | | 1,000 | 2,000 | Decline | 10 | 30 | Decline | 20 | 40 | -100 | -600 | -200 | -800 |
| Spain | | 285,000 | 640,000 | Decline | 53.32 | 53.32 | Decline | | | -151,962 | -341,248 | 0 | 0 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spain (Canary Is.) | | 2,500 | 10,000 | Decline | | | Decline | | | 0 | 0 | 0 | 0 |
| Sweden | | 600 | 1,400 | Increase | 25 | 75 | Increase | 200 | 400 | 150 | 1,050 | 1,200 | 5,600 |
| UK | | 540 | 540 | Decline | 6 | 6 | Decline | 10 | 10 | -32 | -32 | -54 | -54 |
| Total | 100% | **1,279,844** | **2,991,213** | | | | | | | -174,671 | -276,075 | 300,665 | 819,473 |
| | | | | **Percentage change** | | | | | | -13.65% | -9.23% | 23.49% | 27.40% |
| | | | | **Trend (EU Population)** | | | | | | **Decline** (>10% change in 10 years) | **Stable** (<10% change in 10 years) | **Increase** (>20% change since 1980) | **Increase** (>20% change since 1980) |

Data Sources: European Environment Agency (2014); *BirdLife International (2004); ∫ Raine (2007) and BirdLife Malta (pers. comm., 2015)

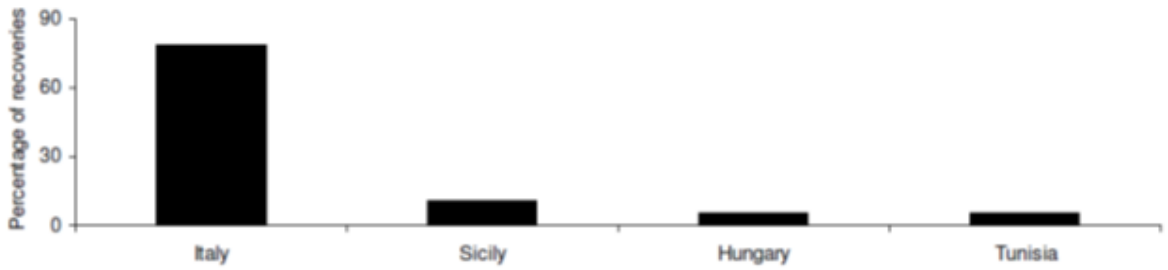
[1] In the absence of a report from the Czech Republic for this taxon, surrogate data were provided by ČSO / BirdLife indicating a breeding population of 4000–8000 calling males, with a fluctuating trend during 2000–2012 and an increasing trend (6863%) during 1982–2012.Source: EEA (2014) Audit Trail, available at: http://bd.eionet.europa.eu/article12/summary/audittrail/?period=1&subject=A113 [Accessed 05/01/2016].

[2] In the absence of a report from Greece for this taxon, surrogate data were provided by the Hellenic Ornithological Society (HOS), the BirdLife Partner in Greece, indicating a breeding population of 2000–5000 calling males, with an unknown trend during 2001–2012 and an unknown trend during 1980–2012. Source: EEA (2014) Audit Trail, available at: http://bd.eionet.europa.eu/article12/summary/audittrail/?period=1&subject=A113 [Accessed 05/01/2016].

**Ring recoveries in Malta**

1.12 Ring recoveries of Quail in Malta are provided by Raine (2007), dating from the 1920s up until the end of 2006 (Fig. 1). Following Raine's publication, an additional ring recovery for this species was recorded by BirdLife Malta in September 2014 (Italy). On average, up to four Quails are fitted with a scientific ring in Malta every year; however none have so far been recovered abroad (BirdLife Malta, pers. comm., 2015).

Fig 1: Percentage of ring recoveries for Quail (*Coturnix coturnix*), ringed overseas and recovered in Malta, by country (n=19)




Source: Raine (2007: 16)

**Quail Reference Population (Ring Recoveries)**

1.13 Table 3 provides data on Quail ring recoveries in Malta (the reference population), the respective number of calling males of the source (reference) population, together with the overall direction of the population trend. Figs. 2 and 3 illustrate the EU population trend categories of this species per Member State. The respective EU source (reference) population trend categories, on the basis of ring recoveries in Malta, are shown in Figs. 4 and 5.

1.14 During the current (2008–2012) Article 12 reporting period, the reference population has a **Stable maximum number of calling males** (+6%) but a **Decreasing minimum number of calling males** (-11.73%). The short-term trend classifications for the minimum and maximum number of calling males are based on 98% of the EU28 population since two Member States reported an Unknown short-term trend, namely Belgium and Greece (the latter surrogate data was provided by the Hellenic Ornithological Society, as specified by EEA, 2014). **The long-term trend classification of the reference population is Unknown (Table 3)**.

| Table 3 | Quail ring recoveries (reference population) from other EU Member States and corresponding population trend | | | | | | | | | Short-term | | Long-term | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Country** | **EU Ring Recoveries in Malta (n=19)** | **Breeding Pairs (Min - Max)** | | **Trend** | **Mag. % (Max - Min)** | | **Long-term Trend** | **Mag. % (Max - Min)** | | **Max % Change (Min)** | **Max % Change (Max)** | **Max % Change (Min)** | **Max % Change (Max)** |
| Italy | 95% | 15,000 | 30,000 | Increase | 70 | 80 | Unknown | - | - | 10,500 | 24,000 | - | - |
| Hungary | 5% | 29,000 | 37,000 | Decline | 54 | 54 | Unknown | - | - | -15,660 | -19,980 | - | - |
| Total | 100% | **44,000** | **67,000** | | | | | | | -5,160 | 4,020 | - | - |
| | | | | Percentage change | | | | | | -11.73% | 6.00% | - | - |
| | | | | **Trend (Ring Recoveries)** | | | | | | **Decline** (>10% change in 10 years) | **Stable** (<10% change in 10 years) | **Unknown** | **Unknown** |

Data Sources: European Environment Agency (2014); *BirdLife International (2004); ∫ Raine (2007) and BirdLife Malta (pers. comm., 2015)

