Conservation status of seven finch species: Common Chaffinch (*Fringilla coelebs*), Common Linnet (*Linaria cannabina*), European Goldfinch (*Carduelis carduelis*), European Greenfinch (*Chloris chloris*), Hawfinch (*Coccothraustes coccothraustes*), European Serin (*Serinus serinus*) and Eurasian Siskin (*Spinus spinus*)

2017 update

Wild Birds Regulation Unit
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Contents

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: • break-up of social structure; • loss of genetic diversity; • large-scale population fluctuations and catastrophic chance events; • 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.
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: • large-scale population fluctuations and catastrophic chance events; • 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)

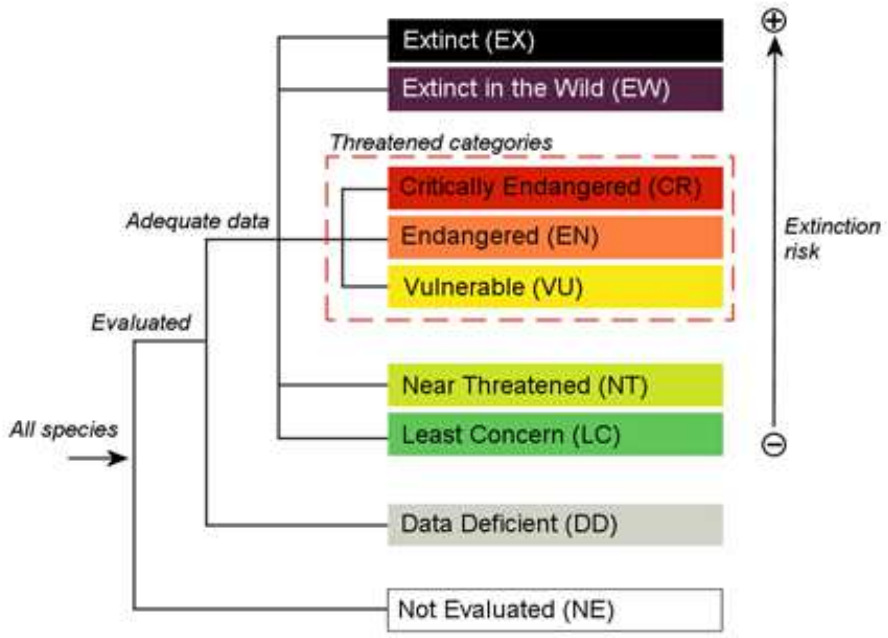
'Worst case' trend scenario 1990–2000	1990–2000 trend category	Criteria met
>30% decline	Large decline	IUCN Red List Criteria
10–29% decline	Moderate decline	Declining
<10% decline and <10% increase	Stable	-
10–29% increase	Moderate increase	-
>30% increase	Large increase	-
Unknown (insufficient data)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

Source: BirdLife International (2004)

IUCN Categories

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

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: A. Reduction in population size based on any of the following: 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: (a) direct observation (b) an index of abundance appropriate to the taxon (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat (d) actual or potential levels of exploitation (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites. 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. 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. 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 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. B. Geographic range in the form of either B1 (extent of occurrence) OR B2 (area of occupancy) OR both: 1. Extent of occurrence estimated to be less than 100 km^2, and estimates indicating at least two of a-c: a. Severely fragmented or known to exist at only a single location. b. Continuing decline, observed, inferred or projected, in any of the following: (i) extent of occurrence (ii) area of occupancy (iii) area, extent and/or quality of habitat (iv) number of locations or subpopulations (v) number of mature individuals. c. Extreme fluctuations in any of the following: (i) extent of occurrence (ii) area of occupancy (iii) number of locations or subpopulations (iv) number of mature individuals. 2. Area of occupancy estimated to be less than 10 km^2, and estimate indicating at least two of a-c: a. Severely fragmented or known to exist at only a single location. b. Continuing decline, observed, inferred or projected, in any of the following: (i) extent of occurrence (ii) area of occupancy (iii) area, extent and/or quality of habitat (iv) number of locations or subpopulations (v) number of mature individuals. c. Extreme fluctuations in any of the following: (i) extent of occurrence (ii) area of occupancy (iii) number of locations or subpopulations (iv) number of mature individuals. C. Population size estimated to number fewer than 250 mature individuals and either: 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 2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b): a. Population structure in the form of one of the following: (i) no subpopulation estimated to contain more than 50 mature individuals, OR (ii) at least 90% of mature individuals in one subpopulation. b. Extreme fluctuations in number of mature individuals. D. Population size estimated to number fewer than 50 mature individuals. 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).

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: A. Reduction in population size based on any of the following: 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: (a) direct observation (b) an index of abundance appropriate to the taxon (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat (d) actual or potential levels of exploitation (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites. 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. 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. 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. B. Geographic range in the form of either B1 (extent of occurrence) OR B2 (area of occupancy) OR both: 1. Extent of occurrence estimated to be less than 5,000 km^2, and estimates indicating at least two of a-c: a. Severely fragmented or known to exist at no more than five locations. b. Continuing decline, observed, inferred or projected, in any of the following: (i) extent of occurrence (ii) area of occupancy (iii) area, extent and/or quality of habitat (iv) number of locations or subpopulations (v) number of mature individuals. c. Extreme fluctuations in any of the following: (i) extent of occurrence (ii) area of occupancy (iii) number of locations or subpopulations (iv) number of mature individuals. 2. Area of occupancy estimated to be less than 500 km^2, and estimates indicating at least two of a-c: a. Severely fragmented or known to exist at no more than five locations. b. Continuing decline, observed, inferred or projected, in any of the following: (i) extent of occurrence (ii) area of occupancy (iii) area, extent and/or quality of habitat (iv) number of locations or subpopulations (v) number of mature individuals. c. Extreme fluctuations in any of the following:

	(i) extent of occurrence (ii) area of occupancy (iii) number of locations or subpopulations (iv) number of mature individuals. C. Population size estimated to number fewer than 2,500 mature individuals and either: 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 2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b): a. Population structure in the form of one of the following: (i) no subpopulation estimated to contain more than 250 mature individuals, OR (ii) at least 95% of mature individuals in one subpopulation. b. Extreme fluctuations in number of mature individuals. D. Population size estimated to number fewer than 250 mature individuals. 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: A. Reduction in population size based on any of the following: 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: (a) direct observation (b) an index of abundance appropriate to the taxon (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat (d) actual or potential levels of exploitation (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites. 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. 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. 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. B. Geographic range in the form of either B1 (extent of occurrence) OR B2 (area of occupancy) OR both: 1. Extent of occurrence estimated to be less than 20,000 km^2, and estimates indicating at least two of a-c: a. Severely fragmented or known to exist at no more than 10 locations.

	b. Continuing decline, observed, inferred or projected, in any of the following: (i) extent of occurrence (ii) area of occupancy (iii) area, extent and/or quality of habitat (iv) number of locations or subpopulations (v) number of mature individuals. c. Extreme fluctuations in any of the following: (i) extent of occurrence (ii) area of occupancy (iii) number of locations or subpopulations (iv) number of mature individuals. 2. Area of occupancy estimated to be less than 2,000 km^2, and estimates indicating at least two of a-c: a. Severely fragmented or known to exist at no more than 10 locations. b. Continuing decline, observed, inferred or projected, in any of the following: (i) extent of occurrence (ii) area of occupancy (iii) area, extent and/or quality of habitat (iv) number of locations or subpopulations (v) number of mature individuals. c. Extreme fluctuations in any of the following: (i) extent of occurrence (ii) area of occupancy (iii) number of locations or subpopulations (iv) number of mature individuals. C. Population size estimated to number fewer than 10,000 mature individuals and either: 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 2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b): a. Population structure in the form of one of the following: (i) no subpopulation estimated to contain more than 1,000 mature individuals, OR (ii) all mature individuals in one subpopulation. b. Extreme fluctuations in number of mature individuals. D. Population very small or restricted in the form of either of the following: 1. Population size estimated to number fewer than 1,000 mature individuals. 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. E. Quantitative analysis showing the probability of extinction in the wild is at least 10% within 100 years.

Executive Summary

This report provides an update on the conservation status of seven finch species, namely: Common Chaffinch (*Fringilla coelebs*), Common Linnet (*Linaria cannabina*), European Goldfinch (*Carduelis carduelis*), European Greenfinch (*Chloris chloris*), Hawfinch (*Coccothraustes coccothraustes*), European Serin (*Serinus serinus*) and Eurasian Siskin (*Spinus spinus*) for review and consideration by the Malta Ornis Committee. The conservation status of the seven finch species is reviewed on the basis of current scientific literature, which also provides details of population size, mortality rates and ring recoveries from other EU Member States. The population trends of these species are evaluated on the basis of Article 12 reports for the reporting period 2008–2012 and the latest (2016) update by the European Bird Census Council.

The latest (2016) EBCC update shows that the EU population of Common Chaffinch, European Goldfinch and Hawfinch are classified as **Moderate Increase**, the European Greenfinch as **Stable** whereas the Common Linnet, European Serin and Eurasian Siskin as **Moderate Decline**. It is noted that EBCC provides data on the magnitude change at both the short- and long-term trends at pan-European level only, which shows that **the Common Linnet declined by 62% in the long-term trend (since 1980)** [5% increase since the previous EBCC update] **and declined by 10% in the short-term (1990) trend** [8% increase since the previous EBCC update][1]. **The European Serin declined by 48% since 1980** [1% decrease since the previous EBCC update] **and declined by 13% in the short-term trend** [8% increase since the previous EBCC update]. **The Eurasian Siskin declined by 7% since 1980** [1% increase since the previous EBCC update] **and declined by 6% in the short-term trend** [13% increase since the previous EBCC update].

This update also focuses on the changes in the short-term and long-term trends of the seven finch species on the basis of Article 12 reports, including surrogate data for Czech Republic and Greece, as published by the European Environment Agency (EEA, 2014) for the period 2008–2012. It is shown that although a number of Member States have reported a decrease in some of the finch populations, such magnitude change is not reflected in the number of breeding pairs that was reported ten years earlier in Birds in Europe II (BirdLife International, 2004). On the contrary, despite a reported decline, the number of breeding pairs as reported in Article 12 reports is actually higher than those reported ten years earlier. This was also the case in terms of reported increases, since the corresponding number of pairs in Birds in Europe II was either exactly the same or indeed higher than those in Article 12 reports. The values for the number of breeding pairs in 2004 was thus revised using an online percentages calculator to provide a more realistic number of breeding pairs based on the percentage changes as reported by each Member State in the current Article 12 reports. The analysis shows that the **short-term trends** of the **EU28 populations** of Common Chaffinch, Common Linnet, European Goldfinch, Hawfinch, European Serin and Eurasian Siskin are classified as **Stable**, whereas the European Greenfinch population is classified as **Moderate Increase** at all levels of the population (minimum and maximum pairs and their geomean). **In terms of long-term trend, all seven finch species have been shown to be Stable at all three levels of their population (min/max/geomean)**, the Eurasian Siskin being the only exception since it **increased** in the number of minimum pairs.

At **reference population** (ring recoveries) **level**, it is shown that the short-term and long-term trends of the European Goldfinch and the short-term trend of the Eurasian Siskin are classified as **Moderate Increase**. Furthermore, the long-term trend of the Eurasian Siskin and the short-term and long-term trends of the Common Chaffinch, Common Linnet, European Greenfinch, Hawfinch and European Serin are **Stable**. The table below lists the trend classifications of the seven finch species at EU28 and reference population levels.

Species	EU Population						Ring Recoveries					
	Short-term Trend			Long-term Trend			Short-term Trend			Long-term Trend		
	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean
Chaffinch	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨
Linnet	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨
Goldfinch	⇨	⇨	⇨	⇨	⇨	⇨	⇧	⇧	⇧	⇧	⇧	⇧
Greenfinch	⇧	⇧	⇧	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨
Hawfinch	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨
Serin	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨
Siskin	⇨	⇨	⇨	⇧	⇨	⇨	⇧	⇧	⇧	⇧	⇨	⇨

Data Sources: EBCC (2016); European Environment Agency (2014)

[1] The European Bird Census Council replaced the short-term (1990) trend by a rolling "Ten-year trend". For the current update it refers to the period 2005–2014 (source: http://www.ebcc.info/index.php?ID=612).

Introduction

This report provides an update on the conservation status of seven finch species, namely: Common Chaffinch (*Fringilla coelebs*), Common Linnet (*Linaria cannabina*), European Goldfinch (*Carduelis carduelis*), European Greenfinch (*Chloris chloris*), Hawfinch (*Coccothraustes coccothraustes*), European Serin (*Serinus serinus*) and Eurasian Siskin (*Spinus spinus*). The status of these species is evaluated on the basis of Article 12 reports for the reporting period 2008–2012 and the latest (2016) update by the European Bird Census Council.

Conservation status: trend analysis and classifications

The 2004 publication by BirdLife International *Birds in Europe: population estimates trends and conservation status* (Birds in Europe II) specifies that a species is classified as declining "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" ("Classification of European threat status": Box 3, p. 8). The explanatory text further specifies that 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" (BirdLife International, 2004). However, Box 3 (p. 14) of Birds in Europe II ("Interpreting the data table") also specifies that when the overall population change is less than **20%**, the overall direction of the population trend is considered to be stable. When calculating the overall direction of the EU finch population's long-term trend, this report considers that **a change of not more than 20% is considered as Stable**. This is a stricter approach than that adopted by BirdLife International for Birds in Europe II (10% for every 10-year period) since, strictly speaking, the threshold over a 30-year period could be said to constitute 30%. **For the short-term trend, a change of not more than 10% is considered as Stable**.

This report takes into account the latest (2016) update by the European Bird Census Council (EBCC, 2016)[2] and the data (minimum/maximum pairs and magnitude change) submitted by Member States (EU27) as part of the Birds Directive Article 12 reporting obligation for the period 2008–2012 (EEA, 2014)[3], including surrogate data for Czech Republic and Greece as published by EEA (2014). Given that Croatia was not included in the 2008–2012 reporting period, and in the absence of published surrogate data from this Member State, the corresponding data at EU28 level is based on EEA (2014) and Birds in Europe II (BirdLife International, 2004). The following sub-section provides a comparison between the population trends as reported in Birds in Europe II and through Article 12 (2008–2012) reports.

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

This update provides an overall comparison between the number of breeding pairs reported in Birds in Europe II and those reported in Article 12 reports for the period 2008–2012. The number of breeding pairs increased in both the minimum and maximum values (see Table 1 below). The only exception is the Common Chaffinch, which has seen a decrease in the number of maximum pairs by just under 3 million, although the number of minimum Common Chaffinch pairs increased by over 18 million. The data was then compared with the **maximum percentage change** as reported by each Member State for each species for the same reporting period (i.e. short-term trend).

It is clear that the two data sets do not correlate given that whilst on the one hand all breeding pairs pertaining to the seven finch species (except the Common Chaffinch) have been reported through Article 12 as increasing (both in the minimum and maximum number of pairs), the Member States' combined magnitude percentage change shows an overall decline in almost all seven finch species (except the European Greenfinch and Common Chaffinch), as shown in the table below (see in particular the circled columns). These percentages are explored in more detail further below in the respective section for each of the seven finch species.

[2] Trends of Common Birds in Europe, 2016 update: Available at: http://www.ebcc.info/index.php?ID=612

[3] EU Population Status Assessment (Article 12 reports). Available at: http://bd.eionet.europa.eu/article12/summary

Table 1:	EU Breeding Population: a comparison between Birds in Europe II (2004) and Article 12 reports (2008–2012)									
Species	**Breeding Pairs (Article 12 Reports) [2014] (Min–Max)**		**Breeding Pairs (Birds in Europe II) [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)**		**Short-term Trend (2004–2014), based on Max. % Change (Article 12 Reports) (Min–Max)**	
Chaffinch	82,131,648	126,886,083	63,934,000	129,864,000	18,197,648	-2,977,917	28.46%	-2.29%	+0.49%	-0.11%
Linnet	14,003,752	18,928,299	6,352,000	15,403,000	7,651,752	3,525,299	120.46%	22.89%	-13.03%	-9.01%
Goldfinch	23,199,170	32,329,072	7,288,500	19,295,000	15,910,670	13,034,072	218.30%	67.55%	-19.22%	-13.56%
Greenfinch	18,096,464	26,173,127	10,164,000	24,429,000	7,932,464	1,744,127	78.04%	7.14%	+17.20%	+3.69%
Hawfinch	1,893,476	3,560,278	1,888,100	3,321,300	5,376	238,978	0.28%	7.20%	-7.21%	-8.13%
Serin	20,286,379	29,083,631	7,548,202	17,695,629	12,738,177	11,388,002	168.76%	64.35%	-30.07%	-23.42%
Siskin	3,381,935	5,238,873	2,103,561	4,806,210	1,278,374	432,663	60.77%	9.00%	-41.57%	-29.49%

Although the number of breeding pairs pertaining to the seven finch species 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 (except the Common Chaffinch max. pairs), this increase is not reflected in the combined percentage change over the same reporting period (=short-term trend).

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

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 four Member States reporting a decline in the number of Common Linnet breeding pairs (ranging from 6–20% up to 40–60% decline) yet the corresponding number of breeding pairs as reported in their Article 12 reports is actually higher than the number of breeding pairs reported in Birds in Europe II (see encircled columns).

EU Member State	**Breeding Pairs (EEA, 2014) (Min - Max)**		**Long-term Trend**	**Mag. % (Min - Max)**		**Breeding Pairs (BLI, 2004) (Min - Max)**	
Italy	300,000	600,000	Decreasing	20	30	100,000	400,000
Austria	18,000	30,000	Decreasing	40	60	12,000	24,000
Poland	830,000	1,100,000	Decreasing	6	20	300,000	600,000
Slovenia	10,000	15,000	Decreasing	30	50	5,000	10,000

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 shown below:

EU Member State	**Breeding Pairs (EEA, 2014) (Min - Max)**		**Long-term Trend**	**Mag. % (Min - Max)**		**Breeding Pairs (2004) (Min - Max)**	
Italy	300,000	600,000	Decreasing	20	30	375,000	857,143
Austria	18,000	30,000	Decreasing	40	60	30,000	75,000
Poland	830,000	1,100,000	Decreasing	6	20	882,979	1,375,000
Slovenia	10,000	15,000	Decreasing	30	50	14,286	30,000

The same approach illustrated above was adopted when the number of breeding pairs in 2014 was reported to have increased yet was either the same or higher in 2004. The objective was to establish a clearer (more realistic) short-term trend analysis on the basis of the populations in 2004 and 2014 and the reported magnitude change.