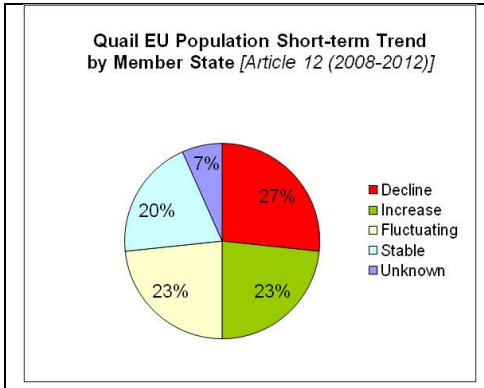



Fig.2: Quail EU28 population short-term trend by Member State

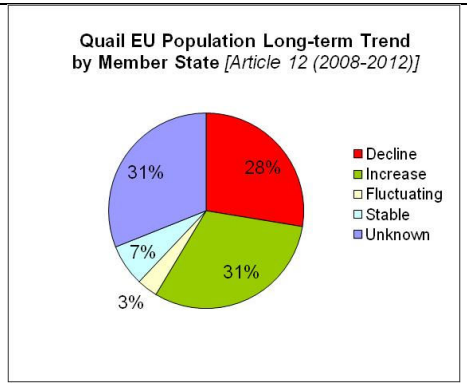



Fig. 3: Quail EU28 population long-term trend by Member State

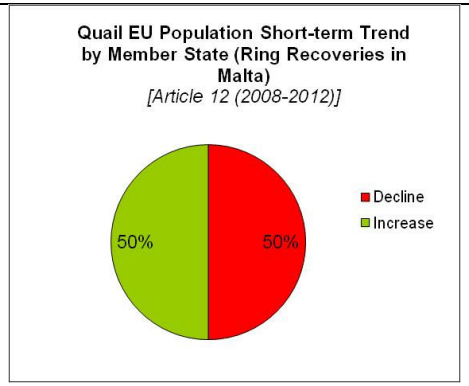



Fig. 4: Quail EU population short-term trend (ring recoveries)

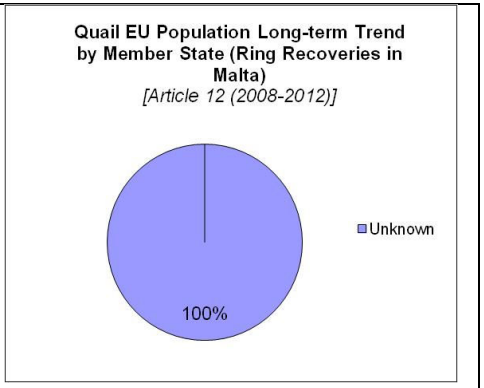



Fig. 5: Quail EU population long-term trend (ring recoveries)

Data sources: European Environment Agency (2014); BirdLife International (2004); Raine (2007); BirdLife Malta (pers. comm. 2015)

## 2. Conservation Status of the Turtle Dove (*Streptopelia turtur*)

2.1 The European Turtle Dove (*Streptopelia turtur*) is a species of pigeon found in cropland and woodland and forest ecosystems. The species has a breeding population size of 2,330,000–4,060,000 pairs and a breeding range size of 2,640,000 km² in the EU27 (viz. all EU Members States excluding Croatia). **The breeding population trend in the EU27 is Decreasing in the short-term and Decreasing in the long-term** (European Environment Agency, 2014). In 2015, the European Commission published the European Red List of Birds, compiled by BirdLife International. The **EU population status** of *Streptopelia turtur* was assessed as **Near Threatened**, because the species comes close to meeting the IUCN Red List criteria at the EU27 scale (EEA, 2014; BirdLife International, 2015: 41). At **European level** the Turtle Dove has been uplisted to **Vulnerable**.

2.2 At the **global level**, this species has also been uplisted to **Vulnerable**. It has undergone rapid declines in much of its European range whilst in Russia and Central Asia it is thought to have experienced more severe declines. Declines are thought to be driven by a number of factors including loss of foraging and nesting sites as well as disease and hunting along its migration (BirdLife International, 2016b)[1]. The population is suspected to be in decline due to ongoing habitat destruction and unsustainable levels of exploitation. In Europe the population size is estimated to be decreasing by 30-49% in 15.9 years (three generations). In Europe, trends since 1980 show that populations have undergone a moderate decline ($p<0.01$), based on data from the Pan-European Common Bird Monitoring Scheme (EBCC/RSPB/BirdLife/Statistics Netherlands, P. Vorisek *in litt*. 2008). In Central Asia (Afghanistan, Kazakhstan, Kyrgystan, Tajikistan, Turkmenistan and Uzbekistan) an analysis of observations of the species suggests that it has experienced a moderate or possibly strong decline over the past two to four decades (R. Ayé *in litt*. 2015). In Uzbekistan the species has declined severely over the past thirty years (R. Kashkarov *in litt*. 2015). The formerly large population in European Russia has crashed by >80% since 2000 and by >90% since 1980 (BirdLife International 2016b). Declines have also been reported from parts of east and south-east Kazakhstan, for example the species is now rare, or even absent in the Manrak Mountains, where it was once common (Wassink and Oreel 2008) (BirdLife International, 2016b).

[1] http://www.birdlife.org/datazone/species/factsheet/22690419

2.3 According to the European Bird Census Council (EBCC, 2015 update)[2], both the long-term trend (1980–2013) and the short-term trend (2004–2013) for the Pan-European population of the Turtle Dove is classified as **Moderate Decline** (Table 4).

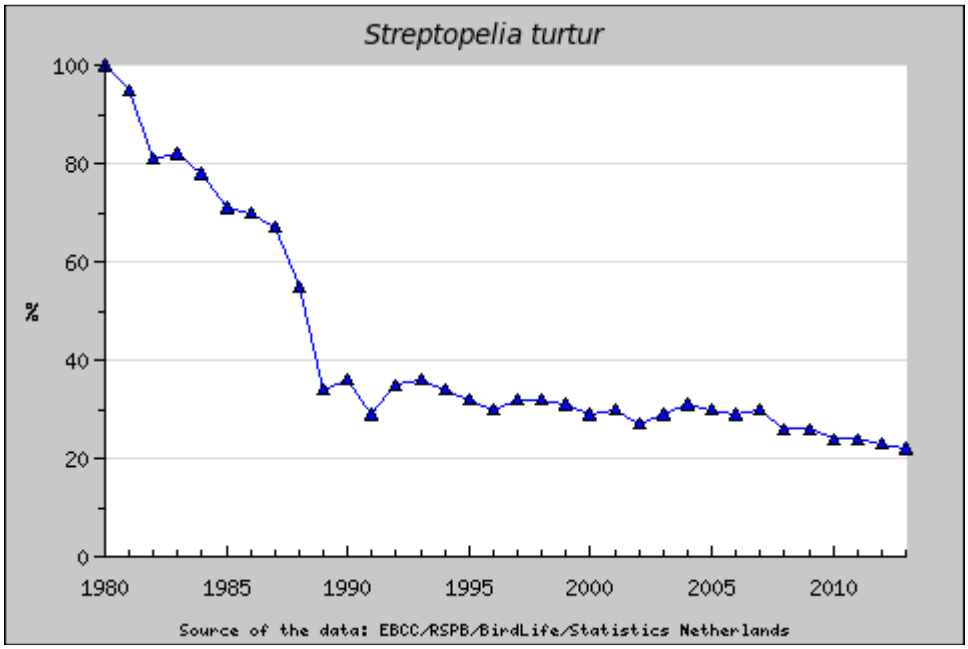
**Table 4 Short-term and long-term trend classification of the Turtle Dove (Pan-European)**

| | Short-term trend (2004–2013) | Long-term trend (1980–2013) |
|---|---|---|
| *Streptopelia turtur* | Moderate decline | Moderate decline |

Source: EBCC (2015 update). Available at: http://www.ebcc.info/index.php?ID=587

2.4 Based on EBCC's 2015 update [2014 base year], the overall change at Pan-European level between 2013 and 2014 was -0.07% in the long-term slope and -2.50% in the short-term slope, with a **total population decline of 78% since 1980** (Fig. 6 and Table 5). Thus, when compared with the previous (2014) EBCC update, **the Turtle Dove population has decreased by a further 1% in the long-term trend (since 1980) and decreased by 8% in the short-term trend (since 2004).**

Fig. 6: Long-term trend (1980–2013)




Source: http://www.ebcc.info/index.php?ID=587

[2] http://www.ebcc.info/index.php?ID=587

**Table 5 Turtle Dove long-term and short-term percentage trend change (2011–2014)**

| Year (EBCC update) | Species | Trend 1980 (%) | Long-term Slope (SE) | % Annual change | Trend 2004 (%) | Short-term Slope (SE) | % Annual change | Habitat |
|---|---|---|---|---|---|---|---|---|
| 2012 | *Streptopelia turtur* | -73 | 0.9611 | -3.89% | -29 | 0.9884 | -1.16% | farm |
| 2013 | *Streptopelia turtur* | -74 | 0.961 | -3.9% | -30 | 0.9879 | -1.21% | farm |
| 2014 | *Streptopelia turtur* | -77 | 0.9607 | -3.93% | -21 | 0.9712 | -2.88% | farm |
| 2015 | *Streptopelia turtur* | **-78** | 0.96 | -4.00% | **-29** | 0.9629 | -3.71% | farm |
| | | | Overall change (2013–2014) | **-0.07%** | | | **-0.83%** | |

Data sources: EBCC (2012a, 2012b, 2013a, 2013b, 2014, 2015)

2.5 Voříšek & Škorpilová (2010) maintain that the population index of Turtle Dove within the territory of the European Union (EU 27) has fallen "from 100% in 1980 to 31% (32% smoothed index) in 2008". The authors also point out that "the smoothed index shows rapid decline of the breeding population in 1980s and less steep decline since early 1990s", concluding that "the breeding population of Turtle Dove in the EU has significantly declined to the level of almost one third of its numbers in 1980", and that "the population appears to be depleted with no signs of recovery" and that the "data from recent years suggest further decline of the population" (Voříšek & Škorpilová, 2010).

2.6 The European Commission's *Guide to Sustainable Hunting under the Birds Directive* (EC 2008) listed the Turtle Dove as a huntable species with unfavourable conservation status (SPEC 3: Moderate Decline) (EC, 2008:90).

**Threats**

2.7 BirdLife International (2016b) lists a number of threats that contribute to the decline of Turtle Doves. Transformation of agricultural land, including destruction of hedges, is thought to be an important factor in the decline of this species as well as the loss of semi-natural habitats. Changes in agricultural practices have several impacts on the species, as they can both reduce food supply and nesting habitat availability and it is likely that the decline in food is the main limiting factor rather than decline in nest site availability (Lutz 2006). Widespread use of chemical herbicides appears to also be a very serious factor, with a consequent decline or elimination of many food plants. Hunting is also significant during migration and in its

wintering range; with an annual toll in France computed at c. 40,000 birds (Baptista *et al*. 2015). The species is also vulnerable to infection by the protozoan parasite *Trichomonas gallinae*, which causes mortality (Stockdale *et al*. 2014). Severe drought in the Sahel zone is thought to be a possible factor in the decline as well as competition with Eurasian Collared-dove *Streptopelia decaocto* (Lutz 2006). A loss of suitable autumn stopping sites (field crops and trees around oases) may also have contributed to its decline as well as a change in tree composition, increased disturbance and an increase in the number of Common Myna (*Acridotheres tristis*) in cities where European Turtle Dove nested in Central Asia (R. Kashkarov *in litt.* 2015) (BirdLife International, 2015[3], 2016b).

**Proposed Conservation Action**

The following conservation actions are proposed by BirdLife International[3] at European and Global level:

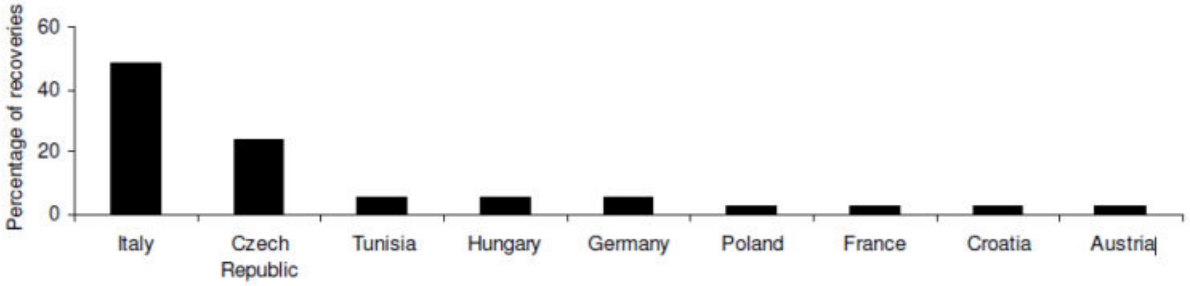
- Breeding and staging habitats should be managed, ensuring the conservation and re-creation of hedges with Hawthorn (*Crataegus*) which is a favoured tree for breeding.
- Reduction in agricultural herbicides.
- Introduction and enforcement of restrictions on hunting to avoid affecting late breeding birds and birds during spring migration.
- Annual national bag statistics where hunting takes place must be collected in order to develop a level of hunting which is sustainable.
- Research and population monitoring should be continued, particularly in its non-European range where little information is currently available.

**Ring recoveries in Malta**

1.15 Ring recoveries of Turtle Dove in Malta are provided by Raine (2007), dating from the 1920s up until the end of 2006 (Fig. 7). Following Raine's publication, an additional two ring recoveries for this species were recorded by BirdLife Malta in May 2013 (Italy) and April 2015 (Hungary). On average, 5–10 Turtle Doves are fitted with a scientific ring in Malta every year, however none have so far been recovered abroad (BirdLife Malta, pers. comm., 2015).