Ring recoveries

The assessment on reference populations and small numbers is based on ring recoveries from EU Member States (BirdLife Malta: Raine, 2007), with the exception of the Hawfinch since there are no ring recoveries of this species in Malta. In the latter case, ring recoveries in Italy (Spina and Volpini, 2008) were used as a proxy. No additional ring recoveries have been reported for these seven finch species since the 2007 publication by BirdLife Malta (BirdLife Malta, *pers. comm*., 2017), hence no updates in this respect were possible. A total of 112 foreign-ringed finches (six species, excluding *Coccothraustes coccothraustes*) from 19 countries were recorded in Malta by Raine (2007). The five most common countries recorded from these ring recoveries are shown in Table 2. Combined, these top five countries make up 73.2% of all finch recoveries in Malta. The remaining 14 countries, including five non-EU Member States (Belarus, Norway, Russia, Switzerland and Ukraine), make up 26.8% of the remaining ring recoveries. For the purpose of calculating the reference population and <1% mortality, these five non-EU Member States were omitted.

Table 2 The five most commonly recorded countries from finch ring recoveries in Malta (six species)

Country	No. of recoveries	% of total recoveries
Czech Republic	23	20.5
Hungary	19	17.0
Italy	16	14.3
Slovenia	13	11.6
Croatia	11	9.8

Source: Raine (2007)

Recruitment rate: breeding success vs. breeding rate

For the purpose of calculating the recruitment rate of each species, the minimum number of chicks per pair was used. Both the Birds of the Western Palearctic (BWP) [Cramp and Perrins, 1994] and the British Trust for Ornithology (BTO) [Robinson, 2005] refer to the breeding rate when referring to the number of young per pair. However, Cramp and Perrins (1994) also refer to the breeding success (young per pair). It should be noted that since the values provided for the number of young per pair do not tally between BWP and BTO, for the purpose of calculating small numbers, only the lowest recruitment rate was considered. For example, the **breeding rate** for the Common Chaffinch (*Fringilla coelebs*) is 3–4 young per pair (BWP and BTO), yet the **breeding success** is 2.6 (BWP). In such instance, the breeding success of 2.6 is used in the formula for calculating small numbers. Whenever the breeding success specified by BWP is higher than the breeding rate, such as the case with the European Greenfinch (*Chloris chloris*) [breeding success 4.4; breeding rate 3–4], then the lower figure specified for the breeding rate (i.e., 3 chicks per pair) is used. This was purposely done so that the formula returns the lowest possible figure when calculating the potential bag limit for each species.

Partitioning of the <1% mortality with other Member States

There are two EU Member States that apply derogations for the live-capturing of finches (and other passerines), namely Austria and Spain. Italy, on the other hand, had applied derogations for the hunting of Common Chaffinch (and other passerines). According to the EC's Composite Report on derogations applied by Member States in 2008 (EC, 2011), it appears that Austria has a bag limit of 554 individuals from a total of 12 species (Common Linnet, European Goldfinch, Eurasian Siskin, Common Chaffinch and Hawfinch and seven other passerines). The situation with respect to the bag limits established by Spain and Italy is unclear. The 2008 Composite Report specifies that the total number of individuals affected by the Spanish activities is 187,967 (Common Linnet, European Goldfinch, Eurasian Siskin, Common Chaffinch, European Serin, European Greenfinch and two other passerine species). However, the July 2011 European Conference on Illegal Killing of Birds[4] held in Larnaca, mentions a figure of 400,000 individuals [5 finch species], composed of: 200,000 European Goldfinches, 100,000 Common Linnets, 40,000 European Greenfinches, 40,000 European Serins and 20,000 Common Chaffinches.

[4] "Control of illegal bird trapping practices in Spain". Available at: http://www.coe.int/t/dg4/cultureheritage/nature/bern/documents/072011_IKB/Presentations/IllegalBirdTrapping_Spain_Larnaca_July2011.pdf

This report partitions the reference population (minimum breeding pairs) with Austria, Italy and Spain very restrictively. For example, it could be argued, on the basis of EU ring recoveries in Malta (Raine, 2007) and taking into account the three principal flyways (Western Europe–Strait of Gibraltar, Central Europe–Tunisia and Eastern Europe–Bosporus), that it is very unlikely that Malta and Spain share the same reference populations. Notwithstanding that this assessment has based the reference population on ring recoveries in Malta (and on recoveries in Italy with respect to the Hawfinch), the <1% threshold is nonetheless partitioned as follows (Table 3):

Table 3 **Partitioning of the <1% mortality (ring recoveries in Malta/Italy) with other EU Member States**

Species	Member State	Partitioning value
Common Chaffinch	Austria, Spain, Italy	25%
Common Linnet	Austria, Spain	33%
European Goldfinch	Austria, Spain	33%
Eurasian Siskin	Austria, Spain	33%
Hawfinch	Austria	50%
European Serin	Spain	50%
European Greenfinch	Spain	50%

An alternative to the above partitioning methodology could have taken into account the entire EU population of the respective species and divide the <1% threshold with Austria, Italy and Spain, as opposed to the partitioning based on ring recoveries in Malta (and Italy in the case of the Hawfinch). However, the latter method returned a much higher <1% threshold notwithstanding that it was further divided by three (to account for the three principal flyways). Therefore, for the purpose of fulfilling the "small numbers" criterion further, the reference population was partitioned solely on the basis of ring recoveries in Malta/Italy, which consist of a much smaller subset of the total EU population of the seven finch species.

Formula for calculating <1% mortality of the reference population and proportionality to *Carnet de Chasse* data

In the following sections on the conservation status of the seven finch species, a formula is used to calculate the national harvest limit, as adapted from Allendorf and Luikart (2007) *Conservation and the Genetics of Populations*. The formula takes into account the <1% mortality of the reference population (which is based on the minimum number of breeding pairs and minimum recruitment rate per species ('<1% mortality' or '<1% threshold') and the average number of birds harvested over a seven-year period (namely, the *Carnet de Chasse* data from 2002 to 2008[5]). The formula returns a figure (N_h) that is not only lower than the partitioned <1% threshold of each species but also lower than the average number of birds caught between 2002 and 2008. It should be noted that the formula can only be applied when the partitioned <1% threshold exceeds the average bag limit. The formula is as follows:

$$N_h = [(N_\mu + N_m) \times (N_\mu / N_m)] - [(N_\mu / N_m) \times N_m \times (\sqrt{N_\mu / N_m})]$$

where,

N_h is the potential national harvest limit

N_m is the 1% mortality of the minimum number of breeding pairs of the reference population (<1%)

N_u is the *Carnet de Chasse* data (average number of finches per species harvested over a 7-year period: 2002–2008)

[5] Available at http://www.mepa.org.mt/biodiversity-reporting

1. Conservation status of the Common Chaffinch (*Fringilla coelebs*)

European Red List Status: Least Concern (European & EU27 levels)	**Status at EU27: Secure**

Distribution and conservation status

This species is present in all of Europe but is absent in Iceland (Hume, 2002). The geographical distribution of the Common Chaffinch in Europe (Fig. 1) is as follows:

Breeding Finland, Sweden, Estonia, Latvia, Lithuania, Malta (few pairs), Czech Republic, United Kingdom, Ireland, Germany, Netherlands, Spain, Portugal, France, Belgium, Austria, Luxembourg, Slovenia, Italy, Greece, Cyprus, Denmark, Bulgaria, Croatia, Hungary and Romania.

Wintering Estonia, Italy, United Kingdom, Ireland, Malta (a few), Cyprus, Greece, Germany (a few), Belgium (a few), Luxembourg (a few)

Sedentary and migratory Northern breeders of the nominate race move west, southwest or south to winter mostly within the range in central and southern Europe, around the Mediterranean, Cyprus, the Middle East and Israel. **It is a nocturnal and diurnal migrant.** (Clement *et al*. 1993: 167).

Conservation status

Least Concern (IUCN 3.1)[1]

Order:	Passeriformes
Family:	Fringillidae
Subfamily:	Fringillinae
Genus:	Fringilla
Species:	**Coelebs**

Binomial name

Fringilla coelebs
Linnaeus, 1758

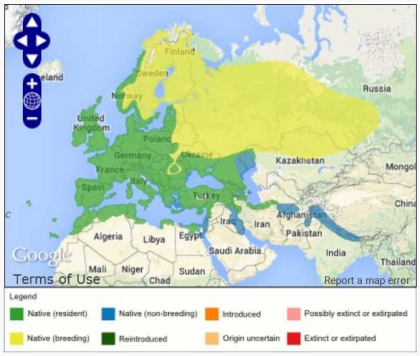


Fig. 1: Distribution and conservation status of the Common Chaffinch (*Fringilla coelebs*)

Source: http://en.wikipedia.org/wiki/Common_Chaffinch [Accessed 13 April 2017]. Distribution map downloaded from http://www.birdlife.org on 13 April 2017 [BirdLife International (2017) IUCN Red List for birds].

Justification of Red List Category

According to BirdLife International (2017)[6] the Common Chaffinch 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). The population trend appears to be increasing, and hence the species does not 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.

Population size

In Europe, the breeding population is estimated to number 185,000,000–269,000,000 pairs, which equates to 371,000,000–537,000,000 mature individuals (BirdLife International, 2015). Europe forms c.70% of the global range, so a very preliminary estimate of the global population size is 530,000,000–767,000,000 mature individuals, although this estimate requires further validation (BirdLife International, 2017).

Based on the EU Member States' Article 12 reports for the 2008–2012 reporting period, the EU27 breeding population amounts to 82,131,648–126,886,083 pairs. Within the territory of the European Union (EU 28), both the minimum and maximum breeding pairs are **Stable** in the long-term trend (1980–2012), with a change in the minimum number of pairs of -0.26% and a change of -1.04% in the maximum number of pairs, equating to a geomean change of -0.73% (Table 4). **According to BirdLife International (2004), this equates to a long-term Stable classification for the minimum, maximum and geomean number of breeding pairs (a change not more than 20% is considered to be Stable for the period 1980–2012)**. Table 4 also lists population counts and long-term trend for each Member State within the territory of the European Union.

Table 4: **Common Chaffinch EU28 breeding population (long-term trend) and ring recoveries** (bold = ring recoveries in Malta)

EU Member State	EU Ring Recoveries in Malta (n=5) ∫	Breeding Pairs (2014) (Min - Max)		Long-term Trend (1980–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)	Max % Change (Geomean)
Austria		1,500,000	2,300,000	Unknown	?	?	-	-	-
Belgium		300,000	700,000	Increasing	20	180	192,857	450,000	321,429
Bulgaria		2,000,000	4,000,000	Stable	0	0	-	-	-
Croatia*		1,000,000	1,500,000	Decreasing	50	79	-790,000	-1,185,000	-987,500
Cyprus		15,000	45,000	Unknown	?	?	-	-	-
Czech Rep.		3,720,000	7,440,000	Decreasing	20	32	-1,190,400	-2,380,800	-1,785,600
Denmark		1,300,000	1,300,000	Stable	0	0	-	-	-
Estonia		1,700,000	2,200,000	Stable	0	0	-	-	-
Finland		7,200,000	8,500,000	Stable	0	0	-	-	-
France		8,000,000	15,000,000	Stable	0	0	-	-	-
Germany		7,350,000	11,000,000	Stable	0	19	-	-	-
Greece		430,000	550,000	Unknown	?	?	-	-	-
Hungary	**40%**	**1,130,000**	**1,360,000**	**Unknown**	**?**	**?**	-	-	-
Ireland		2,767,400	3,871,930	Unknown	?	?	-	-	-
Italy	**40%**	**1,000,000**	**2,000,000**	**Increasing**	**10**	**20**	**166,667**	**333,333**	**250,000**
Latvia		2,623,780	3,219,441	Stable	0	0	-	-	-
Lithuania		1,500,000	2,500,000	Stable	0	0	-	-	-

[6] BirdLife International (2017) Species factsheet: *Fringilla coelebs*. Downloaded from http://www.birdlife.org on 13/04/2017

Luxembourg		50,000	70,000	Unknown	?	?	-	-	-
Netherlands		715,468	834,712	Increasing	91	154	433,788	506,085	469,936
Poland	**20%**	**7,600,000**	**8,500,000**	**Unknown**	**?**	**?**	**-**	**-**	**-**
Portugal		1,000,000	5,000,000	Unknown	?	?	-	-	-
Romania		4,000,000	8,000,000	Unknown	?	?	-	-	-
Slovakia		3,000,000	5,000,000	Stable	0	0	-	-	-
Slovenia		750,000	1,250,000	Stable	0	0	-	-	-
Spain		8,710,000	10,675,000	Increasing	?	?	-	-	-
Sweden		5,720,000	10,860,000	Stable	0	0	-	-	-
UK		6,200,000	6,200,000	Increasing	18.6	18.6	974,987	974,987	974,987
Total	100%	81,281,648	123,876,083			**Total change**	**-212,101**	**-1,301,394**	**-756,748**
						Percentage change	**-0.26%**	**-1.04%**	**-0.73%**
						Long-term Trend (EU Population)	**Stable**	**Stable**	**Stable**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)
Percentages verified using *The Percentages Calculator*, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

With reference to the short-term trend of the Common Chaffinch within the territory of the European Union (EU 28), the change in the minimum number of breeding pairs is +4.46% and +3.14% in the maximum number of pairs, equating to a geomean change of +3.64% (Table 5). **This equates to a short-term Stable classification for the minimum and maximum number of breeding pairs and their geomean (a change not more than 10% is considered to be Stable for the short-term trend)**. Table 5 also lists population counts and short-term trend for each Member State within the territory of the European Union.

Table 5 Common Chaffinch EU28 breeding population (short-term trend) and ring recoveries (bold = ring recoveries in Malta)

EU Member State	EU Ring Recoveries in Malta (n=5) ∫	Breeding Pairs (EEA, 2014) (Min - Max)		Short-term Trend (~2001–2012)	Mag. % (Min - Max)		Breeding Pairs (2004) (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)	Max % Change (Geomean)
Austria		1,500,000	2,300,000	Stable	0	0	1,600,000	3,200,000	-	-	-
Belgium		300,000	700,000	Stable	0	0	100,000	250,000	-	-	-
Bulgaria		2,000,000	4,000,000	Stable	0	0	2,000,000	6,000,000	-	-	-
Croatia*		1,000,000	1,500,000	Decreasing	50	79	2,000,000	7,142,857	-790,000	-1,185,000	-987,500
Cyprus		15,000	45,000	Stable	?	?	20,000	40,000	-	-	-
Czech Rep.		3,720,000	7,440,000	Decreasing	4	15	3,875,000	8,752,941	-558,000	-1,116,000	-837,000
Denmark		1,300,000	1,300,000	Stable	0	0	1,500,000	2,000,000	-	-	-
Estonia		1,700,000	2,200,000	Stable	0	0	1,500,000	2,500,000	-	-	-
Finland		7,200,000	8,500,000	Stable	0	0	5,000,000	7,000,000	-	-	-
France		8,000,000	15,000,000	Increasing	11	11	7,207,207	13,513,514	792,793	1,486,486	1,139,640
Germany		7,350,000	11,000,000	Decreasing	7	13	7,903,226	12,643,678	-955,500	-1,430,000	-1,192,750
Greece		430,000	550,000	Stable	0	0	430,000	550,000	-	-	-
Hungary	**40%**	**1,130,000**	**1,360,000**	**Increasing**	**42**	**42**	**795,775**	**957,746**	**474,600**	**571,200**	**522,900**
Ireland		2,767,400	3,871,930	Increasing	7.20	21.10	2,581,530	3,197,300	482,181	674,630	578,406
Italy	**40%**	**1,000,000**	**2,000,000**	**Increasing**	**5**	**15**	**952,381**	**1,739,130**	**150,000**	**300,000**	**225,000**
Latvia		2,623,780	3,219,441	Increasing	24	68	2,115,952	1,916,334	1,062,006	1,303,107	1,182,557
Lithuania		1,500,000	2,500,000	Stable	0	0	2,500,000	3,500,000	-	-	-
Luxembourg		50,000	70,000	Unknown	?	?	50,000	70,000	-	-	-
Netherlands		715,468	834,712	Increasing	8	19	662,470	701,439	114,234	133,273	123,754
Poland	**20%**	**7,600,000**	**8,500,000**	**Decreasing**	**10**	**20**	**8,444,444**	**10,625,000**	**-1,520,000**	**-1,700,000**	**-1,610,000**
Portugal		1,000,000	5,000,000	Stable	0	0	500,000	2,500,000	-	-	-
Romania		4,000,000	8,000,000	Fluctuating	-	-	2,450,000	6,300,000	-	-	-
Slovakia		3,000,000	5,000,000	Stable	0	0	3,000,000	5,000,000	-	-	-
Slovenia		750,000	1,250,000	Stable	0	0	1,000,000	1,500,000	-	-	-
Spain		8,710,000	10,675,000	Increasing	75	75	4,977,143	6,100,000	3,732,857	4,575,000	4,153,929

Sweden		5,720,000	10,860,000	Stable	0	0	7,500,000	15,000,000	-	-	-
UK		6,200,000	6,200,000	Increasing	7.40	7.40	5,772,812	5,772,812	427,188	427,188	427,188
Total	100%	81,281,648	123,876,083				76,437,940	128,472,751			
								Total change	**3,412,360**	**4,039,885**	**3,726,122**
								Percentage change	**4.46%**	**3.14%**	**3.64%**
						Short-term Trend (EU Population)			**Stable**	**Stable**	**Stable**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using The Percentages Calculator, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

Conservation status at EU27 level

The Common Chaffinch has a breeding population size of 81,300,000–126,000,000 pairs within the territory of the European Union (EU27). The breeding population trend in the EU27 is **Increasing** in the short-term and **Stable** in the long-term. The EU population status of *Fringilla coelebs* was assessed as **Secure**, because the species does not meet any of the IUCN Red List criteria for threatened or Near Threatened, or the criteria for Depleted or Declining (the EU27 population or range has not declined by 20% or more since 1980) [Source: EEA, 2014, *Fringilla coelebs all others*, Article 12 2008–2012 (Data Sheet Info[7])].