[3] http://www.iucnredlist.org/details/22690419/0

Fig. 7: Percentage of ring recoveries for Turtle Dove (*Streptopelia turtur*), ringed overseas and recovered in Malta, by country (n=37)




Source: Raine (2007: 16)

**Article 12 Reports (2008–2012)**

2.8 Article 12 reports for the reporting period 2008–2012 provides the latest information on the short-term and long-term trends of bird species at the EU27 level (viz. all Member States, excluding Croatia). The previous dataset, provided by Birds in Europe II [BirdLife International (2004)] had shown that the Turtle Dove populations within the current territory of the European Union (EU 28, including Croatia) decreased by 25.08% (minimum pairs) and by 17.82% (maximum pairs) with a change in the geomean population of -20.50% (Table 6). According to BirdLife International (2004), this equated to a Moderate Decline for the minimum, maximum and geomean number of breeding pairs (a change not more than 10% in 10 years is considered to be Stable). Table 7 provides a more recent update based on EU Member States' Article 12 reports for the 2008–2012 reporting period.

**Table 6** **Turtle Dove EU28 Breeding Population in 2004** (Bold = Ring Recoveries)

| Country | EU Ring Recoveries in Malta (n=35) ∫ | Breeding Pairs (Min - Max) | | Trend | Mag. % (Max - Min) | | Max % Change (Min Pairs) | Max % Change (Max Pairs) | Max % Change (Average Pairs) |
|---|---|---|---|---|---|---|---|---|---|
| **Austria** | **2.9%** | **8,000** | **15,000** | **Stable** | **0** | **19** | **-** | **-** | **-** |
| Belgium | | 5,800 | 9,600 | Decline | 50 | 79 | -4,582 | -7,584 | -6,083 |
| Bulgaria | | 20,000 | 100,000 | Stable | 0 | 19 | - | - | - |
| **Croatia** | **2.9%** | **50,000** | **100,000** | **Increase** | **0** | **19** | **9,500** | **19,000** | **14,250** |
| Cyprus | | 5,000 | 15,000 | Decline | 0 | 19 | -950 | -2,850 | -1,900 |
| **Czech Rep.** | **25.7%** | **60,000** | **120,000** | **Stable** | **0** | **19** | **-** | **-** | **-** |
| Denmark | | 25 | 75 | Decline | 50 | 50 | -13 | -38 | -25 |
| Estonia | | 4,000 | 8,000 | Decline | 20 | 29 | -1,160 | -2,320 | -1,740 |
| Finland | | 5 | 30 | Decline | 80 | 80 | -4 | -24 | -14 |
| **France** | **2.9%** | **150,000** | **450,000** | **Increase** | **10** | **10** | **15,000** | **45,000** | **30,000** |
| **Germany** | **5.7%** | **55,000** | **81,000** | **Decline** | **20** | **29** | **-15,950** | **-23,490** | **-19,720** |
| Greece | | 10,000 | 30,000 | Decline | 0 | 19 | -1,900 | -5,700 | -3,800 |
| **Hungary** | **5.7%** | **165,000** | **215,000** | **Stable** | **0** | **19** | **-** | **-** | **-** |
| **Italy** | **51.4%** | **200,000** | **400,000** | **Stable** | **0** | **19** | **-** | **-** | **-** |
| Latvia | | 500 | 2,000 | Decline | 50 | 79 | -395 | -1,580 | -988 |
| Lithuania | | 2,000 | 5,000 | Decline | 30 | 49 | -980 | -2,450 | -1,715 |
| Luxembourg | | 1,800 | 2,000 | Stable | 0 | 19 | - | - | - |
| Malta | | 2 | 5 | Decline | 0 | 19 | 0 | -1 | -1 |
| Netherlands | | 10,000 | 12,000 | Decline | 53 | 53 | -5,300 | -6,360 | -5,830 |
| **Poland** | **2.9%** | **40,000** | **70,000** | **Decline** | **0** | **19** | **-7,600** | **-13,300** | **-10,450** |
| Portugal | | 10,000 | 100,000 | ? | - | - | - | - | - |
| Romania | | 15,000 | 25,000 | Increase | 0 | 19 | 2,850 | 4,750 | 3,800 |
| Slovakia | | 15,000 | 30,000 | Stable | 0 | 19 | - | - | - |
| Slovenia | | 2,000 | 3,000 | Stable | 0 | 19 | - | - | - |
| Spain | | 790,000 | 1,000,000 | Decline | 30 | 49 | -387,100 | -490,000 | -438,550 |
| Sweden | | 0 | 1 | ? | - | - | - | - | - |
| UK | | 44,000 | 44,000 | Decline | 42 | 42 | -18,480 | -18,480 | -18,480 |
| Total | 100% | **1,663,132** | **2,836,711** | | | | -417,064 | -505,426 | -461,245 |
| | | | | **Percentage change** | | | **-25.08%** | **-17.82%** | **-20.50%** |
| | | | | **Trend (EU Population)** | | | **Moderate Decline** | **Moderate Decline** | **Moderate Decline** |

Data sources: BirdLife International (2004); ∫ Raine (2007).

**Table 7** **Turtle Dove EU28 Breeding Population in 2014** (Bold = Ring Recoveries)

| Country | EU Ring Recoveries in Malta (n=37) ∫ | Breeding Pairs (Min - Max) | | Short-term Trend | Mag. % (Max - Min) | | Long-term Trend | Mag. % (Max - Min) | | Breeding Pairs (2004) (Min - Max) | | Short-term | | Long-term | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Max % Change (Min Pairs) | Max % Change (Max Pairs) | Max % Change (Min Pairs) | Max % Change (Max Pairs) |
| **Austria** | **2.7%** | **12,000** | **18,000** | **Decline** | **30** | **50** | **Unknown** | **?** | **?** | **18,000** | **27,000** | **-6,000** | **-9,000** | **-** | **-** |
| Belgium | | 3,000 | 4,500 | Decline | 38 | 58 | Decline | 84 | 90 | 4,740 | 7,110 | -1,740 | -2,610 | -2,520 | -4,050 |
| Bulgaria | | 35,000 | 100,000 | Decline | 27 | 27 | Unknown | ? | ? | 44,450 | 127,000 | -9,450 | -27,000 | - | - |
| **Croatia*** | **2.7%** | **50,000** | **100,000** | **Increase** | **0** | **19** | | | | **40,500** | **81,000** | **9,500** | **19,000** | **-** | **-** |
| Cyprus | | 3,000 | 10,000 | Stable | 0 | 0 | Decline | 10 | 30 | 3,300 | 13,000 | - | - | -300 | -3,000 |
| **Czech Rep** | **24.3%** | **38,000** | **76,000** | **Decline** | **3** | **33** | **Decline** | **62** | **94** | **50,540** | **101,080** | **-12,540** | **-25,080** | **-23,560** | **-71,440** |
| Denmark | | 100 | 100 | Increase | 50 | 50 | Stable | 0 | 0 | 50 | 50 | 50 | 50 | - | - |
| Estonia | | 1,000 | 3,000 | Decline | 20 | 50 | Decline | 50 | 70 | 1,500 | 4,500 | -500 | -1,500 | -500 | -2,100 |
| Finland | | 5 | 10 | Decline | 27 | 61 | Decline | 82 | 90 | 8 | 16 | -3 | -6 | -4 | -9 |
| **France** | **2.7%** | **397,000** | **481,000** | **Decline** | **11** | **20** | **Decline** | **20** | **30** | **476,400** | **577,200** | **-79,400** | **-96,200** | **-79,400** | **-144,300** |
| **Germany** | **5.4%** | **25,000** | **45,000** | **Decline** | **38** | **58** | **Decline** | **20** | **60** | **39,500** | **71,100** | **-14,500** | **-26,100** | **-5,000** | **-27,000** |
| Greece | | 30,000 | 80,000 | Decline | 5 | 15 | Decline | 10 | 20 | 34,500 | 92,000 | -4,500 | -12,000 | -3,000 | -16,000 |
| **Hungary** | **8.1%** | **64,000** | **150,000** | **Stable** | **0** | **0** | **Unknown** | **?** | **?** | **165,000** | **215,000** | **-** | **-** | **-** | **-** |
| **Italy** | **51.4%** | **150,000** | **300,000** | **Unknown** | **?** | **?** | **Unknown** | **?** | **?** | **200,000** | **400,000** | **-** | **-** | **-** | **-** |
| Latvia | | 10,341 | 30,431 | Stable | 0 | 0 | Stable | 0 | 0 | 10,341 | 30,431 | - | - | - | - |
| Lithuania | | 4,000 | 7,000 | Decline | 5 | 10 | Decline | 60 | 80 | 4,400 | 7,700 | -400 | -700 | -2,400 | -5,600 |
| Luxembourg | | 150 | 200 | Decline | 20 | 20 | Decline | 30 | 50 | 180 | 240 | -30 | -40 | -45 | -100 |
| Netherlands | | 4,763 | 5,715 | Decline | 27 | 55 | Decline | 82 | 90 | 7,383 | 8,858 | -2,620 | -3,143 | -3,906 | -5,144 |
| **Poland** | **2.7%** | **25,000** | **49,000** | **Decline** | **25** | **55** | **Unknown** | **?** | **?** | **38,750** | **75,950** | **-13,750** | **-26,950** | **-** | **-** |
| Portugal | | 10,000 | 50,000 | Decline | 39 | 59 | Decline | 20 | 40 | 15,900 | 79,500 | -5,900 | -29,500 | -2,000 | -20,000 |
| Romania | | 120,000 | 300,000 | Fluctuating | - | - | Unknown | - | - | 120,000 | 300,000 | - | - | - | - |
| Slovakia | | 15,000 | 30,000 | Stable | 0 | 0 | Stable | 0 | 0 | 15,000 | 30,000 | - | - | - | - |
| Slovenia | | 3,500 | 5,000 | Decline | 30 | 50 | Decline | 30 | 50 | 5,250 | 7,500 | -1,750 | -2,500 | -1,050 | -2,500 |
| Spain | | 1,370,000 | 2,285,000 | Decline | 29 | 29 | Decline | 0.80 | 2.50 | 1,767,300 | 2,947,650 | -397,300 | -662,650 | -10,960 | -57,125 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UK | | 14,000 | 14,000 | Decline | 76.70 | 76.70 | Decline | 91.73 | 91.73 | 24,738 | 24,738 | -10,738 | -10,738 | -12,842 | -12,842 |
| Total | 100% | **2,384,859** | **4,143,956** | | | | | | | **3,087,730** | **5,228,623** | -551,571 | -916,667 | -147,487 | -371,210 |
| | | | | **Percentage change** | | | | | | | | -23.13% | -22.12% | -6.18% | -8.96% |
| | | | | **Trend (EU Population)** | | | | | | | | **Decline** (> 10% change in 10 years) | **Decline** (>10% change in 10 years) | **Stable** (<20% change since 1980) | **Stable** (< 20% change since 1980) |

Data Sources: European Environment Agency (2014); *BirdLife International (2004); ∫ Raine (2007) and BirdLife Malta (pers. comm., 2015)

[1] In the absence of a report from the Czech Republic for this taxon, surrogate data were provided by ČSO / BirdLife indicating a breeding population of 38000–76000 pairs, with a decreasing trend (3–33%) during 2000–2012 and a decreasing trend (62–94%) during 1982–2012.Source: EEA (2014) Audit Trail, available at: http://bd.eionet.europa.eu/article12/summary/audittrail/?period=1&subject=A210 [Accessed 05/01/2016].

[2] In the absence of a report from Greece for this taxon, surrogate data were provided by the Hellenic Ornithological Society (HOS), the BirdLife Partner in Greece, indicating a breeding population of 30000–80000 pairs, with a decreasing trend (5–15%) during 2007–2013 and a decreasing trend (10–20%) during 1980–2012. Source: EEA (2014) Audit Trail, available at: http://bd.eionet.europa.eu/article12/summary/audittrail/?period=1&subject=A210 [Accessed 05/01/2016].

**Comparison between Birds in Europe II (2004) and Article 12 data (EEA, 2014)**

2.9 The number of breeding pairs reported in Birds in Europe II (BirdLife International, 2004) was compared with the number of breeding pairs reported in Article 12 reports for the reporting period 2008–2012. When compared with the 2004 data, both the minimum and maximum number of breeding pairs increased notwithstanding the number of declines reported by Member States (Table 8). Although in their Article 12 reports a number of Member States reported a percentage **decline** in the number of breeding pairs, they also reported having a **larger breeding population in 2014** than in 2004. There seems to be no correlation between the two datasets pertaining to some Member States. In 2004, the total number of Turtle Doves at EU28 level (including Croatia) was reported by BirdLife International (2004) at 1,663,132–2,836,711 pairs yet in 2014 the population at EU27 level (excluding Croatia) was reported by the European Environment Agency at 2,330,000–4,060,000 pairs[1], equating to a 40–43% increase over a 10-year period. Such increase does not correlate with the recent uplisting of this species to Near Threatened at EU level.

| **Table 8** | **EU Breeding Population: a comparison between Birds in Europe II (2004) and Article 12 reports (2008–2012)** | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Species** | **Breeding Pairs (Article 12 Reports – EU27) [2014] (Min - Max)** | | **Breeding Pairs (Birds in Europe II – EU28) [2004] (Min - Max)** | | **Change in Breeding Pairs** (comparison between Article 12 and BIE II) **(Min – Max)** | | **% Change** (comparison between Article 12 and BIE II) **(Min – Max)** | |
| *Streptopelia turtur* | 2,330,000 | 4,060,000 | 1,663,132 | 2,836,711 | +666,868 | +1,223,289 | +40.01% | +43.12% |

Although the number of breeding pairs within the EU territory, as reported by Member States in their Article 12 submissions, is higher than the corresponding number of breeding pairs in Birds in Europe II, this increase is not reflected in the combined percentage change over the same 10-year reporting period.