European Bird Census Council: Long-term trend and ten-year (short-term) trends

According to the European Bird Census Council (EBCC, 2016 update), the Common Chaffinch population is classified as **Moderate Increase** (1980–2014) in the long-term trend at both pan-European[8] and EU[9] levels. It should be noted that EBCC data pertaining to the short-term trends is only available at pan-European level. EBCC replaced the short-term (1990) trend by a rolling "Ten-year trend" (2005–2014). At pan-European level, the Common Chaffinch increased by 8% since 1980 but decreased by 2% during the current 10-year period. When compared with the previous (2015) EBCC update the percentage change was **+1%** in the long-term trend and **+2%** in the short-term trend (Table 6).

Table 6	**Common Chaffinch long-term and short-term percentage change at pan-European level**							
EBCC update	**Species**	**Long-term Trend (%)**	**Long-term Slope**		**10-Year Trend (%)**	**10-Year Slope**		**Habitat**
2012	*Fringilla coelebs*	+13%	1.0021		-1%	0.9996		oth
2013	*Fringilla coelebs*	+8%	1.0016		-4%	0.9993		oth
2014	*Fringilla coelebs*	+13%	1.0019		+5%	1.0005		oth
2015	*Fringilla coelebs*	+7%	1.0019		-4%	0.9998		oth
2016	*Fringilla coelebs*	+8%	1.0015		-2%	1.0014		oth
Overall % change (2015–2016)		+1%			+2%			
Data sources: EBCC (2012–2016 updates). Available at: http://www.ebcc.info/index.php?ID=612								

[7] http://bd.eionet.europa.eu/article12/summary/datasheet/?period=1&subject=A657

[8] http://www.ebcc.info/index.php?ID=612

[9] http://www.ebcc.info/index.php?ID=613

Figure 2 is an extract from the EBCC 2016 update, which confirms that the long-term trend classification for *Fringilla coelebs* is **Moderate Increase**, namely: "significant increase, but not significantly more than 5% per year".

Chaffinch (*Fringilla coelebs*)

Population index (%) 1980 - 2014, Europe.
Trend classification: *Moderate increase* (explanation)

List of Countries

Source of the data: EBCC/RSPB/BirdLife/Statistics Netherlands

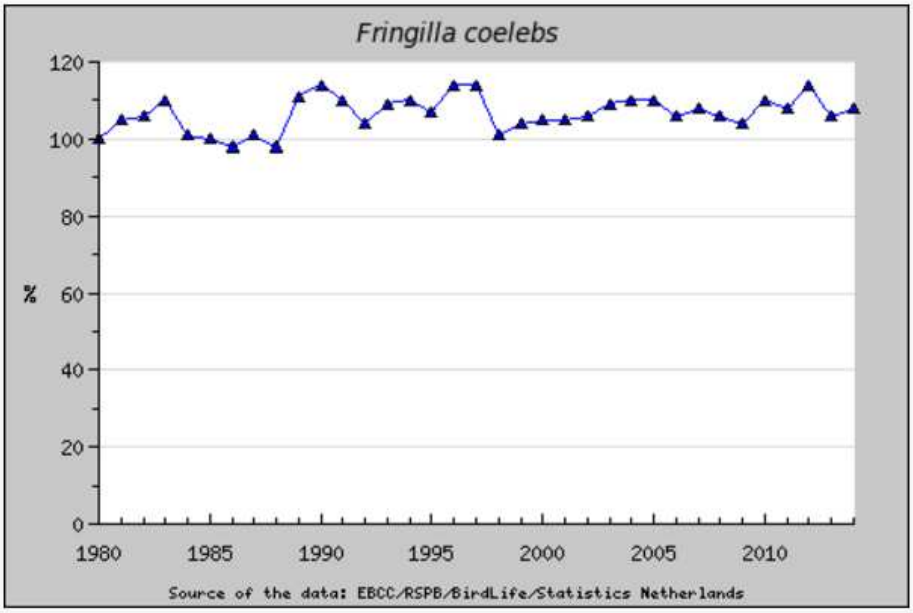


Fig. 2: Long-term trend classification for *Fringilla coelebs*.

"List of Countries":

Austria	1998 - 2013	Latvia	2005 - 2013
Belgium-Brussels	1992 - 2013	Lithuania	1994 - 2013
Belgium-Wallonia	1990 - 2013	Luxembourg	2009 - 2012
Bulgaria	2005 - 2013	Netherlands	1984 - 2013
Cyprus	2006 - 2013	Norway	1996 - 2013
Czech Republic	1982 - 2013	Poland	2000 - 2013
Denmark	1976 - 2013	Portugal	2004 - 2013
Estonia	1983 - 2013	Republic of Ireland	1998 - 2013
Finland	1975 - 2013	Romania	2007 - 2013
France	1989 - 2013	Slovakia	2005 - 2013
Germany East	1991 - 2013	Slovenia	2007 - 2013
Germany West	1989 - 2013	Spain	1998 - 2013
Greece	2007 - 2013	Sweden	1975 - 2013
Hungary	1999 - 2013	Switzerland	1999 - 2013
Italy	2000 - 2013	United Kingdom	1966 - 2013

Source: EBCC (2016 update), available at: http://www.ebcc.info/index.php?ID=612.

Ring recoveries in Malta

Tables 7 and 8 provide data on the ring recoveries of this species in Malta, the respective number of breeding pairs, together with the overall direction of the population trend. The reference population (ring recoveries in Malta) is **Stable** in both the short-term and long-term trends. Figs. 3 and 4 illustrate the long-term trend at EU and reference population levels whereas Figs. 5 and 6 illustrate the respective short-term trends.

Table 7 **Common Chaffinch ring recoveries in Malta from other EU Member States and corresponding long-term trend**

EU Member State	EU Ring Recoveries in Malta (n=5)∫	Reference Population Breeding Pairs (Min - Max)		Long-term Trend (1980–2012)	Mag. % (Max - Min)		Max % Change (Min Pairs)	Max % Change (Max Pairs)
Hungary	40%	1,130,000	1,360,000	Unknown	?	?	-	-
Italy	40%	1,000,000	2,000,000	Increasing	10	20	166,667	333,333
Poland	20%	7,600,000	8,500,000	Unknown	?	?	-	-
Total	100%	9,730,000	11,860,000			Total change	166,667	333,333
						Percentage change	1.74%	2.89%
						Long-term Trend (Ring Recoveries)	Stable	Stable

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)
Percentages verified using *The Percentages Calculator*, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

Table 8 **Common Chaffinch ring recoveries in Malta from other EU Member States and corresponding short-term trend**

EU Member State	EU Ring Recoveries in Malta (n=5)∫	Breeding Pairs (EEA, 2014) (Min - Max)		Short-term Trend (~2001–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)
Hungary	40%	1,130,000	1,360,000	Increasing	42	42	474,600	571,200
Italy	40%	1,000,000	2,000,000	Increasing	5	15	150,000	300,000
Poland	20%	7,600,000	8,500,000	Decreasing	10	20	-1,520,000	-1,700,000
Total	100%	9,730,000	11,860,000			Total change	-895,400	-828,800
						Percentage change	-8.78%	-6.22%
						Short-term Trend (Ring Recoveries)	Stable	Stable

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)
Percentages verified using *The Percentages Calculator*, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

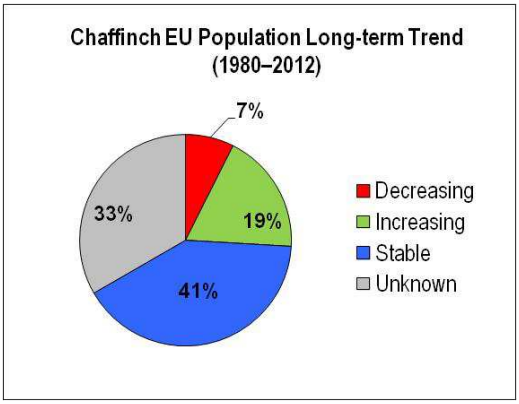


Fig. 3: Common Chaffinch EU population long-term trend by Member State

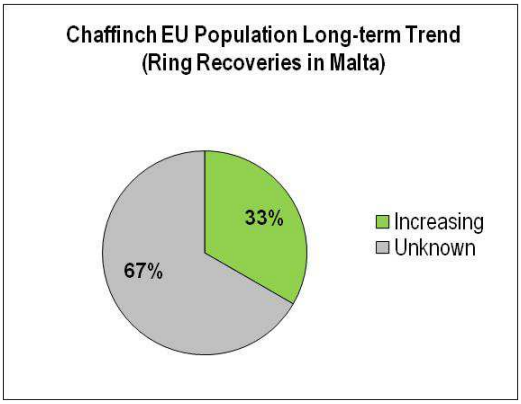


Fig. 4: Common Chaffinch EU population long-term trend (ring recoveries in Malta)

Data sources: EEA (2014); Raine (2007)

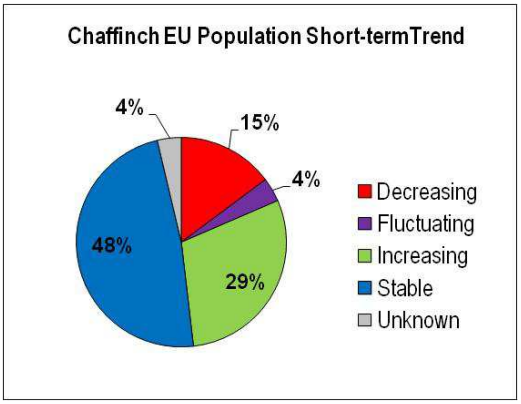


Fig. 5: Common Chaffinch EU population short-term trend by Member State

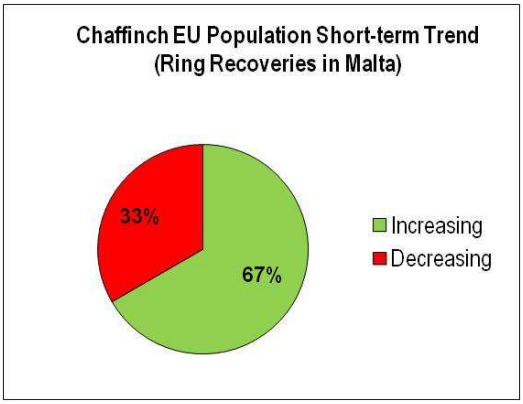


Fig. 6: Common Chaffinch EU population short-term trend (ring recoveries in Malta)

Data sources: EEA (2014); Raine (2007)

Common Chaffinch conservation status update – comparison between different data sources

The following table provides a general overview of the latest conservation status update from various sources for direct comparison.

Species	EU Population						Ring Recoveries					
	Short-term Trend			Long-term Trend			Short-term Trend			Long-term Trend		
	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean
Chaffinch	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨

Species	Short-term Trend			Long-term Trend			
	EBCC 2016 (pan-European)	Article 12 (2008–2012) [EU Geomean]	Article 12 (2008–2012) [Ring Recoveries Geomean]	EBCC 2016 (pan-European)	EBCC 2016 (EU)	Article 12 (2008–2012) [EU Geomean]	Article 12 (2008–2012) [Ring Recoveries Geomean]
Chaffinch	⇨	⇨	⇨	⇧	⇧	⇨	⇨

Data Sources: EBCC (2016); European Environment Agency (2014)

The reference population

Table 9 Common Chaffinch (*Fringilla coelebs*) breeding population estimates (reference population)

Country [Ring recoveries in Malta]	**Common Chaffinch minimum breeding population size (pairs)** [Reference population]	**Short-term Trend (~2001–2012)**	**Long-term Trend (1980–2012)**
Hungary	1,130,000	Increasing	Unknown
Italy	1,000,000	Increasing	Increasing
Poland	7,600,000	Decreasing	Unknown
Reference Population Size (Minimum breeding pairs)	**9,730,000**	**Stable (-8.78%)**	**Stable (+1.74%)**

Data Sources: BirdLife International (2004); European Environment Agency (2014); Raine (2007)

Carnet de Chasse data (2002–2008)

According to the *Carnet de Chasse* data available from the Environment Protection Directorate of the Malta Environment and Planning Authority, the following number of Common Chaffinches were captured alive in Malta during the years indicated (Table 10).

Table 10 *Carnet de Chasse* live-capturing data[10] for Common Chaffinch (2002–2008)

Species	2002	2003	2004	2005	2006	2007	2008	Total	Average
Common Chaffinch	4,957	8,159	3,746	7,215	4,783	6,914	6,750	42,524	6,075

Source: *Carnet de Chasse* data, Environment Protection Directorate (Malta Environment and Planning Authority). Available at: http://www.mepa.org.mt/biodiversity-reporting.

Minimum breeding population and the <1% annual mortality

Table 11 shows the minimum number of breeding pairs of Common Chaffinches within the territory of the European Union that correspond with ring recoveries in Malta (the reference population), together with other relevant information required for the calculation of "small numbers".

Table 11 Minimum breeding population and mortality rate

	Common Chaffinch (*Fringilla coelebs*)	Source
Minimum breeding population – pairs	**9,730,000**	EEA (2014); Raine (2007)
Mortality rate – juveniles	47%	Bauer (2005): *Das Kompendium der Vögel Mitteleuropas* / Cramp & Perrins (1994): Birds of the Western Palearctic / Robinson (2005): British Trust for Ornithology
Mortality rate – adults	43%	Bauer (2005) and Robinson (2005)
Breeding rate (young per pair)	3–4	Cramp & Perrins (1994: 467) and Robinson (2005)
Breeding success	2.6	Cramp & Perrins (1994: 467)

For the purpose of calculating the <1% mortality rate and "small numbers", the reference population is based solely on ring recoveries of this species in Malta from EU Member States. This equates to a reference population of **9,730,000 minimum breeding pairs**.

Calculation of the <1% mortality rate and "small numbers"

Common Chaffinch (*Fringilla coelebs*)
Minimum breeding success: 2.6 fledglings per pair (9,730,000 x 2.6) = 25,298,000
Mortality rate of 1st year birds (25,298,000 x 47%) = 11,890,060
Mortality rate of adults (19,460,000 x 43%) = 8,367,800
Total annual mortality (11,890,060 + 8,367,800) = 20,257,860
1% of total annual mortality (20,257,860 x 1%) = 202,579

Total potential Common Chaffinch harvest figure is 202,579
Partitioning with other Member States (Austria, Spain and Italy: 202,579 × 25%) = 50,645

[10] The *Carnet de Chasse* data for the period 2002–2007 covers the months January–May and September–December, whereas the *Carnet de Chasse* data for 2008 covers the months of January and October–December.

Autumn seasonal bag limit in relation to "small numbers"

Based on the <1% mortality rate of the reference population, the "small numbers" calculation with respect to the potential national bag limit of the Common Chaffinch is as follows:

- **Common Chaffinch** – potential maximum bag limit of **50,645** individuals (partitioned with Austria, Spain and Italy)

Notwithstanding that the partitioned maximum bag limit arising out of the above calculations is 50,645 Common Chaffinches, given that the average bag limit over a seven-year period (2002–2008) is 6,075 birds, this analysis recommends that, should a derogation for the live-capturing of the seven finch species be considered in autumn 2017, the national bag limit should be substantially reduced further to not more than 5,000 as established in the 2014 Framework for Allowing a Derogation Opening an Autumn Live-Capturing Season for Finches Regulations (S.L. 549.93)[11]. This calculation is based on the formula discussed previously, which returns a figure that is not only considerably lower than the <1% threshold but also lower than the average number of birds caught over a seven-year period (2002–2008). Thus:

- **Common Chaffinch** – national bag limit of **5,000** birds.

[11] http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12211&l=1

2. Conservation status of the Common Linnet (*Linaria cannabina*)

European Red List Status: Least Concern (European & EU27 levels)	**Status at EU27: Declining by at least 20% since 1980, with continuing decline since 2001**

Distribution and conservation status

The species is present in most of Europe except N. Scandinavia and Iceland (Hume, 2002). The geographical distribution of the Common Linnet in Europe (Fig. 7) is as follows:

Breeding Finland, Sweden, Estonia, Latvia, Lithuania, Malta (a few), Czech Republic, United Kingdom, Ireland, Germany, Netherlands, Spain, Portugal, France, Belgium, Austria, Luxembourg, Slovenia, Italy, Greece, Cyprus, Denmark, Bulgaria, Croatia, Hungary and Romania.

Wintering Estonia, Italy, United Kingdom, Ireland, Malta (a few), Cyprus, Greece, Germany (a few), Belgium (a few), Luxembourg (a few).

Sedentary and migratory Northern breeders of races *cannabina* (nominate) and *bella* (Turkestan Common Linnet: Turkey, Middle East, Israel, Caucasus and Iran) move south and southwest to winter mostly within the range around the Mediterranean and Iran, Iraq and northern Baluchistan (Pakistan), also to coastal areas of North Africa, the Negev, northern Egypt and the Nile areas of Sudan. **A diurnal and nocturnal passage migrant** (Clement *et al*. 1993: 250).

Conservation status

Least Concern (IUCN 3.1)[1]

Order:	Passeriformes
Family:	Fringillidae
Genus:	*Carduelis*
Species:	***Cannabina***

Binomial name

Linaria cannabina
(Linnaeus, 1758)

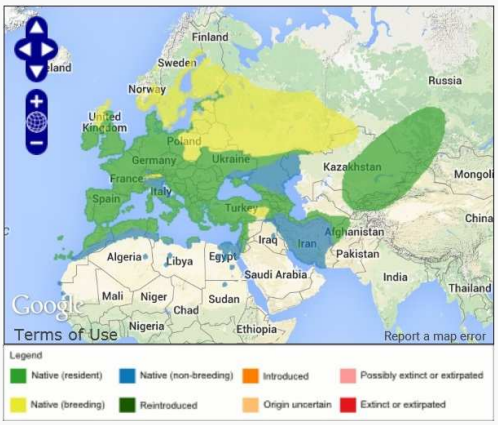


Fig. 7: Distribution and conservation status of the Common Linnet (*Carduelis cannabina*)

Source: http://en.wikipedia.org/wiki/ Common Linnet. [Accessed 18 April 2017]. Distribution map downloaded from http://www.birdlife.org on 18 April 2017 [BirdLife International (2017) IUCN Red List for birds].

Justification of Red List Category

According to BirdLife International (2017)[12] the Common Linnet 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.

Population size

In Europe, the breeding population is estimated to number 17,600,000–31,900,000 pairs, which equates to 35,100,000–63,700,000 mature individuals (BirdLife International 2015). Europe forms c.65% of the global range, so a very preliminary estimate of the global population size is 54,000,000–98,000,000 mature individuals, although further validation of this estimate is needed (BirdLife International, 2017).

Based on the EU Member States' Article 12 reports for the 2008–2012 reporting period, the EU27 breeding population amounts to 14,003,752–18,928,299 breeding pairs. Within the territory of the European Union (EU 28), both the minimum and maximum breeding pairs are **Stable** in the long-term trend (1980–2012), with a change in the minimum number of pairs of -4.61% and a change of -5.88% in the maximum number of pairs, equating to a geomean change of -5.35% (Table 12). **According to BirdLife International (2004), this equates to a Stable classification for the minimum, maximum and geomean number of breeding pairs (a change not more than 20% is considered to be Stable for the period 1980–2012)**. Table 12 also lists population counts and long-term trend for each Member State within the territory of the European Union.

Table 12 **Common Linnet EU28 breeding population (long-term trend) and ring recoveries** (bold = ring recoveries in Malta)

EU Member State	EU Ring Recoveries in Malta (n=52) ∫	Breeding Pairs (2014) (Min - Max)		Long-term Trend (1980–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)	Max % Change (Geomean)
Austria	**6%**	**18,000**	**30,000**	**Unknown**	**?**	**?**	**-**	**-**	**-**
Belgium		30,000	70,000	Decreasing	53	80	-24,000	-56,000	-40,000
Bulgaria		30,000	100,000	Stable	0	0	-	-	-
Croatia*	**15%**	**500,000**	**800,000**	**Increasing**	**80**	**80**	**222,222**	**355,556**	**288,889**
Cyprus		20,000	60,000	Unknown	?	?	-	-	-
Czech Rep.	**24%**	**60,000**	**120,000**	**Decreasing**	**3**	**73**	**-43,800**	**-87,600**	**-65,700**
Denmark		100,000	100,000	Decreasing	33	50	-50,000	-50,000	-50,000
Estonia		40,000	60,000	Decreasing	20	50	-20,000	-30,000	-25,000
Finland		6,600	18,000	Stable	0	0	-	-	-
France		500,000	1,000,000	Decreasing	68	68	-340,000	-680,000	-510,000
Germany		125,000	235,000	Decreasing	52	69	-86,250	-162,150	-124,200
Greece		250,000	680,000	Unknown	?	?	-	-	-
Hungary	**26%**	**71,000**	**107,000**	**Unknown**	**?**	**?**	**-**	**-**	**-**
Ireland		153,250	309,590	Unknown	?	?	-	-	-
Italy	**22%**	**300,000**	**600,000**	**Decreasing**	**20**	**30**	**-90,000**	**-180,000**	**-135,000**
Latvia		12,065	42,162	Stable	0	0	-	-	-
Lithuania	**2%**	**100,000**	**200,000**	**Stable**	**0**	**0**	**-**	**-**	**-**
Luxembourg		5,000	8,000	Decreasing	20	40	-2,000	-3,200	-2,600

[12] BirdLife International (2017) Species factsheet: *Linaria cannabina*. Downloaded from http://www.birdlife.org on 18/04/2017

Netherlands		38,837	48,547	Decreasing	54	75	-29,128	-36,410	-32,769
Poland	**2%**	**830,000**	**1,100,000**	**Unknown**	**?**	**?**	**-**	**-**	**-**
Portugal		500,000	1,000,000	Unknown	?	?	**-**	**-**	**-**
Romania		200,000	500,000	Unknown	?	?	**-**	**-**	**-**
Slovakia	**2%**	**40,000**	**60,000**	**Stable**	**0**	**0**	**-**	**-**	**-**
Slovenia	**1%**	**10,000**	**15,000**	**Unknown**	**?**	**?**	**-**	**-**	**-**
Spain		9,770,000	11,665,000	Stable	**0**	**0**	**-**	**-**	**-**
Sweden		64,000	150,000	Decreasing	56	72	-46,080	-108,000	-77,040
UK		430,000	430,000	Decreasing	40.6	40.6	-174,709	-174,709	-174,709
Total	100%	14,203,752	19,508,299			**Total change**	**-683,745**	**-1,212,514**	**-948,129**
						Percentage change	**-4.61%**	**-5.88%**	**-5.35%**
						Long-term Trend (EU Population)	**Stable**	**Stable**	**Stable**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using *The Percentages Calculator*, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

With reference to the short-term trend of the Common Linnet within the territory of the European Union (EU 28), there is change in the minimum number of breeding pairs of -1.32% and a change of -1.14% in the maximum number of pairs, equating to a geomean change of -1.20% (Table 13). **According to BirdLife International (2004), this equates to a Stable classification for the minimum and maximum number of breeding pairs and their geomean (a change not more than 10% is considered to be Stable for the short-term trend)**. Table 13 also lists population counts and short-term trend for each Member State within the territory of the European Union.

Table 13 **Common Linnet EU28 breeding population (short-term trend) and ring recoveries** (bold = ring recoveries in Malta)

EU Member State	EU Ring Recoveries in Malta (n=52) ∫	Breeding Pairs (EEA, 2014) (Min - Max)		Short-term Trend (~2001–2012)	Mag. % (Min - Max)		Breeding Pairs (2004) (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)	Max % Change (Geomean)
Austria	**6%**	**18,000**	**30,000**	**Decreasing**	**40**	**60**	30,000	75,000	**-10,800**	**-18,000**	**-14,400**
Belgium		30,000	70,000	Decreasing	3	3	30,928	72,165	-900	-2,100	-1,500
Bulgaria		30,000	100,000	Stable	0	0	2,000,000	6,000,000	-	-	-
Croatia*	**15%**	**500,000**	**800,000**	**Increasing**	**80**	**80**	**277,778**	**444,444**	**222,222**	**355,556**	**288,889**
Cyprus		20,000	60,000	Decreasing	10	20	22,222	75,000	-4,000	-12,000	-8,000
Czech Rep.	**24%**	**60,000**	**120,000**	**Fluctuating**	**-**	**-**	60,000	120,000	-	-	-
Denmark		100,000	100,000	Decreasing	33	50	149,254	200,000	-50,000	-50,000	-50,000
Estonia		40,000	60,000	Decreasing	20	50	50,000	120,000	-20,000	-30,000	-25,000
Finland		6,600	18,000	Stable	0	0	5,000,000	7,000,000	-	-	-
France		500,000	1,000,000	Decreasing	39	39	819,672	1,639,344	-195,000	-390,000	-292,500
Germany		125,000	235,000	Decreasing	40	53	208,333	500,000	-66,250	-124,550	-95,400
Greece		250,000	680,000	Unknown	?	?	50,000	100,000	-	-	-
Hungary	**26%**	**71,000**	**107,000**	**Stable**	**0**	**0**	**940,000**	**1,230,000**	-	-	-
Ireland		153,250	309,590	Stable	0	0	1,000,000	2,500,000	-	-	-
Italy	**22%**	**300,000**	**600,000**	**Decreasing**	**20**	**30**	375,000	857,143	**-90,000**	**-180,000**	**-135,000**
Latvia		12,065	42,162	Stable	0	0	2,600,000	3,200,000	-	-	-
Lithuania	**2%**	**100,000**	**200,000**	**Stable**	**0**	**0**	2,500,000	3,500,000	-	-	-
Luxembourg		5,000	8,000	Decreasing	10	20	5,556	10,000	-1,000	-1,600	-1,300
Netherlands		38,837	48,547	Increasing	19	19	32,636	40,796	**6,201**	**7,751**	**6,976**
Poland	**2%**	**830,000**	**1,100,000**	**Decreasing**	**6**	**20**	882,979	1,375,000	**-166,000**	**-220,000**	**-193,000**
Portugal		500,000	1,000,000	Unknown	?	?	500,000	2,500,000	-	-	-
Romania		200,000	500,000	Unknown	?	?	2,450,000	6,300,000	-	-	-
Slovakia	**2%**	**40,000**	**60,000**	**Stable**	**0**	**0**	3,000,000	5,000,000	-	-	-
Slovenia	**1%**	**10,000**	**15,000**	**Decreasing**	**30**	**50**	14,286	30,000	**-5,000**	**-7,500**	**-6,250**

Spain		9,770,000	11,665,000	Stable	0	0	2,600,000	6,400,000	-	-	-
Sweden		64,000	150,000	Stable	0	0	7,500,000	15,000,000	-	-	-
UK		430,000	430,000	Decreasing	14.90	14.90	505,288	505,288	-64,070	-64,070	-64,070
Total	100%	14,203,752	19,508,299				33,603,931	64,794,180			
								Total change	**-444,597**	**-736,513**	**-590,555**
								Percentage change	**-1.32%**	**-1.14%**	**-1.20%**
							Short-term Trend (EU Population)		**Stable**	**Stable**	**Stable**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using The Percentages Calculator, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

Conservation status at EU27 level

The Common Linnet has a breeding population size of 13,700,000–19,100,000 pairs and a breeding range size of 3,370,000 square kilometres in the EU27. The breeding population trend in the EU27 is **Decreasing** in the short term and **Decreasing** in the long term. The EU population status of *Linaria cannabina* was assessed as **Declining**, because EU27 population or range declined by at least 20% since 1980, with continuing decline since 2001 [Source: EEA, 2014, *Linaria cannabina*, Article 12 2008–2012 (Data Sheet Info[13])].

European Bird Census Council: Long-term trend and ten-year (short-term) trends

According to the European Bird Census Council (EBCC, 2016 update), the Common Linnet population is classified as **Moderate Decline** (1980–2014) in the long-term trend at both pan-European[14] and EU[15] levels. It should be noted that EBCC data pertaining to the short-term trends is only available at pan-European level. EBCC replaced the short-term (1990) trend by a rolling "Ten-year trend" (2005–2014). **At pan-European level, the Common Linnet decreased by 62% since 1980 and decreased by 10% during the current 10-year period.** When compared with the previous (2015) EBCC update the percentage change was **+5%** in the long-term trend and **+8%** in the short-term trend (Table 14).

Table 14	**Common Linnet long-term and short-term percentage change at pan-European level**						
EBCC update	**Species**	**Long-term Trend (%)**	**Long-term Slope**		**10-Year Trend (%)**	**10-Year Slope**	**Habitat**
2012	*Linaria cannabina*	-62%	0.9658		-51%	0.9526	farm
2013	*Linaria cannabina*	-63%	0.9675		-54%	0.9557	farm
2014	*Linaria cannabina*	-56%	0.9667		+7%	1.0016	farm
2015	*Linaria cannabina*	-67%	0.9661		-18%	0.9997	farm
2016	*Linaria cannabina*	-62%	0.9677		-10%	1.0057	farm
Overall % change (2015–2016)		+5%			+8%		
Data sources: EBCC (2012–2016 updates). Available at: http://www.ebcc.info/index.php?ID=612							

[13] http://bd.eionet.europa.eu/article12/summary/datasheet/?period=1&subject=A366

[14] http://www.ebcc.info/index.php?ID=612

[15] http://www.ebcc.info/index.php?ID=613

Figure 8 is an extract from the EBCC 2016 update, which confirms that the long-term trend classification for *Linaria cannabina* is **Moderate Decline**, namely: "significant decline, but not significantly more than 5% per year".

Eurasian Linnet (*Carduelis cannabina*)

Population index (%) 1980 - 2014, Europe.
Trend classification: *Moderate decline* (explanation)

List of Countries

Source of the data: EBCC/RSPB/BirdLife/Statistics Netherlands

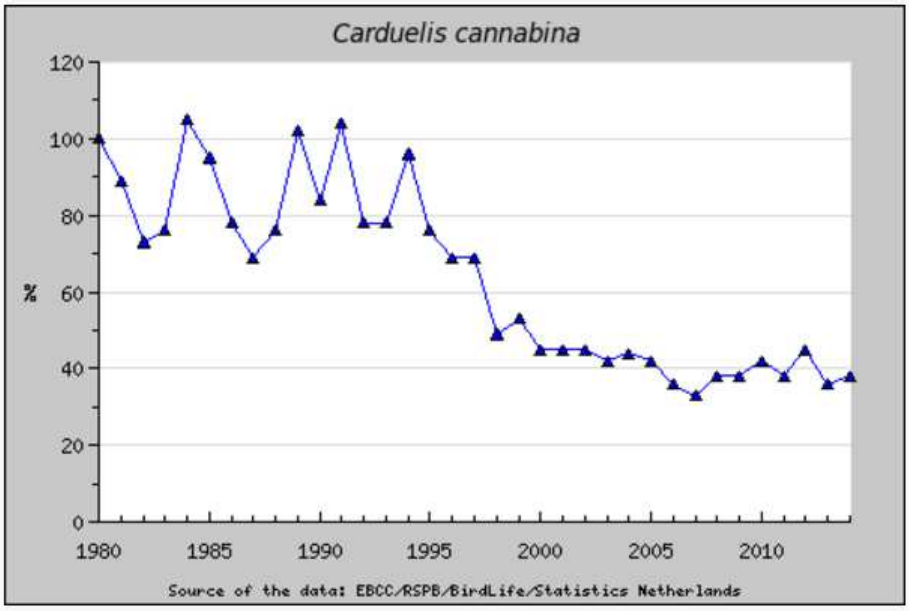


Fig. 8: Long-term trend classification for *Linaria cannabina*.

"List of Countries":

Austria	1998 - 2013	Latvia	1995 - 2013
Belgium-Wallonia	1990 - 2013	Lithuania	2011 - 2013
Cyprus	2006 - 2013	Netherlands	1984 - 2013
Czech Republic	1982 - 2013	Poland	2000 - 2013
Denmark	1976 - 2013	Portugal	2004 - 2013
Estonia	1983 - 2013	Republic of Ireland	1998 - 2013
France	1989 - 2013	Slovakia	2005 - 2013
Germany East	1991 - 2013	Slovenia	2007 - 2013
Germany West	1989 - 2013	Spain	1998 - 2013
Greece	2007 - 2013	Sweden	1975 - 2013
Hungary	1999 - 2013	Switzerland	1999 - 2013
Italy	2000 - 2013	United Kingdom	1966 - 2013

Source: EBCC (2016 update), available at: http://www.ebcc.info/index.php?ID=612.

Ring recoveries in Malta

Tables 15 and 16 provide data on the ring recoveries of this species in Malta, the respective number of breeding pairs, together with the overall direction of the population trend. The reference population (ring recoveries in Malta) is **Stable** in both the short-term and long-term trends. Figs. 9 and 10 illustrate the long-term trend at EU and reference population levels whereas Figs. 11 and 12 illustrate the respective short-term trends.

Table 15 **Common Linnet ring recoveries in Malta from other EU Member States and corresponding long-term trend**

EU Member State	EU Ring Recoveries in Malta (n=52) ∫	Breeding Pairs (2014) (Min - Max)		Long-term Trend (1980–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)
Hungary	26%	71,000	107,000	Unknown	?	?	-	-
Czech Rep.	24%	60,000	120,000	Decreasing	3	73	-43,800	-87,600
Italy	22%	300,000	600,000	Decreasing	20	30	-90,000	-180,000
Croatia*	15%	500,000	800,000	Increasing	80	80	222,222	355,556
Austria	6%	18,000	30,000	Unknown	?	?	-	-
Lithuania	2%	100,000	200,000	Stable	0	0	-	-
Poland	2%	830,000	1,100,000	Unknown	?	?	-	-
Slovakia	2%	40,000	60,000	Stable	0	0	-	-
Slovenia	1%	10,000	15,000	Unknown	?	?	-	-
Total	100%	1,929,000	3,032,000			**Total change**	**88,422**	**87,956**
						Percentage change	**4.92%**	**2.90%**
						Long-term Trend (Ring Recoveries)	**Stable**	**Stable**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)
Percentages verified using *The Percentages Calculator*, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

Table 16 **Common Linnet ring recoveries in Malta from other EU Member States and corresponding short-term trend**

EU Member State	EU Ring Recoveries in Malta (n=52) ∫	Breeding Pairs (EEA, 2014) (Min - Max)		Short-term Trend (~2001–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)
Hungary	26%	71,000	107,000	Stable	0	0	-	-
Czech Rep.	24%	60,000	120,000	Fluctuating	-	-	-	-
Italy	22%	300,000	600,000	Decreasing	20	30	-90,000	-180,000
Croatia*	15%	500,000	800,000	Increasing	80	80	222,222	355,556
Austria	6%	18,000	30,000	Decreasing	40	60	-10,800	-18,000
Lithuania	2%	100,000	200,000	Stable	0	0	-	-
Poland	2%	830,000	1,100,000	Decreasing	6	20	-166,000	-220,000
Slovakia	2%	40,000	60,000	Stable	0	0	-	-
Slovenia	1%	10,000	15,000	Decreasing	30	50	-5,000	-7,500
Total	100%	1,929,000	3,032,000			**Total change**	**-49,578**	**-69,944**
						Percentage change	**-2.59%**	**-2.31%**
						Long-term Trend (Ring Recoveries)	**Stable**	**Stable**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)
Percentages verified using *The Percentages Calculator*, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

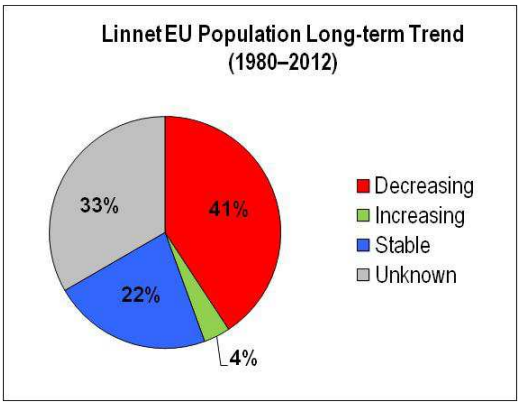


Fig. 9: Common Linnet EU population long-term trend by Member State

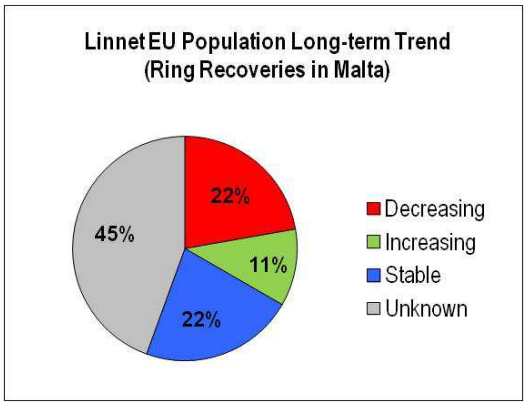


Fig. 10: Common Linnet EU population long-term trend (ring recoveries in Malta)

Data sources: EEA (2014); Raine (2007)

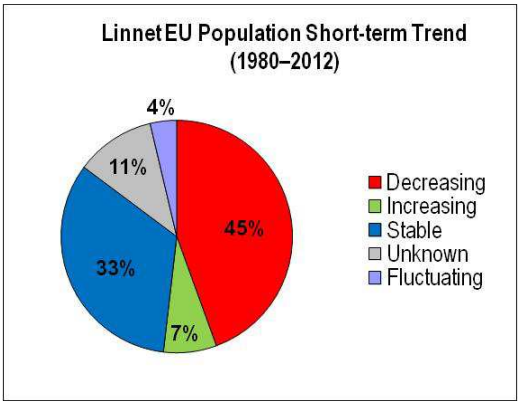


Fig. 11: Common Linnet EU population short-term trend by Member State

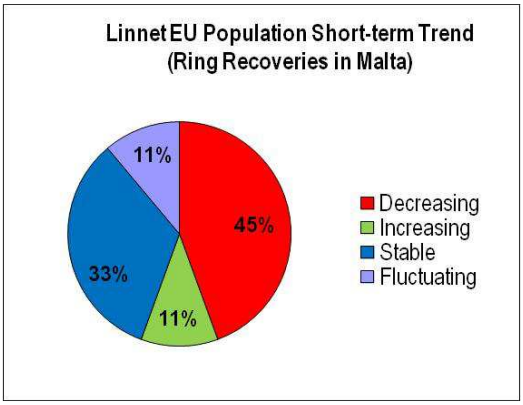


Fig. 12: Common Linnet EU population short-term trend (ring recoveries in Malta)

Data sources: EEA (2014); Raine (2007)

Common Linnet conservation status update – comparison between different data sources

The following table provides a general overview of the latest conservation status from various sources for direct comparison.