Data Sources: BirdLife International (2004); European Environment Agency (2014)

2.10 The mismatch between the number of breeding pairs reported through Article 12 (2008–2012) and the number of breeding pairs reported in Birds in Europe II can be better illustrated in the example below. The data shows three Member States reporting a decline in the number of Turtle Dove breeding

[1] Includes the surrogate data for Czech Republic and Greece, as reported by the European Environment Agency in the Audit Trail for this species: "In the absence of a report from the Czech Republic for this taxon, surrogate data were provided by ČSO / BirdLife indicating a breeding population of 225000–450000 pairs, with a decreasing trend (50–83%) during 2000–2012 and a decreasing trend (98–99%) during 1982–2012. In the absence of a report from Greece for this taxon, surrogate data were provided by the Hellenic Ornithological Society (HOS), the BirdLife Partner in Greece, indicating a breeding population of 80000–110000 pairs, with a stable trend during 2007–2013 and an unknown trend during 1980–2012."
Available at: http://bd.eionet.europa.eu/article12/summary/audittrail/?period=1&subject=A361

pairs (ranging from 11–20% up to 30–50% decline), yet the corresponding number of breeding pairs as reported in their Article 12 reports (EEA, 2014) is higher than the number of breeding pairs reported in Birds in Europe II (BLI, 2004) (see encircled columns).

| EU Member State | Breeding Pairs (EEA, 2014) (Min - Max) | | Short-term Trend (EEA, 2014) | Mag. % (Min - Max) | | Breeding Pairs (BLI, 2004) (Min - Max) | |
|---|---|---|---|---|---|---|---|
| Austria | 12,000 | 18,000 | Decline | 30 | 50 | 8,000 | 15,000 |
| France | 397,000 | 481,000 | Decline | 11 | 20 | 150,000 | 450,000 |
| Spain | 1,370,000 | 2,285,000 | Decline | 29 | 29 | 790,000 | 1,000,000 |

2.11 In order to overcome this anomaly, an online percentages calculator (http://www.cleavebooks.co.uk/scol/calpcent.htm) was used. This calculator returns a value that corresponds to the number of breeding pairs in 2004 (the "**Original value**"), based on the number of breeding pairs (the "**Value** after **DEcrease**") and "**Percentage change"** as reported by Member States in their Article 12 (2008–2012) reports (EEA, 2014). Using the above example, the revised figures are highlighted below:

| EU Member State | Breeding Pairs (EEA, 2014) (Min - Max) | | Short-term Trend (EEA, 2014) | Mag. % (Max) | Breeding Pairs (2004) (Min - Max) | |
|---|---|---|---|---|---|---|
| Austria | 12,000 | 18,000 | Decline | 50 | 24,000 | 36,000 |
| France | 397,000 | 481,000 | Decline | 20 | 496,250 | 601,250 |
| Spain | 1,370,000 | 2,285,000 | Decline | 29 | 1,929,577 | 3,218,310 |

2.12 The objective of the above exercise was to establish a clearer (more realistic) trend analysis of the EU and reference populations on the basis of the reported maximum magnitude change. At **EU28 level**, the Turtle Dove is **Stable[2] in the long-term trend** (Min. Pairs: -6.18%; Max. Pairs: -8.96%) but **Declining in the short-term trend** (Min. Pairs: -23.13%; Max. Pairs: -22.12%). It should be noted that a similar output for the short-term and long-term trend classifications was obtained when the Turtle Dove populations were analysed at EU28 level *without using the adjusted figures as explained above*, namely: **Stable in the long-term trend** (Min. Pairs: -4.78%; Max. Pairs: -7.10%) but **Declining in the short-term trend** (Min. Pairs: -17.86%; Max. Pairs: -17.53%).

[2] The trend classification 'Stable' represents a change in the total number of breeding pairs of not more than 10% in 10 years (short-term trend) and a change of not more than 20% in the total number of breeding pairs since 1980 (long-term trend).

**Turtle Dove Reference Population (Ring Recoveries)**

2.13 Table 9 provides data on ring recoveries of Turtle Dove in Malta (the reference population), the respective number of breeding pairs pertaining to the source (reference) population, together with the overall direction of the population trend. Figs. 8 and 9 illustrate the EU population trend categories of this species per Member State. The respective EU source (reference) population trend categories, on the basis of ring recoveries in Malta, are shown in Figs. 10 and 11. The reference population is **Declining in the short-term trend** (minimum and maximum pairs) but appears to be **Stable in the long-term trend** (minimum and maximum pairs). However, given that both the short-term and long-term trend categories for the major source population in Italy (51.4% of the total reference population) is 'Unknown', such trend classification should be interpreted with caution.

**Table 9** **Turtle Dove ring recoveries (reference population) from other EU Member States and corresponding population trend**