Species	EU Population						Ring Recoveries					
	Short-term Trend			Long-term Trend			Short-term Trend			Long-term Trend		
	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean
Linnet	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨

Species	Short-term Trend			Long-term Trend			
	EBCC 2016 (pan-European)	Article 12 (2008–2012) [EU Geomean]	Article 12 (2008–2012) [Ring Recoveries Geomean]	EBCC 2016 (pan-European)	EBCC 2016 (EU)	Article 12 (2008–2012) [EU Geomean]	Article 12 (2008–2012) [Ring Recoveries Geomean]
Linnet	⇨	⇨	⇨	⇩	⇩	⇨	⇨

Data Sources: EBCC (2016); European Environment Agency (2014)

The reference population

Table 17 Common Linnet (*Linaria cannabina*) breeding population estimates (reference population)

Country [Ring recoveries in Malta]	Common Linnet minimum breeding population size (pairs) [Reference population]	Short-term Trend (~2001–2012)	Long-term Trend (1980–2012)
Hungary	71,000	Stable	Unknown
Czech Rep.	60,000	Fluctuating	Decreasing
Italy	300,000	Decreasing	Decreasing
Croatia*	500,000	Increasing	Increasing
Austria	18,000	Decreasing	Unknown
Lithuania	100,000	Stable	Stable
Poland	830,000	Decreasing	Unknown
Slovakia	40,000	Stable	Stable
Slovenia	10,000	Decreasing	Unknown
Reference Population Size (Minimum breeding pairs)	**1,929,000**	**Stable (-2.59%)**	**Stable (+4.92%)**

Data Sources: BirdLife International (2004); European Environment Agency (2014); Raine (2007)

Carnet de Chasse data (2002–2008)

According to the *Carnet de Chasse* data available from the Environment Protection Directorate of the Malta Environment and Planning Authority, the following Common Linnets were captured alive in Malta during the years indicated (Table 18).

Table 18 *Carnet de Chasse* live-capturing data[16] for Common Linnet (2002–2008)

Species	2002	2003	2004	2005	2006	2007	2008	Total	Average
Common Linnet	18,946	22,321	14,362	13,534	9,252	28,094	19,143	125,662	17,952

Source: *Carnet de Chasse* data, Environment Protection Directorate (Malta Environment and Planning Authority). Available at: http://www.mepa.org.mt/biodiversity-reporting.

Minimum breeding population and the <1% annual mortality

Table 19 shows the minimum number of breeding pairs of Common Linnets within the territory of the European Union that correspond with ring recoveries in Malta (the reference population), together with other relevant information required for the calculation of "small numbers".

Table 19 Minimum breeding population and mortality rate

	Common Linnet (*Linaria cannabina*)	Source
Minimum breeding population – pairs	**1,929,000**	BirdLife International (2014); EEA (2014); Raine (2007)
Mortality rate – juveniles	66%	Bauer (2005): *Das Kompendium der Vögel Mitteleuropas* (KVM) / Cramp & Perrins (1994): Birds of the Western Palearctic / Robinson (2005): British Trust for Ornithology

[16] The *Carnet de Chasse* data for the period 2002–2007 covers the months January–May and September–December, whereas the *Carnet de Chasse* data for 2008 covers the months of January and October–December.

Mortality rate – adults	63%	Bauer (2005) and Robinson (2005)
Breeding rate (young per pair)	3–4	Cramp & Perrins (1994: 620) and Robinson (2005)
Breeding success	2.7	Cramp & Perrins (1994: 620)

For the purpose of calculating the <1% mortality rate and "small numbers", the reference population is based solely on ring recoveries of this species in Malta from EU Member States. This equates to a reference population of **1,929,000 minimum breeding pairs**.

Calculation of <1% annual mortality and "small numbers"

Common Linnet (*Linaria cannabina*)
Minimum breeding success: 2.7 fledglings per pair (1,929,000 x 2.7) = 5,208,300
Mortality rate of 1st year birds (5,208,300 x 66%) = 3,437,478
Mortality rate of adults (3,858,000 x 63%) = 2,430,540
Total annual mortality (3,437,478 + 2,430,540) = 5,868,018
1% of total annual mortality (5,868,018 x 1%) = 58,680

Total potential Common Linnet harvest figure is 58,680.
Partitioning with other Member States (Austria and Spain: 58,680 × 33%) = 19,364

Autumn seasonal bags in relation to "small numbers"

Based on the <1% mortality rate of the reference population, the "small numbers" calculation with respect to the potential national bag limit of the Common Linnet is as follows:

- **Common Linnet** – potential maximum bag limit of **19,364** birds (partitioned with Austria and Spain).

Notwithstanding that the partitioned maximum bag limit arising out of the above calculations is 19,364 Common Linnets, given that the average bag limit over a seven-year period (2002–2008) is 17,952 birds, this analysis recommends that, should a derogation for the live-capturing of the seven finch species be considered in autumn 2017, the national bag limit should be substantially reduced further to not more than 12,000 as established in the July 2014 Framework for Allowing a Derogation Opening an Autumn Live-Capturing Season for Finches Regulations (S.L. 549.93)[17]. This calculation is based on the formula discussed previously, which returns a figure that is not only considerably lower than the <1% threshold but also lower than the average number of birds caught over a seven-year period (2002–2008). Thus:

- **Common Linnet** – national bag limit of **12,000** birds.

[17] http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12211&l=1

3. Conservation status of the European Goldfinch (*Carduelis carduelis*)

European Red List Status: Least Concern (European & EU27 levels)	**Status at EU27: Secure**

Distribution and conservation status

The European Goldfinch is resident in most European countries (Hume, 2002). The geographical distribution of this species in Europe (Fig. 13) is as follows:

Breeding Estonia, Latvia, Lithuania, Czech Republic, United Kingdom, Ireland, Germany, Netherlands, Spain, Portugal, France, Belgium, Austria, Luxembourg, Slovenia, Italy, Greece, Cyprus, Denmark, Bulgaria, Croatia, Hungary, Romania, Turkey, Sicily, Corsica, Sardinia, Russia.

Wintering Estonia, Italy, United Kingdom, Ireland, Cyprus, Greece, Germany (a few), Belgium (a few), Luxembourg, Sicily, Corsica, Sardinia.

Sedentary and migratory Birds breeding in northern parts of the range move south and southwest to winter mostly within the southern boundaries of the range or occasionally just beyond. Nominate race regularly (annually?) reaches the Mediterranean, Malta, North Africa and southern Israel; about two-thirds of the British breeding population moves south to winter from Belgium to southern Spain, but some remain even in the northernmost parts of the British Isles (Clement *et al*. 1993: 242).

Conservation status

Least Concern (IUCN 3.1)[1]

Order:	Passeriformes
Family:	Fringillidae
Genus:	*Carduelis*
Species:	***Carduelis***

Binomial name

Carduelis carduelis
(Linnaeus, 1758)

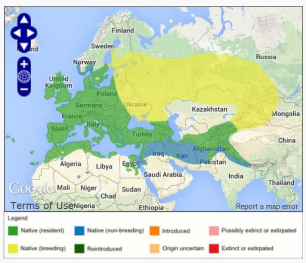


Fig. 13: Distribution and conservation status of the European Goldfinch (*Carduelis carduelis*)

Source: http://en.wikipedia.org/wiki/European_Goldfinch [Accessed 18 April 2017]. Distribution map downloaded from http://www.birdlife.org on 18 April 2017 [BirdLife International (2017) IUCN Red List for birds].

Justification of Red List Category

According to BirdLife International (2017)[18] the European Goldfinch 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). The population trend appears to be increasing, and hence the species does not 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.

Population size

In Europe, the breeding population is estimated to number 27,800,000–42,700,000 pairs, which equates to 55,700,000–85,500,000 mature individuals (BirdLife International 2015). Europe forms c.55% of the global range, so a very preliminary estimate of the global population size is 101,000,000–155,000,000 mature individuals, although further validation of this estimate is needed (BirdLife International, 2017).

Based on the EU Member States' Article 12 reports for the 2008–2012 reporting period, the EU27 breeding population amounts to 23,199,170–32,329,072 breeding pairs. Within the territory of the European Union (EU 28), both the minimum and maximum breeding pairs are **Stable** in the long-term trend (1980–2012), with a change in the minimum number of pairs of +0.67% and a change of +0.07% in the maximum number of pairs, equating to a geomean change of +0.32% (Table 20). **According to BirdLife International (2004), this equates to a Stable classification for the minimum, maximum and geomean number of breeding pairs (a change not more than 20% is considered to be Stable for the period 1980–2012)**. Table 20 also lists population counts and trends for each Member State within the territory of the European Union.

Table 20 **European Goldfinch EU28 breeding population (long-term trend) and ring recoveries** (bold = ring recoveries in Malta)

EU Member State	EU Ring Recoveries in Malta (n=3) ∫	Breeding Pairs (2014) (Min - Max)		Long-term Trend (1980–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)	Max % Change (Geomean)
Austria		50,000	80,000	Unknown	?	?	-	-	-
Belgium		8,000	14,500	Increasing	19	303	6,015	10,902	8,458
Bulgaria		400,000	600,000	Decreasing	5	10	-40,000	-60,000	-50,000
Croatia*	**33%**	**500,000**	**1,000,000**	**Increasing**	**80**	**80**	**222,222**	**444,444**	**333,333**
Cyprus		70,000	150,000	Unknown	?	?	-	-	-
Czech Rep.		200,000	400,000	Stable	0	19	-	-	-
Denmark		23,000	23,000	Increasing	100	1,000	20,909	20,909	20,909
Estonia		40,000	60,000	Stable	0	0	-	-	-
Finland		7,700	15,000	Increasing	603	1,342	7,166	13,960	10,563
France		800,000	1,500,000	Decreasing	18	18	-144,000	-270,000	-207,000
Germany	**33%**	**305,000**	**520,000**	**Decreasing**	**26**	**52**	**-158,600**	**-270,400**	**-214,500**
Greece		830,000	1,080,000	Unknown	?	?	-	-	-
Hungary		622,000	763,000	Unknown	?	?	-	-	-
Ireland		275,945	494,810	Unknown	?	?	-	-	-
Italy		1,000,000	1,800,000	Decreasing	20	30	-300,000	-540,000	-420,000
Latvia		48,861	139,543	Stable	0	0	-	-	-
Lithuania		50,000	100,000	Stable	0	0	-	-	-
Luxembourg		3,000	6,000	Unknown	?	?	-	-	-

[18] BirdLife International (2017) Species factsheet: *Carduelis carduelis*. Downloaded from http://www.birdlife.org on 18/04/2017

Netherlands		31,664	42,219	Increasing	407	1,125	29,079	38,773	33,926
Poland		650,000	1,000,000	Unknown	?	?	-	-	-
Portugal		500,000	1,000,000	Unknown	?	?	-	-	-
Romania		750,000	1,500,000	Unknown	?	?	-	-	-
Slovakia		100,000	150,000	Stable	0	0	-	-	-
Slovenia		28,000	112,000	Unknown	?	?	-	-	-
Spain		15,515,000	19,010,000	Stable	0	0	-	-	-
Sweden		21,000	49,000	Increasing	590	3,300	20,382	47,559	33,971
UK	**33%**	**1,100,000**	**1,300,000**	**Increasing**	**82**	**82**	**496,533**	**586,811**	**541,672**
Total	100%	23,929,170	32,909,072			**Total change**	**159,707**	**22,958**	**91,332**
						Percentage change	**0.67%**	**0.07%**	**0.32%**
						Long-term Trend (EU Population)	**Stable**	**Stable**	**Stable**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using The Percentages Calculator, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

With reference to the short-term trend of the European Goldfinch within the territory of the European Union (EU 28), there is change in the minimum number of breeding pairs of -3.73% and a change of -4.17% in the maximum number of pairs, equating to a geomean change of -4.02% (Table 21). **According to BirdLife International (2004), this equates to a Stable classification for the minimum and maximum number of breeding pairs and their geomean (a change not more than 10% is considered to be Stable for the short-term trend)**. Table 21 also lists population counts and short-term trend for each Member State within the territory of the European Union.

Table 21 **European Goldfinch EU28 breeding population (short-term trend) and ring recoveries (bold = ring recoveries in Malta)**

EU Member State	EU Ring Recoveries in Malta (n=3) ∫	Breeding Pairs (EEA, 2014) (Min - Max)		Short-term Trend (~2001–2012)	Mag. % (Min - Max)		Breeding Pairs (2004) (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)	Max % Change (Geomean)
Austria		50,000	80,000	Stable	0	0	25,000	50,000	-	-	-
Belgium		8,000	14,500	Increasing	2	100	7,843	7,250	4,000	7,250	5,625
Bulgaria		400,000	600,000	Decreasing	10	50	444,444	1,200,000	-200,000	-300,000	-250,000
Croatia*	**33%**	**500,000**	**1,000,000**	**Increasing**	**80**	**80**	**277,778**	**555,556**	**222,222**	**444,444**	**333,333**
Cyprus		70,000	150,000	Decreasing	10	20	77,778	187,500	-14,000	-30,000	-22,000
Czech Rep.		200,000	400,000	Stable	0	19	200,000	400,000	-	-	-
Denmark		23,000	23,000	Decreasing	20	33	28,750	34,328	-7,590	-7,590	-7,590
Estonia		40,000	60,000	Stable	0	0	20,000	30,000	-	-	-
Finland		7,700	15,000	Increasing	30	148	5,923	6,048	4,595	8,952	6,773
France		800,000	1,500,000	Decreasing	49	49	1,568,627	2,941,176	-392,000	-735,000	-563,500
Germany	**33%**	**305,000**	**520,000**	**Decreasing**	**37**	**48**	**484,127**	**1,000,000**	**-146,400**	**-249,600**	**-198,000**
Greece		830,000	1,080,000	Stable	0	19	830,000	1,080,000	-	-	-
Hungary		622,000	763,000	Stable	0	0	690,000	910,000	-	-	-
Ireland		275,945	494,810	Increasing	135	216	117,523	156,585	188,621	338,225	263,423
Italy		1,000,000	1,800,000	Decreasing	20	30	1,250,000	2,571,429	-300,000	-540,000	-420,000
Latvia		48,861	139,543	Stable	0	0	15,000	50,000	-	-	-
Lithuania		50,000	100,000	Stable	0	0	50,000	100,000	-	-	-
Luxembourg		3,000	6,000	Unknown	?	?	6,000	8,000	-	-	-
Netherlands		31,664	42,219	Increasing	80	119	17,591	19,278	17,206	22,941	20,073
Poland		650,000	1,000,000	Decreasing	35	40	1,000,000	1,666,667	-260,000	-400,000	-330,000
Portugal		500,000	1,000,000	Stable	0	0	500,000	2,500,000	-	-	-
Romania		750,000	1,500,000	Fluctuating	-	-	887,000	964,000	-	-	-
Slovakia		100,000	150,000	Stable	0	0	100,000	150,000	-	-	-
Slovenia		28,000	112,000	Decreasing	27	35	38,567	172,308	-9,800	-39,200	-24,500
Spain		15,515,000	19,010,000	Stable	0	0	800,000	2,900,000	-	-	-

Sweden		21,000	49,000	Increasing	70	260	12,353	13,611	15,167	35,389	25,278
UK	**33%**	**1,100,000**	**1,300,000**	**Increasing**	**84**	**84**	**596,853**	**705,372**	**503,147**	**594,628**	**548,888**
Total	100%	23,929,170	32,909,072				10,051,159	20,379,108			
								Total change	**-374,833**	**-849,561**	**-612,197**
								Percentage change	**-3.73%**	**-4.17%**	**-4.02%**
								Short-term Trend (EU Population)	**Stable**	**Stable**	**Stable**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using The Percentages Calculator, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

Conservation status at EU27 level

The European Goldfinch has a breeding population size of 23,500,000–32,600,000 pairs and a breeding range size of 3,420,000 square kilometres in the EU27. The breeding population trend in the EU27 is **Stable** in the short term and **Stable** in the long term. The EU population status of *Carduelis carduelis* was assessed as **Secure**, because the species does not meet any of the IUCN Red List criteria for threatened or Near Threatened, or the criteria for Depleted or Declining (the EU27 population or range has not declined by 20% or more since 1980) [Source: EEA, 2014, *Carduelis carduelis*, Article 12 2008–2012 (Data Sheet Info[19])].

European Bird Census Council: Long-term trend and ten-year (short-term) trends

According to the European Bird Census Council (EBCC, 2016 update), the European Goldfinch population is classified as **Moderate Increase** (1980–2014) in the long-term trend at both the pan-European[20] and EU[21] levels. It should be noted that EBCC data pertaining to the short-term trends is only available at pan-European level. EBCC replaced the short-term (1990) trend by a rolling "Ten-year trend" (2005–2014). At pan-European level, the European Goldfinch increased by 9% since 1980 but decreased by 7% during the current 10-year period. When compared with the previous (2015) EBCC update the percentage change was **+7%** in the long-term trend and **+7%** in the short-term trend (Table 22).

Table 22	**European Goldfinch long-term and short-term percentage change at pan-European level**						
EBCC update	**Species**	**Long-term Trend (%)**	**Long-term Slope**		**10-Year Trend (%)**	**10-Year Slope**	**Habitat**
2012	*Carduelis carduelis*	-3%	1.0195		+8	1.001	oth
2013	*Carduelis carduelis*	+4%	1.022		+6	0.9992	oth
2014	*Carduelis carduelis*	+18%	1.0208		+1	0.9989	oth
2015	*Carduelis carduelis*	+2%	1.0185		-14%	0.9981	oth
2016	*Carduelis carduelis*	+9%	1.0181		-7%	1.0037	oth
Overall % change (2015–2016)		+7%			+7%		
Data sources: EBCC (2012–2016 updates). Available at: http://www.ebcc.info/index.php?ID=612							

[19] http://bd.eionet.europa.eu/article12/summary/datasheet/?period=1&subject=A364

[20] http://www.ebcc.info/index.php?ID=612

[21] http://www.ebcc.info/index.php?ID=613

Figure 14 is an extract from the EBCC 2016 update, which confirms that the long-term trend classification for *Carduelis carduelis* is **Moderate Increase**, namely: "significant increase, but not significantly more than 5% per year".

European Goldfinch (*Carduelis carduelis*)

Population index (%) 1980 - 2014, Europe.
Trend classification: *Moderate increase* (explanation)

List of Countries

Source of the data: EBCC/RSPB/BirdLife/Statistics Netherlands

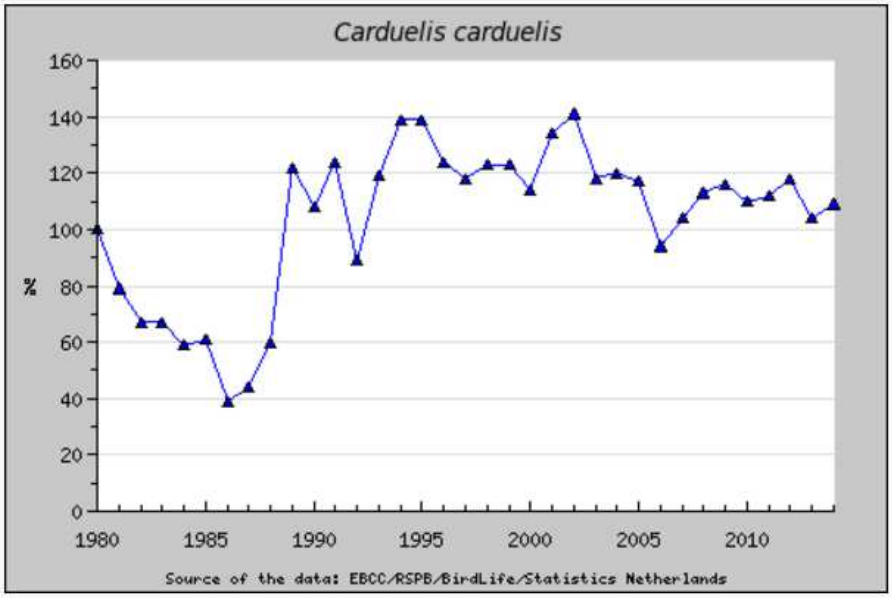


Fig. 14: Long-term trend classification for *Carduelis carduelis.*

"List of Countries":

Austria	1998 - 2013	Latvia	1995 - 2013
Belgium-Wallonia	1990 - 2013	Lithuania	2011 - 2013
Bulgaria	2005 - 2013	Netherlands	1984 - 2013
Cyprus	2006 - 2013	Poland	2000 - 2013
Czech Republic	1982 - 2013	Portugal	2004 - 2013
Denmark	1976 - 2013	Republic of Ireland	1998 - 2013
Estonia	1983 - 2013	Romania	2007 - 2013
France	1989 - 2013	Slovakia	2005 - 2013
Germany East	1991 - 2013	Slovenia	2007 - 2013
Germany West	1989 - 2013	Spain	1998 - 2013
Greece	2007 - 2013	Sweden	1983 - 2013
Hungary	1999 - 2013	Switzerland	1999 - 2013
Italy	2000 - 2013	United Kingdom	1966 - 2013

Source: EBCC (2016 update), available at: http://www.ebcc.info/index.php?ID=612.

Ring recoveries in Malta

Tables 23 and 24 provide data on the ring recoveries of this species in Malta, the respective number of breeding pairs, together with the overall direction of the population trend. The reference population (ring recoveries in Malta) is **Increasing** in both the short-term and long-term trends. Figs. 15 and 16 illustrate the long-term trend at EU and reference population levels whereas Figs. 17 and 18 illustrate the respective short-term trends.

Table 23 **European Goldfinch ring recoveries in Malta from other EU Member States and corresponding long-term trend**

Country	EU Ring Recoveries in Malta (n=3) ∫	Breeding Pairs (Min - Max)		Long-term Trend (1980–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)
Croatia*	33%	500,000	1,000,000	Increasing	80	80	222,222	444,444
Germany	33%	305,000	520,000	Decreasing	26	52	-158,600	-270,400
UK	33%	1,100,000	1,300,000	Increasing	82	82	496,533	586,811
Total	100%	1,905,000	2,820,000			Total change	560,155	760,856
						Percentage change	+41.65%	+36.95%
						Long-term Trend (Ring Recoveries)	Increasing	Increasing

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using *The Percentages Calculator*, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

Table 24 **European Goldfinch ring recoveries in Malta from other EU Member States and corresponding short-term trend**

EU Member State	EU Ring Recoveries in Malta (n=3) ∫	Breeding Pairs (EEA, 2014) (Min - Max)		Short-term Trend	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)
Croatia*	33%	500,000	1,000,000	Increasing	80	80	222,222	444,444
Germany	33%	305,000	520,000	Decreasing	37	48	-146,400	-249,600
UK	33%	1,100,000	1,300,000	Increasing	84	84	503,147	594,628
Total	100%	1,905,000	2,820,000			Total change	578,969	789,473
						Percentage change	+49.29%	+42.42%
						Short-term Trend (Ring Recoveries)	Increasing	Increasing

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using *The Percentages Calculator*, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

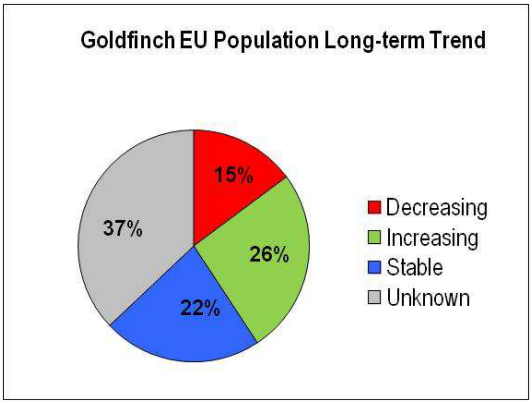


Fig. 15: European Goldfinch EU population long-term trend by Member State

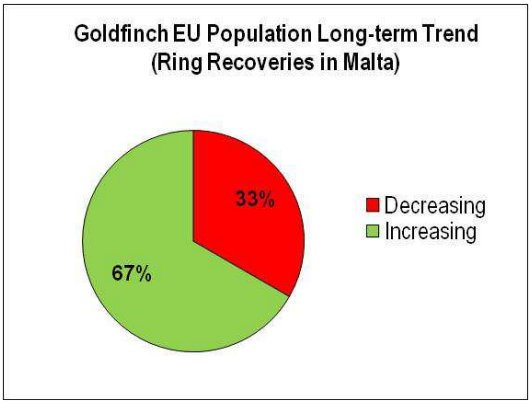


Fig. 16: European Goldfinch EU population long-term trend (ring recoveries in Malta)

Data sources: EEA (2014); Raine (2007)

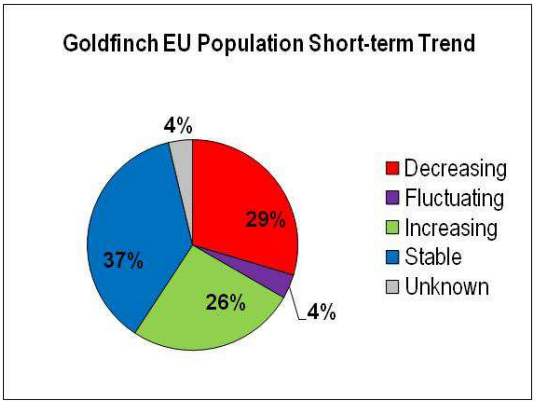


Fig. 17: European Goldfinch EU population short-term trend by Member State

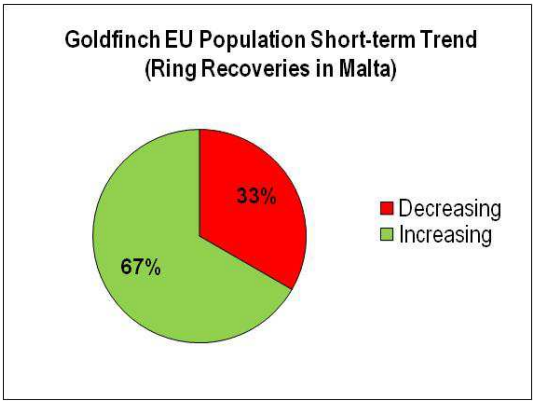


Fig. 18: European Goldfinch EU population short-term trend (ring recoveries in Malta)

Data sources: EEA (2014); Raine (2007)

European Goldfinch conservation status update – comparison between different data sources

The following table provides a general overview of the latest conservation status from various sources for direct comparison.

Species	EU Population						Ring Recoveries					
	Short-term Trend			Long-term Trend			Short-term Trend			Long-term Trend		
	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean
Goldfinch	⇨	⇨	⇨	⇨	⇨	⇨	⇧	⇧	⇧	⇧	⇧	⇧

Species	Short-term Trend			Long-term Trend			
	EBCC 2016 (pan-European)	Article 12 (2008–2012) [EU Geomean]	Article 12 (2008–2012) [Ring Recoveries Geomean]	EBCC 2016 (pan-European)	EBCC 2016 (EU)	Article 12 (2008–2012) [EU Geomean]	Article 12 (2008–2012) [Ring Recoveries Geomean]
Goldfinch	⇨	⇨	⇧	⇧	⇧	⇨	⇧

Data Sources: EBCC (2016); European Environment Agency (2014)

The reference population

Table 25: European Goldfinch (*Carduelis carduelis*) breeding population estimates (reference population)

Country [Ring recoveries in Malta]	**European Goldfinch minimum breeding population size (pairs)** [Reference population]	**Short-term Trend (~2001–2012)**	**Long-term Trend (1980–2012)**
Croatia*	500,000	Increasing	Increasing
Germany	305,000	Decreasing	Decreasing
UK	1,100,000	Increasing	Stable
Reference Population Size (Minimum breeding pairs)	**1,905,000**	**Increasing (+49.29%)**	**Increasing (+41.65%)**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); Raine (2007)

Carnet de Chasse data (2002–2008)

According to the *Carnet de Chasse* data available from the Environment Protection Directorate of the Malta Environment and Planning Authority, the following European Goldfinches were captured alive in Malta during the years indicated (Table 26).

Table 26 *Carnet de Chasse* live-capturing data[22] for European Goldfinch (2002–2008)

Species	2002	2003	2004	2005	2006	2007	2008	Total	Average
European Goldfinch	1,248	1,348	497	1,240	505	1,880	458	7,176	1,025

Source: *Carnet de Chasse* data, Environment Protection Directorate (Malta Environment and Planning Authority). Available at: http://www.mepa.org.mt/biodiversity-reporting.

Minimum breeding population and the <1% annual mortality

In the case of the European breeding population, Table 27 shows the minimum number of breeding pairs of European Goldfinches correspond with ring recoveries in Malta (the reference population), together with other relevant information required for the calculation of "small numbers".

Table 27 Minimum breeding population and mortality rate

	European Goldfinch (*Carduelis carduelis*)	Source
Minimum breeding population – pairs	1,905,000	BirdLife International (2014); EEA (2014); Raine (2007)
Mortality rate – juveniles	66%	Bauer (2005): *Das Kompendium der Vögel Mitteleuropas* (KVM) / Cramp & Perrins (1994): Birds of the Western Palearctic / Robinson (2005): British Trust for Ornithology
Mortality rate – adults	63%	Bauer (2005) and Robinson (2005)
Breeding rate (young per pair)	3–4	Cramp & Perrins (1994: 583) and Robinson (2005)
Breeding success	1.8	Cramp & Perrins (1994: 583)

For the purpose of calculating the <1% mortality rate and "small numbers", the reference population is based solely on ring recoveries of this species in Malta from EU Member States. This equates to a reference population of **1,905,000 minimum breeding pairs**.

Calculation of <1% annual mortality and "small numbers"

European Goldfinch (*Carduelis carduelis*)
Minimum breeding success: 1.8 fledglings per pair (1,905,000 x 1.8) = 3,429,000
Mortality rate of 1st year birds (3,429,000 x 66%) = 2,263,140
Mortality rate of adults (3,810,000 x 63%) = 2,400,300
Total annual mortality (2,263,140 + 2,400,300) = 4,663,440
1% of total annual mortality (1,958,400 x 1%) = 46,634

Total potential European Goldfinch harvest figure is 46,634.
Partitioning with other Member States (Austria and Spain: 46,634 × 33%) = 15,389

[22] The *Carnet de Chasse* data for the period 2002–2007 covers the months January–May and September–December, whereas the *Carnet de Chasse* data for 2008 covers the months of January and October–December.

Autumn seasonal bags in relation to "small numbers"

Based on the <1% mortality rate of the reference population, the "small numbers" calculation with respect to the potential national bag limit of the European Goldfinch is as follows:

- **European Goldfinch** – potential maximum bag limit of 15,389 individuals (partitioned with Austria and Spain).

Notwithstanding that the partitioned maximum bag limit arising out of the above calculations is 15,389 European Goldfinches, given that the average bag limit over a seven-year period (2002–2008) is 1,025 birds, this analysis recommends that, should a derogation for the live-capturing of the seven finch species be considered in autumn 2017, the national bag limit should be substantially reduced further to not more than 800 as established in the July 2014 Framework for Allowing a Derogation Opening an Autumn Live-Capturing Season for Finches Regulations (S.L. 549.93)[23]. This calculation is based on the formula discussed previously, which returns a figure that is not only considerably lower than the <1% threshold but also lower than the average number of birds caught over a seven-year period (2002–2008). Thus:

- **European Goldfinch** – national bag limit of **800** birds.

[23] http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12211&l=1

4. Conservation status of the European Greenfinch (*Chloris chloris*)

European Red List Status: Least Concern (European & EU27 levels)	**Status at EU27: Secure**

Distribution and conservation status

This European Greenfinch is present throughout Europe except Iceland (Hume, 2002). The geographical distribution of this species in Europe (Fig. 19) is as follows:

Breeding Estonia, Latvia, Lithuania, Czech Republic, United Kingdom, Ireland, Germany, Netherlands, Spain, Portugal, France, Belgium, Austria, Luxembourg, Slovenia, Italy, Greece, Cyprus, Denmark, Bulgaria, Croatia, Hungary, Romania, Turkey, Sicily, Corsica, Sardinia, Russia.

Wintering Estonia, Italy, United Kingdom, Ireland, Cyprus, Greece, Germany (a few), Belgium (a few), Luxembourg, Sicily, Corsica, Sardinia, Malta.

Sedentary and migratory Birds from northern areas of breeding range move south and southwest to winter mostly within or slightly to the south of the range with nominate race regular in winter in southern Spain, southern France, Italy (possibly also Malta) and south-western CIS (former USSR); *aurantiiventris* is largely sedentary, but some move south to reach Malta, Cyprus, Libya and northern Egypt south to the Suez Canal and the northern shores of the Red Sea. **A diurnal and nocturnal migrant** (Clement *et al*. 1993: 214).

European Greenfinch

Conservation status

Least Concern (IUCN 3.1)[1]

Order:	Passeriformes
Family:	Fringillidae
Genus:	*Carduelis*
Species:	***Chloris***

Binomial name

Chloris chloris
(Linnaeus, 1758)

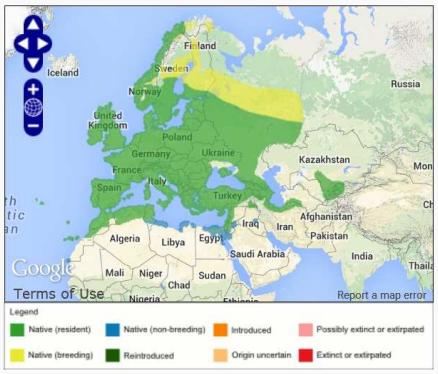


Fig. 19: Distribution and conservation status of the European Greenfinch (*Chloris chloris*)

Source: http://en.wikipedia.org/wiki/European_Greenfinch [Accessed 19 April 2017]. Distribution map downloaded from http://www.birdlife.org on 19 April 2017 [BirdLife International (2017) IUCN Red List for birds].

Justification of Red List Category

According to BirdLife International (2017)[24] the European Greenfinch 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). The population trend appears to be stable, and hence the species does not 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.

Population size

In Europe, the breeding population is estimated to number 21,600,000–33,100,000 pairs, which equates to 43,200,000–66,100,000 mature individuals (BirdLife International 2015). Europe forms c.90% of the global range, so a very preliminary estimate of the global population size is 48,000,000–74,000,000 mature individuals, although further validation of this estimate is needed (BirdLife International, 2017).

Based on the EU Member States' Article 12 reports for the 2008–2012 reporting period, the EU27 breeding population amounts to 18,096,464–26,173,127 pairs. Within the territory of the European Union (EU 28), both the minimum and maximum breeding pairs are **Stable** in the long-term trend (1980–2012), with a change in the minimum number of pairs of -1.55% and a change of -2.45% in the maximum number of pairs, equating to a geomean change of -2.08% (Table 28). **According to BirdLife International (2004), this equates to a long-term Stable classification for the minimum, maximum and geomean number of breeding pairs (a change not more than 20% is considered to be Stable for the period 1980–2012)**. Table 28 also lists population counts and long-term trend for each Member State within the territory of the European Union.