| Country | EU Ring Recoveries in Malta (n=37) ∫ | Breeding Pairs (Min - Max) | | Short-term Trend | Mag. % (Max - Min) | | Long-term Trend | Mag. % (Max - Min) | | Breeding Pairs (2004) (Min - Max) | | Short-term | | Long-term | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Max % Change (Min Pairs) | Max % Change (Max Pairs) | Max % Change (Min Pairs) | Max % Change (Max Pairs) |
| Italy | 51.4% | 150,000 | 300,000 | Unknown | ? | ? | Unknown | ? | ? | 200,000 | 400,000 | - | - | - | - |
| Czech Rep | 24.3% | 38,000 | 76,000 | Decline | 3.00 | 33.00 | Decline | 62.00 | 94.00 | 50,540 | 101,080 | -12,540 | -25,080 | -23,560 | -71,440 |
| Hungary | 8.1% | 64,000 | 150,000 | Stable | 0.00 | 0.00 | Unknown | ? | ? | 165,000 | 215,000 | - | - | - | - |
| Germany | 5.4% | 25,000 | 45,000 | Decline | 38.00 | 58.00 | Decline | 20.00 | 60.00 | 39,500 | 71,100 | -14,500 | -26,100 | -5,000 | -27,000 |
| Poland | 2.7% | 25,000 | 49,000 | Decline | 25.00 | 55.00 | Unknown | ? | ? | 38,750 | 75,950 | -13,750 | -26,950 | - | - |
| France | 2.7% | 397,000 | 481,000 | Decline | 11.00 | 20.00 | Decline | 20.00 | 30.00 | 476,400 | 577,200 | -79,400 | -96,200 | -79,400 | -144,300 |
| Croatia* | 2.7% | 50,000 | 100,000 | Increase | 0.00 | 19.00 | | | | 40,500 | 81,000 | 9,500 | 19,000 | | |
| Austria | 2.7% | 12,000 | 18,000 | Decline | 30.00 | 50.00 | Unknown | ? | ? | 18,000 | 27,000 | -6,000 | -9,000 | - | - |
| Total | 100% | **761,000** | **1,219,000** | | | | | | | **1,028,690** | **1,548,330** | -104,150 | -139,250 | -84,400 | -171,300 |
| | | | | Percentage change | | | | | | | | -13.69% | -11.42% | -11.09% | -14.05% |
| | | | | **Trend (Ring Recoveries)** | | | | | | | | **Decline** (> 10% change in 10 years) | **Decline** (>10% change in 10 years) | **Stable** (<20% change since 1980) | **Stable** (< 20% change since 1980) |

Data Sources: European Environment Agency (2014); *BirdLife International (2004); ∫ Raine (2007) and BirdLife Malta (pers. comm., 2015)

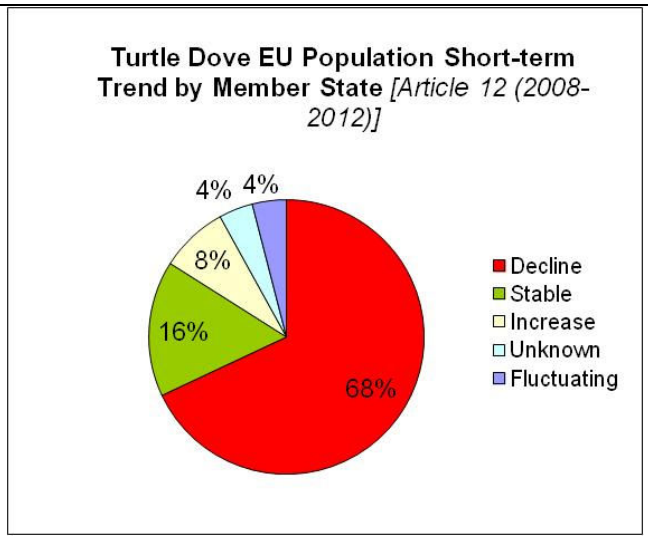



Fig. 8: Turtle Dove EU28 population short-term trend by Member State

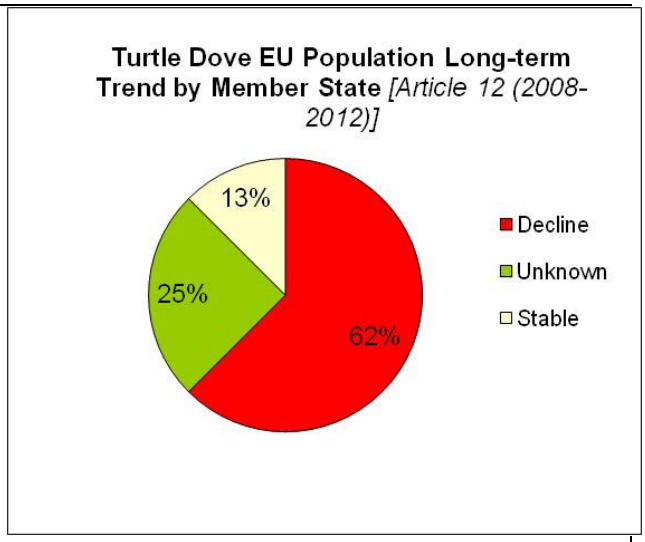



Fig. 9: Turtle Dove EU28 population long-term trend by Member State

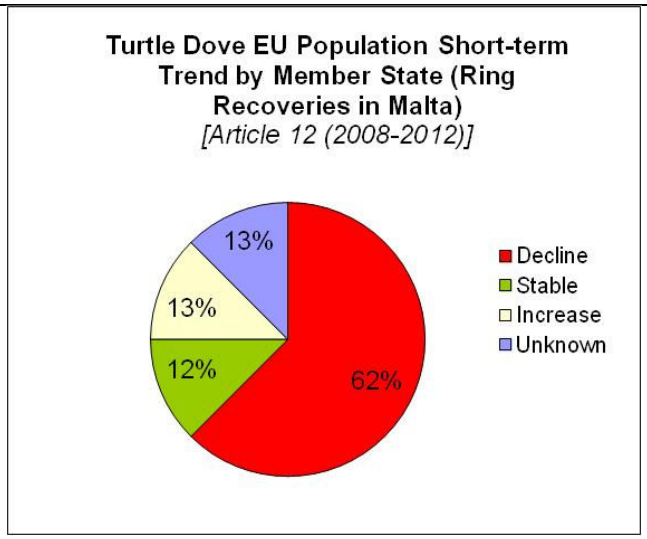



Fig. 10: Turtle Dove EU population short-term trend (ring recoveries)

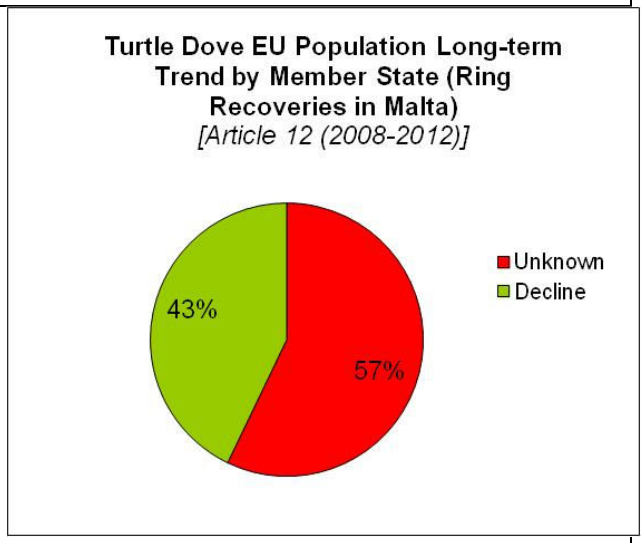



Fig. 11: Turtle Dove EU population long-term trend (ring recoveries)

Data sources: European Environment Agency (2014); BirdLife International (2004); Raine (2007); BirdLife Malta (pers. comm. 2015)

2.14 The Turtle Dove reference population is **Declining in the short-term trend** (Min. Pairs: -13.69%; Max. Pairs: -11.42%) but appears to be **Stable in the long-term trend** (minimum and maximum pairs). However, given that both the short-term and long-term trend categories for the major source population in Italy (51.4% of the total reference population) is 'Unknown', such trend classification should be interpreted with caution, taking into full account the overall decline of this species at EU (Near Threatened), European (Vulnerable) and Global (Vulnerable) scales.