Table 28 **European Greenfinch EU28 breeding population (long-term trend) and ring recoveries** (bold = ring recoveries in Malta)

EU Member State	EU Ring Recoveries in Malta (n=16) ∫	Breeding Pairs (2014) (Min - Max)		Long-term Trend (1980–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)	Max % Change (Geomean)
Austria		190,000	280,000	Unknown	?	?	-	-	-
Belgium		70,000	130,000	Stable	0	0	-	-	-
Bulgaria		200,000	400,000	Stable	0	0	-	-	-
Croatia*	**18%**	**500,000**	**1,000,000**	**Increasing**	**80**	**80**	**222,222**	**444,444**	**333,333**
Cyprus		40,000	120,000	Increasing	10	50	13,333	40,000	26,667
Czech Rep.		562,500	1,125,000	Decreasing	1	35	-196,875	-393,750	-295,313
Denmark		500,000	500,000	Increasing	50	100	250,000	250,000	250,000
Estonia		80,000	120,000	Increasing	50	70	32,941	49,412	41,176
Finland		170,000	400,000	Increasing	349	570	144,627	340,299	242,463
France		1,000,000	2,000,000	Decreasing	30	30	-300,000	-600,000	-450,000
Germany	**8%**	**1,650,000**	**2,800,000**	**Decreasing**	**14**	**29**	**-478,500**	**-812,000**	-645,250
Greece		370,000	470,000	Unknown	?	?	-	-	-
Hungary	**25%**	**525,000**	**639,000**	**Unknown**	**?**	**?**	-	-	-
Ireland		260,240	439,675	Unknown	?	?	-	-	-
Italy	**12%**	**400,000**	**800,000**	**Decreasing**	**20**	**30**	**-120,000**	**-240,000**	**-180,000**
Latvia		113,621	194,246	Increasing	5	297	85,001	145,318	115,159
Lithuania		120,000	250,000	Stable	0	0	-	-	-
Luxembourg		15,000	20,000	Unknown	?	?	-	-	-
Netherlands		90,603	181,206	Increasing	44	190	59,361	118,721	89,041

[24] BirdLife International (2017) Species factsheet: *Chloris chloris*. Downloaded from http://www.birdlife.org on 19/04/2017

Poland		1,000,000	1,300,000	Unknown	?	?	-	-	-
Portugal		500,000	1,000,000	Unknown	?	?	-	-	-
Romania		300,000	600,000	Unknown	?	?	-	-	-
Slovakia	**12%**	**100,000**	**130,000**	**Stable**	**0**	**0**	-	-	-
Slovenia	**25%**	**101,000**	**142,000**	**Unknown**	**?**	**?**	-	-	-
Spain		7,780,000	9,155,000	Increasing	?	?	-	-	-
Sweden		241,000	572,000	Stable	0	0	-	-	-
UK		1,600,000	1,800,000	Stable	0	0	-	-	-
Total	100%	18,478,964	26,568,127						
						Total change	**-287,890**	**-657,557**	**-472,723**
						Percentage change	**-1.55%**	**-2.45%**	**-2.08%**
						Long-term Trend (EU Population)	**Stable**	**Stable**	**Stable**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using The Percentages Calculator, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

With reference to the short-term trend of the European Greenfinch within the territory of the European Union (EU 28), there is change in the minimum number of breeding pairs of +16.52% and a change of +10.36% in the maximum number of pairs, equating to a geomean change of +12.69% (Table 29). **According to BirdLife International (2004), this equates to a short-term Moderate Increase classification for the minimum number of breeding pairs and Stable for the maximum and geomean number of breeding pairs (a change not more than 10% is considered to be Stable for the short-term trend)**. Table 29 also lists population counts and short-term trend for each Member State within the territory of the European Union.

Table 29 **European Greenfinch EU28 breeding population (short-term trend) and ring recoveries (bold = ring recoveries in Malta)**

EU Member State	EU Ring Recoveries in Malta (n=16) ∫	Breeding Pairs (EEA, 2014) (Min - Max)		Short-term Trend (~2001–2012)	Mag. % (Min - Max)		Breeding Pairs (2004) (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)	Max % Change (Geomean)
Austria		190,000	280,000	Stable	0	0	110,000	220,000	-	-	-
Belgium		70,000	130,000	Increasing	42	42	49,296	91,549	20,704	38,451	29,577
Bulgaria		200,000	400,000	Fluctuating	-	-	200,000	600,000	-	-	-
Croatia*	**18%**	**500,000**	**1,000,000**	**Increasing**	**80**	**80**	**277,778**	**555,556**	**222,222**	**444,444**	**333,333**
Cyprus		40,000	120,000	Stable	0	0	80,000	200,000	-	-	-
Czech Rep.		562,500	1,125,000	Increasing	17	50	480,769	750,000	187,500	375,000	281,250
Denmark		500,000	500,000	Stable	0	0	500,000	700,000	-	-	-
Estonia		80,000	120,000	Increasing	20	50	66,667	80,000	26,667	40,000	33,333
Finland		170,000	400,000	Decreasing	41	57	288,136	930,233	-96,900	-228,000	-162,450
France		1,000,000	2,000,000	Decreasing	29	29	1,408,451	2,816,901	-290,000	-580,000	-435,000
Germany	**8%**	**1,650,000**	**2,800,000**	**Decreasing**	**20**	**29**	**2,062,500**	**3,943,662**	**-478,500**	**-812,000**	**-645,250**
Greece		370,000	470,000	Stable	0	0	370,000	470,000	-	-	-
Hungary	**25%**	**525,000**	**639,000**	**Increasing**	**35**	**35**	**388,889**	**473,333**	**136,111**	**165,667**	**150,889**
Ireland		260,240	439,675	Decreasing	25	41	348,847	750,299	-107,739	-182,025	-144,882
Italy	**12%**	**400,000**	**800,000**	**Decreasing**	**25**	**35**	**533,333**	**1,230,769**	**-140,000**	**-280,000**	**-210,000**
Latvia		113,621	194,246	Increasing	6	216	107,190	61,470	77,665	132,776	105,220
Lithuania		120,000	250,000	Stable	0	0	200,000	400,000	-	-	-
Luxembourg		15,000	20,000	Unknown	?	?	15,000	20,000	-	-	-
Netherlands		90,603	181,206	Increasing	64	100	55,246	90,603	45,302	90,603	67,952
Poland		1,000,000	1,300,000	Increasing	60	90	625,000	684,211	473,684	615,789	544,737
Portugal		500,000	1,000,000	Stable	0	0	200,000	2,000,000	-	-	-
Romania		300,000	600,000	Unknown	?	?	850,000	910,000	-	-	-
Slovakia	**12%**	**100,000**	**130,000**	**Stable**	**0**	**0**	**100,000**	**130,000**	**-**	**-**	**-**
Slovenia	**25%**	**101,000**	**142,000**	**Stable**	**0**	**0**	**50,000**	**80,000**	**-**	**-**	**-**
Spain		7,780,000	9,155,000	Increasing	65	65	4,728,334	5,560,617	3,054,538	3,594,383	3,324,461
Sweden		241,000	572,000	Decreasing	37	48	382,540	1,100,000	-115,680	-274,560	-195,120

UK		1,600,000	1,800,000	Decreasing	19	19	1,968,020	2,214,022	-299,200	-336,600	-317,900
Total	100%	18,478,964	26,568,127				16,445,993	27,063,225			
								Total change	**2,716,374**	**2,803,927**	**2,760,151**
								Percentage change	**16.52%**	**10.36%**	**12.69%**
							Short-term Trend (EU Population)		**Increasing**	**Increasing**	**Increasing**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using The Percentages Calculator, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

Conservation status at EU27 level

The European Greenfinch has a breeding population size of 18,000,000–26,100,000 pairs and a breeding range size of 4,010,000 square kilometres in the EU27. The breeding population trend in the EU27 is **Stable** in the short term and **Stable** in the long term. The EU population status of *Chloris chloris* was assessed as **Secure**, because the species does not meet any of the IUCN Red List criteria for threatened or Near Threatened, or the criteria for Depleted or Declining (the EU27 population or range has not declined by 20% or more since 1980) [Source: EEA, 2014, *Chloris chloris*, Article 12 2008–2012 (Data Sheet Info[25])].

European Bird Census Council: Long-term trend and ten-year (short-term) trends

According to the European Bird Census Council (EBCC, 2016 update), the European Greenfinch population is classified as **Stable** (1980–2014) in the long-term trend at both pan-European[26] and EU[27] levels. It should be noted that EBCC data pertaining to the short-term trends is only available at pan-European level. EBCC replaced the short-term (1990) trend by a rolling "Ten-year trend" (2005–2014). At pan-European level, the European Greenfinch increased by 6% since 1980 but decreased by 11% during the current 10-year period. When compared with the previous (2015) EBCC update the percentage change was **-8%** in the long-term trend and **-2%** in the short-term trend (Table 30).

Table 30	**European Greenfinch long-term and short-term percentage change at pan-European level**						
EBCC update	**Species**	**Long-term Trend (%)**	**Long-term Slope**		**10-Year Trend (%)**	**10-Year Slope**	**Habitat**
2012	*Chloris chloris*	+28%	1.0045		-16%	0.9936	oth
2013	*Chloris chloris*	+29%	1.005		-18%	0.9937	oth
2014	*Chloris chloris*	+22%	1.004		-5%	0.994	oth
2015	*Chloris chloris*	+14%	1.0023		-9%	0.9933	oth
2016	*Chloris chloris*	+6%	1.0014		-11%	0.9916	
Overall % change (2015–2016)		-8%			-2%		
Data sources: EBCC (2012–2016 updates). Available at: http://www.ebcc.info/index.php?ID=612							

[25] http://bd.eionet.europa.eu/article12/summary/datasheet/?period=1&subject=A745

[26] http://www.ebcc.info/index.php?ID=612

[27] http://www.ebcc.info/index.php?ID=613

Figure 20 is an extract from the EBCC 2016 update, which confirms that the long-term trend classification for *Chloris chloris* is **Stable**, namely: "no significant increase or decline, and most probable trends are less than 5% per year".

European Greenfinch (*Carduelis chloris*)

Population index (%) 1980 - 2014, Europe.
Trend classification: *Stable* (explanation)

List of Countries

Source of the data: EBCC/RSPB/BirdLife/Statistics Netherlands

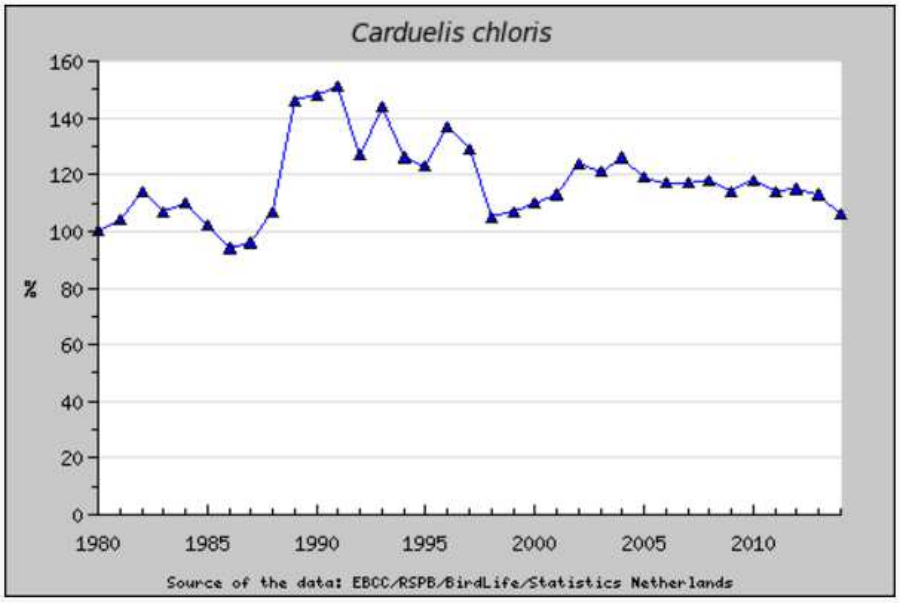


Fig. 20: Long-term trend classification for *Chloris chloris*.

"List of Countries":

Austria	1998 - 2013	Latvia	1995 - 2013
Belgium-Brussels	1992 - 2013	Lithuania	2011 - 2013
Belgium-Wallonia	1990 - 2013	Luxembourg	2009 - 2012
Bulgaria	2005 - 2013	Netherlands	1984 - 2013
Cyprus	2006 - 2013	Norway	1996 - 2013
Czech Republic	1982 - 2013	Poland	2000 - 2013
Denmark	1976 - 2013	Portugal	2004 - 2013
Estonia	1983 - 2013	Republic of Ireland	1998 - 2013
Finland	1984 - 2013	Slovakia	2005 - 2013
France	1989 - 2013	Slovenia	2007 - 2013
Germany East	1991 - 2013	Spain	1998 - 2013
Germany West	1989 - 2013	Sweden	1975 - 2013
Greece	2007 - 2013	Switzerland	1999 - 2013
Hungary	1999 - 2013	United Kingdom	1966 - 2013
Italy	2000 - 2013		

Source: EBCC (2016 update), available at: http://www.ebcc.info/index.php?ID=612.

Ring recoveries in Malta

Tables 31 and 32 provide data on the ring recoveries of this species in Malta, the respective number of breeding pairs, together with the overall direction of the population trend. The reference population (ring recoveries in Malta) is **Stable** in both the short-term and long-term trends. Figs. 21 and 22 illustrate the long-term trend at EU and reference population levels whereas Figs. 23 and 24 illustrate the respective short-term trends.

Table 31 **European Greenfinch ring recoveries in Malta from other EU Member states and corresponding long-term trend**

Country	EU Ring Recoveries in Malta (n=16) ∫	Breeding Pairs (Min - Max)		Long-term Trend (1980–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)
Hungary	25%	525,000	639,000	Unknown	?	?	-	-
Slovenia	25%	101,000	142,000	Unknown	?	?	-	-
Croatia*	18%	500,000	1,000,000	Increasing	80	80	222,222	444,444
Italy	12%	400,000	800,000	Decreasing	20	30	-120,000	-240,000
Slovakia	12%	100,000	130,000	Stable	0	0	-	-
Germany	8%	1,650,000	2,800,000	Decreasing	14	29	-478,500	-812,000
Total	100%	3,276,000	5,511,000			**Total change**	**-376,278**	**-607,556**
						Percentage change	**-10.99%**	**-9.27%**
						Long-term Trend (Ring Recoveries)	**Stable**	**Stable**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using *The Percentages Calculator*, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

Table 32 **European Greenfinch ring recoveries in Malta from other EU Member states and corresponding short-term trend**

EU Member State	EU Ring Recoveries in Malta (n=16) ∫	Breeding Pairs (EEA, 2014) (Min - Max)		Short-term Trend (~2001–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)
Hungary	25%	525,000	639,000	Increasing	35	35	136,111	165,667
Slovenia	25%	101,000	142,000	Stable	0	0	-	-
Croatia*	18%	500,000	1,000,000	Increasing	80	80	222,222	444,444
Italy	12%	400,000	800,000	Decreasing	25	35	-140,000	-280,000
Slovakia	12%	100,000	130,000	Stable	0	0	-	-
Germany	8%	1,650,000	2,800,000	Decreasing	20	29	-478,500	-812,000
Total	100%	3,276,000	5,511,000			**Total change**	**-260,167**	**-481,889**
						Percentage change	**-7.62%**	**-7.51%**
						Short-term Trend (Ring Recoveries)	**Stable**	**Stable**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using *The Percentages Calculator*, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

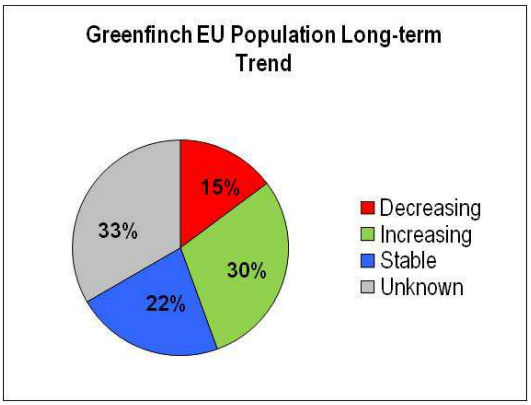


Fig. 21: European Greenfinch EU population long-term trend by Member State

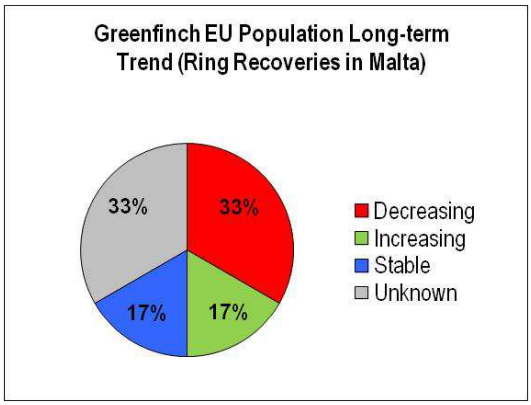


Fig. 22: European Greenfinch EU population long-term trend (ring recoveries in Malta)

Data sources: EEA (2014); Raine (2007)

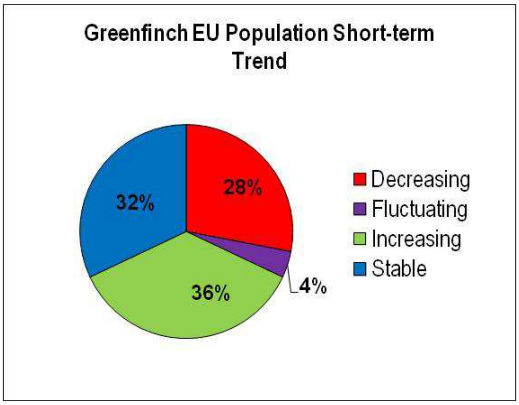


Fig. 23: European Greenfinch EU population short-term trend by Member State

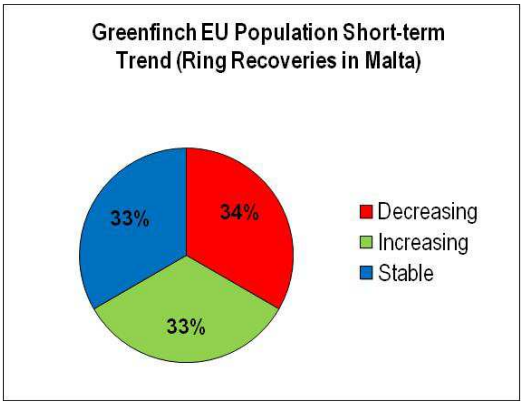


Fig. 24: European Greenfinch EU population short-term trend (ring recoveries in Malta)

Data sources: EEA (2014); Raine (2007)

European Greenfinch conservation status update – comparison between different data sources

The following table provides a general overview of the latest conservation status from various sources for direct comparison.