**Conclusions regarding the conservation status of Common Quail and Turtle Dove**

**Common Quail (*Coturnix coturnix*)**

2.15 The European Environment Agency (2014) notes that the breeding population trend of the Common Quail in the EU27 is **Decreasing** in the short-term and **Unknown** in the long-term. The EU population status for Common Quail is **Unknown**, as the data reported were not sufficient to assess the population status of the species (EEA, 2014). The assessment carried out as part of this update has shown that, on the basis of Article 12 reports (EEA, 2014) at EU28 level (EU27 Article 12 reports + Croatian data for 2004), the Quail is **Increasing** in the long-term trend (Min. Pairs: +23.49%; Max. Pairs: +27.40%). However, this percentage increase should be interpreted with caution given that it is based on data pertaining to only 74% of Quail population within EU28—the remaining 26% have an Unknown long-term trend. In the short-term, the EU28 population of Common Quail has a **Stable maximum number of calling males** (-9.23%) but a **Decreasing minimum number of calling males** (-13.65%). Similarly, the reference population of the Common Quail has a short-term trend classification of **Stable** in the **maximum number of calling males** (+6%) but **Decreasing** in the **minimum number of calling males** (-11.73%). **The long-term trend of the reference population is Unknown**. The Common Quail (*Coturnix coturnix*) has remained within the IUCN Least Concern classification at the EU27 and European scale (BirdLife International, 2015: 38). The Common Quail is not included in the Pan-European Common Bird Monitoring Scheme.

***Turtle Dove* (*Streptopelia turtur*)**

2.16 In 2015 the **EU population status** of Turtle Dove (*Streptopelia turtur*) was assessed as **Near Threatened**, because the species comes close to meeting the IUCN Red List criteria at the EU27 scale (BirdLife International, 2015: 41). At the **European and Global levels** the Turtle Dove has been uplisted to **Vulnerable**. The latest (2015) European Bird Census Council update has shown that at Pan-European level, the **Turtle Dove continued to decline by an additional 1% in the long-term trend**, reaching a **total decline of 78% since 1980**. Compared with the previous (2014) EBCC update, which had shown an increase of 9% in the short-term trend, the current EBCC update has reported **a decline of 8% in the short-term trend**, resulting in **a total Turtle Dove population decline of 29% since 2004**.

2.17 **The Pan-European population of the Turtle Dove is classified as Moderate Decline** (EBCC, 2015 update) [both the short-term and long-term trends]. The number of Turtle Dove breeding pairs reported in Birds in Europe II (BirdLife International, 2004) was compared with the number of breeding pairs reported in Article 12 reports for the reporting period 2008–2012. Although in their Article 12 reports a number of Member States reported a percentage **decline** in the number of breeding pairs, they also reported having a **larger breeding population in 2014** (Article 12) than in 2004 (Birds in Europe II). There seems to be no correlation between the two datasets pertaining to some Member States. In 2004, the total number of Turtle Doves at EU28 level (including Croatia) was reported by BirdLife International (2004) at 1,663,132–2,836,711 pairs yet in 2014 the population at EU27 level (excluding Croatia) was reported by the European Environment Agency at 2,330,000–4,060,000 pairs[1], equating to a 40–43% increase over a 10-year period. Such increase does not correlate with the recent uplisting of this species to Near Threatened at EU level.

2.18 This update has attempted to tally the number of Turtle Dove breeding pairs in 2004 (Birds in Europe II) with those of 2014 on the basis of the percentage declines reported by the Member States in their Article 12 submissions. The anomalies between the two datasets cannot be easily explained or justified. For example, it is very unclear why Austria had reported a Stable Turtle Dove population at 8,000–15,000 pairs in 2004 then 12,000–18,000 pairs in 2014 with a decline of 30–50% in the short-term trend. Similarly, Spain had reported a Turtle Dove population of 790,000–1,000,000 pairs in 2004 with a decline of 30–49% yet in 2014 reported a population of 1,370,000–2,285,000 with a 29% decline in the short-term trend. The objective of the exercise was to establish a clearer (more realistic) trend analysis of the EU and reference populations on the basis of the reported maximum magnitude change. The assessment shows that at **EU28 level**, the Turtle Dove is **Stable in the long-term trend** (Min. Pairs: -6.18%; Max. Pairs: -8.96%) but **Declining in the short-term trend** (Min. Pairs: -23.13%; Max. Pairs: -22.12%). A similar output

[1] Includes the surrogate data for Czech Republic and Greece, as reported by the European Environment Agency in the Audit Trail for this species: "In the absence of a report from the Czech Republic for this taxon, surrogate data were provided by ČSO / BirdLife indicating a breeding population of 225000–450000 pairs, with a decreasing trend (50–83%) during 2000–2012 and a decreasing trend (98–99%) during 1982–2012. In the absence of a report from Greece for this taxon, surrogate data were provided by the Hellenic Ornithological Society (HOS), the BirdLife Partner in Greece, indicating a breeding population of 80000–110000 pairs, with a stable trend during 2007–2013 and an unknown trend during 1980–2012."
Available at: http://bd.eionet.europa.eu/article12/summary/audittrail/?period=1&subject=A361

for the short-term and long-term trend classifications was obtained when the Turtle Dove populations were analysed at EU28 level *without using the adjusted figures as explained above*, namely: **Stable in the long-term trend** (Min. Pairs: -4.78%; Max. Pairs: -7.10%) but **Declining in the short-term trend** (Min. Pairs: -17.86%; Max. Pairs: -17.53%).

2.19 The Turtle Dove reference population is **Declining in the short-term trend** (Min. Pairs: -13.69%; Max. Pairs: -11.42%) but appears to be **Stable in the long-term trend** (minimum and maximum pairs). However, given that both the short-term and long-term trend categories for the major source population in Italy (51.4% of the total reference population) is 'Unknown', such trend classification should be interpreted with caution, taking into full account the overall decline of this species at EU (Near Threatened), European (Vulnerable) and Global (Vulnerable) scales.

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