Species	EU Population						Ring Recoveries					
	Short-term Trend			Long-term Trend			Short-term Trend			Long-term Trend		
	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean
Greenfinch	⇧	⇧	⇧	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨

Species	Short-term Trend			Long-term Trend			
	EBCC 2016 (pan-European)	Article 12 (2008–2012) [EU Geomean]	Article 12 (2008–2012) [Ring Recoveries Geomean]	EBCC 2016 (pan-European)	EBCC 2016 (EU)	Article 12 (2008–2012) [EU Geomean]	Article 12 (2008–2012) [Ring Recoveries Geomean]
Greenfinch	⇩	⇧	⇨	⇨	⇨	⇨	⇨

Data Sources: EBCC (2016); European Environment Agency (2014)

The reference population

Table 33 European Greenfinch (*Chloris chloris*) breeding population estimates (reference population)

Country [Ring recoveries in Malta]	European Goldfinch minimum breeding population size (pairs) [Reference population]	Short-term Trend (~2001–2012)	Long-term Trend (1980–2012)
Hungary	525,000	Increasing	Unknown
Slovenia	101,000	Stable	Unknown
Croatia*	500,000	Increasing	Increasing
Italy	400,000	Decreasing	Decreasing
Slovakia	100,000	Stable	Stable
Germany	1,650,000	Decreasing	Decreasing
Reference Population Size (Minimum breeding pairs)	**3,276,000**	**Stable (-7.62%)**	**Stable (-10.99%)**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); Raine (2007)

Carnet de Chasse data (2002–2008)

According to the *Carnet de Chasse* data available from the Environment Protection Directorate of the Malta Environment and Planning Authority, the following European Greenfinches were captured alive in Malta during the years indicated (Table 34).

Table 34 *Carnet de Chasse* live-capturing data[28] for European Greenfinch (2002–2008)

Species	2002	2003	2004	2005	2006	2007	2008	Total	Average
European Greenfinch	8,231	12,449	2,494	4,130	3,062	6,202	2,619	39,187	5,598

Source: *Carnet de Chasse* data, Environment Protection Directorate (Malta Environment and Planning Authority). Available at: http://www.mepa.org.mt/biodiversity-reporting.

Minimum breeding population

In the case of the European breeding population, Table 35 shows the minimum number of breeding pairs of European Greenfinches that correspond with ring recoveries in Malta (the reference population), together with other relevant information required for the calculation of "small numbers".

Table 35 Minimum breeding population and mortality rate

	European Greenfinch (*Chloris chloris*)	Source
Minimum breeding population – pairs	3,276,000	BirdLife International (2014); EEA (2014); Raine (2007)
Mortality rate – juveniles	58%	Bauer (2005): *Das Kompendium der Vögel Mitteleuropas* (KVM) / Cramp & Perrins (1994): Birds of the Western Palearctic / Robinson (2005): British Trust for Ornithology
Mortality rate – adults	55%	Bauer (2005) and Robinson (2005)
Breeding rate (young per pair)	3–4	Cramp & Perrins (1994: 564) and Robinson (2005)
Breeding success	4.4	Cramp & Perrins (1994: 564)

[28] The *Carnet de Chasse* data for the period 2002–2007 covers the months January–May and September–December, whereas the *Carnet de Chasse* data for 2008 covers the months of January and October–December.

For the purpose of calculating the <1% mortality rate and "small numbers", the reference population is based solely on ring recoveries of this species in Malta from EU Member States. This equates to a reference population of 3,276,000 **minimum breeding pairs**.

Calculation of <1% annual mortality and "small numbers"

European Greenfinch (*Chloris chloris*)
Minimum breeding success: 3 fledglings per pair (3,276,000 x 3) = 9,828,000
Mortality rate of 1st year birds (9,828,000 x 58%) = 5,700,240
Mortality rate of adults (6,552,000 x 55%) = 3,603,600
Total annual mortality (3,603,600 + 5,700,240) = 9,303,840
1% of total annual mortality (9,303,840 x 1%) = 93,038

Total potential European Greenfinch harvest figure is 93,038.
Partitioning with other Member States (Spain: 93,038 × 50%) = 46,519

Autumn seasonal bags in relation to "small numbers"

Based on the <1% mortality rate of the reference population, the "small numbers" calculation with respect to the potential national bag limit of the European Greenfinch is as follows:

- **European Greenfinch** – potential maximum bag limit of 46,519 individuals (partitioned with Spain).

Notwithstanding that the partitioned maximum bag limit arising out of the above calculations is 46,519 European Greenfinches, given that the average bag limit over a seven-year period (2002–2008) is 5,598 birds, this analysis recommends that, should a derogation for the live-capturing of the seven finch species be considered in autumn 2017, the national bag limit should be substantially reduced further to not more than 4,500 as established in the July 2014 Framework for Allowing a Derogation Opening an Autumn Live-Capturing Season for Finches Regulations (S.L. 549.93)[29]. This calculation is based on the formula discussed previously, which returns a figure that is not only considerably lower than the <1% threshold but also lower than the average number of birds caught over a seven-year period (2002–2008). Thus:

- **European Greenfinch** – national bag limit of **4,500** birds.

[29] http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12211&l=1

5. Conservation status of the Hawfinch (*Coccothraustes coccothraustes*)

European Red List Status: Least Concern (European & EU27 levels)	**Status at EU27: Secure**

Distribution and conservation status

The Hawfinch is a widespread but much localized breeder (Hume, 2002). The geographical distribution of this species in Europe (Fig. 25) is as follows:

Breeding Estonia, Latvia, Lithuania, Czech Republic, United Kingdom, Germany, Netherlands, Spain, Portugal, France, Belgium, Austria, Luxembourg, Slovenia, Italy, Greece, Cyprus, Bulgaria, Croatia, Hungary, Romania, Turkey, Sicily, Corsica, Sardinia, Russia.

Wintering Estonia, Italy, United Kingdom, Cyprus, Greece, Germany, Belgium (a few), Luxembourg, Sicily, Corsica, and Sardinia.

Sedentary and migratory Birds in the southern and central parts of the range are largely resident or make only short-distance movements. Northern breeders move south, southeast or southwest. Nominate race (*Coccothraustes c. coccothraustes*) winters from Ireland to southern Europe mostly around the Mediterranean, including Algeria and Tunisia, northwest Africa, Malta, Crete and Cyprus, east through the Balkans and the Black Sea sporadically to west and central Turkey, northern Iran, Central Asia, southern Mongolia to Manchuria, central and southern China, also Sakhalin. (Clement *et al*. 1993: 313).

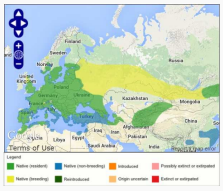
Conservation status	
Extinct / Threatened / Least Concern EX EW CR EN VU NT LC Least Concern (IUCN 3.1)[1]	
Order:	Passeriformes
Suborder:	Passeri
Infraorder:	Passerida
Superfamily:	Passeroidea
Family:	Fringillidae
Subfamily:	Carduelinae
Genus:	*Coccothraustes*
Species:	***Coccothraustes***
Binomial name	
Coccothraustes coccothraustes (Linnaeus, 1758)	
	

Fig. 25: Distribution and conservation status of the Hawfinch (*Coccothraustes coccothraustes*)

Source: http://en.wikipedia.org/wiki/Hawfinch [Accessed 19 April 2017]. Distribution map downloaded from http://www.birdlife.org on 19 April 2017 [BirdLife International (2017) IUCN Red List for birds].

Justification of Red List Category

According to BirdLife International (2017)[30] the Hawfinch 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). The population trend appears to be increasing, and hence the species does not 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.

Population size

In Europe, the breeding population is estimated to number 2,600,000–5,070,000 pairs, which equates to 5,200,000–10,100,000 mature individuals (BirdLife International 2015). Europe forms c.50% of the global range, so a very preliminary estimate of the global population size is 10,400,000–20,200,000 mature individuals, although further validation of this estimate is needed (BirdLife International, 2017).

Based on the EU Member States' Article 12 reports for the 2008–2012 reporting period, the EU27 breeding population amounts to 1,893,476– 3,560,278 pairs. Within the territory of the European Union (EU 28), both the minimum and maximum breeding pairs are **Stable** in the long-term trend (1980–2012), with a change in the minimum number of pairs of -3.97% and a change of -5.23% in the maximum number of pairs, equating to a geomean change of -4.79% (Table 36). **According to BirdLife International (2004), this equates to a long-term Stable classification for the minimum, maximum and geomean number of breeding pairs (a change not more than 20% is considered to be Stable for the period 1980–2012)**. Table 36 also lists population counts and long-term trend for each Member State within the territory of the European Union.

Table 36 **Hawfinch EU28 breeding population and ring recoveries** (bold = Ring Recoveries in Italy)

EU Member State	EU Ring Recoveries in Italy (n=522) ∫	Breeding Pairs (2014) (Min - Max)		Long-term Trend (1980–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)	Max % Change (Geomean)
Austria	**2.7%**	**20,000**	**35,000**	**Unknown**	**?**	**?**	**-**	**-**	**-**
Belgium	**0.6%**	**12,000**	**17,000**	**Increasing**	**71**	**305**	**9,037**	**12,802**	**10,920**
Bulgaria		40,000	150,000	Stable	0	0	-	-	-
Croatia*	**0.6%**	**200,000**	**300,000**	**Increasing**	**80**	**80**	**88,889**	**133,333**	**111,111**
Czech Rep.	**27.2%**	**140,000**	**280,000**	**Decreasing**	**29**	**81**	**-113,400**	**-226,800**	**-170,100**
Denmark	**0.2%**	**9,500**	**9,500**	**Increasing**	**25**	**50**	**3,167**	**3,167**	**3,167**
Estonia	**0.4%**	**20,000**	**40,000**	**Stable**	**0**	**0**	**-**	**-**	**-**
Finland		1,000	1,500	Increasing	333	526	840	1,260	1,050
France	**0.8%**	**23,000**	**40,000**	**Increasing**	**118**	**118**	**12,450**	**21,651**	**17,050**
Germany	**35.8%**	**200,000**	**365,000**	**Decreasing**	**36**	**69**	**-138,000**	**-251,850**	**-194,925**
Greece		5,000	20,000	Unknown	?	?	-	-	-
Hungary	**19.0%**	**112,000**	**163,000**	**Unknown**	**?**	**?**	**-**	**-**	**-**
Italy	**N/A**	**5,000**	**15,000**	**Unknown**	**?**	**?**	**-**	**-**	**-**
Latvia		50,301	95,434	Increasing	403	3,081	48,720	92,434	70,577
Lithuania		30,000	60,000	Stable	0	0	-	-	-
Luxembourg	**0.2%**	**3,000**	**4,000**	**Unknown**	**?**	**?**	**-**	**-**	**-**
Netherlands	**0.2%**	**9,875**	**12,344**	**Increasing**	**60**	**196**	**6,539**	**8,174**	**7,356**
Poland	**2.5%**	**270,000**	**390,000**	**Unknown**	**?**	**?**	**-**	**-**	**-**
Portugal		5,000	10,000	Unknown	?	?	-	-	-
Romania	**0.4%**	**500,000**	**1,000,000**	**Unknown**	**?**	**?**	**-**	**-**	**-**

[30] BirdLife International (2017) Species factsheet: *Coccothraustes coccothraustes*. Downloaded from http://www.birdlife.org on 19/04/2017

Slovakia	**5.6%**	**110,000**	**220,000**	**Stable**	**0**	**0**	**-**	**-**	**-**
Slovenia	**2.5%**	**25,000**	**35,000**	**Stable**	**0**	**0**	**-**	**-**	**-**
Spain	**0.2%**	**92,000**	**272,500**	**Stable**	**0**	**0**	**-**	**-**	**-**
Sweden	**1.0%**	**10,000**	**24,000**	**Increasing**	**25**	**75**	**4,286**	**10,286**	**7,286**
UK		800	1,000	Decreasing	88	88	-704	-880	-792
Total	100%	1,893,476	3,560,278						
						Total change	**-78,177**	**-196,422**	**-137,300**
						Percentage change	**-3.97**	**-5.23%**	**-4.79%**
						Long-term Trend (EU)	**Stable**	**Stable**	**Stable**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Spina and Volpini (2008)

Percentages verified using The Percentages Calculator, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

With reference to the short-term trend of the Hawfinch within the territory of the European Union (EU 28), there is change in the minimum number of breeding pairs of +1.72% and a change of +0.86% in the maximum number of pairs, equating to a geomean change of +1.16% (Table 37). **According to BirdLife International (2004), this equates to a short-term Stable classification for the minimum and maximum number of breeding pairs and their geomean (a change not more than 10% is considered to be Stable for the short-term trend)**. Table 37 also lists population counts and short-term trend for each Member State within the territory of the European Union.

Table 37 Hawfinch EU28 breeding population and ring recoveries (bold = Ring Recoveries in Italy)

EU Member State	EU Ring Recoveries in Italy (n=522) ∫	Breeding Pairs (EEA, 2014) (Min - Max)		Short-term Trend (~2001–2012)	Mag. % (Min - Max)		Breeding Pairs (2004) (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)	Max % Change (Geomean)
Austria	**2.7%**	**20,000**	**35,000**	**Fluctuating**	**-**	**-**	**25,000**	**50,000**	**-**	**-**	**-**
Belgium	**0.6%**	**12,000**	**17,000**	**Increasing**	**19**	**70**	**5,200**	**15,000**	**4,941**	**7,000**	**5,971**
Bulgaria		40,000	150,000	Fluctuating	-	-	50,000	150,000	-	-	-
Croatia*	**0.6%**	**200,000**	**300,000**	**Increasing**	**80**	**80**	**200,000**	**300,000**	**88,889**	**133,333**	**111,111**
Czech Rep.	**27.2%**	**140,000**	**280,000**	**Stable**	**0**	**0**	**140,000**	**280,000**	**-**	**-**	**-**
Denmark	**0.2%**	**9,500**	**9,500**	**Decreasing**	**33**	**50**	**14,179**	**19,000**	**-4,750**	**-4,750**	**-4,750**
Estonia	**0.4%**	**20,000**	**40,000**	**Stable**	**0**	**0**	**5,000**	**10,000**	**-**	**-**	**-**
Finland		1,000	1,500	Increasing	3	57	400	800	363	545	454
France	**0.8%**	**23,000**	**40,000**	**Increasing**	**37**	**37**	**50,000**	**250,000**	**6,212**	**10,803**	**8,507**
Germany	**35.8%**	**200,000**	**365,000**	**Decreasing**	**12**	**57**	**227,273**	**848,837**	**-114,000**	**-208,050**	**-161,025**
Greece		5,000	20,000	Stable	0	19	5,000	20,000	-	-	-
Hungary	**19.0%**	**112,000**	**163,000**	**Increasing**	**159**	**159**	**82,000**	**145,000**	**68,757**	**100,066**	**84,411**
Italy	**N/A**	**5,000**	**15,000**	**Unknown**	**?**	**?**	**5,000**	**15,000**	**-**	**-**	**-**
Latvia		50,301	95,434	Increasing	249	249	3,000	10,000	35,888	68,089	51,989
Lithuania		30,000	60,000	Stable	0	0	40,000	60,000	-	-	-
Luxembourg	**0.2%**	**3,000**	**4,000**	**Unknown**	**?**	**?**	3,000	4,000	-	-	-
Netherlands	**0.2%**	**9,875**	**12,344**	**Increasing**	**30**	**76**	**8,000**	**10,000**	**4,264**	**5,330**	**4,797**
Poland	**2.5%**	**270,000**	**390,000**	**Decreasing**	**20**	**20**	**337,500**	**487,500**	**-54,000**	**-78,000**	**-66,000**
Portugal		5,000	10,000	Unknown	?	?	1,000	10,000	-	-	-
Romania	**0.4%**	**500,000**	**1,000,000**	**Fluctuating**	**-**	**-**	**760,000**	**940,000**	**-**	**-**	**-**
Slovakia	**5.6%**	**110,000**	**220,000**	**Stable**	**0**	**0**	**110,000**	**220,000**	**-**	**-**	**-**
Slovenia	**2.5%**	**25,000**	**35,000**	**Stable**	**0**	**0**	**10,000**	**20,000**	**-**	**-**	**-**
Spain	**0.2%**	**92,000**	**272,500**	**Stable**	**0**	**0**	**2,500**	**10,000**	**-**	**-**	**-**
Sweden	**1.0%**	**10,000**	**24,000**	**Stable**	**0**	**0**	**5,000**	**15,000**	**-**	**-**	**-**
UK		800	1,000	Decreasing	81	81	4,211	5,263	-648	-810	-729

Total	100%	1,893,476	3,560,278				2,093,262	3,895,400			
								Total change	35,916	33,556	34,736
								Percentage change	1.72%	0.86%	1.16%
								Short-term Trend (EU Population)	Stable	Stable	Stable

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Spina and Volpini (2008)

Percentages verified using The Percentages Calculator, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

Conservation status at EU27 level

The Hawfinch has a breeding population size of 1,690,000–3,270,000 pairs and a breeding range size of 2,200,000 square kilometres in the EU27. The breeding population trend in the EU27 is **Stable** in the short term and **Unknown** in the long term. The EU population status of *Coccothraustes coccothraustes* was assessed as Secure, because the species does not meet any of the IUCN Red List criteria for threatened or Near Threatened, or the criteria for Depleted or Declining (the EU27 population or range has not declined by 20% or more since 1980) [Source: EEA, 2014, *Coccothraustes coccothraustes*, Article 12 2008–2012 (Data Sheet Info[31])].

European Bird Census Council: Long-term trend and ten-year (short-term) trends

According to the European Bird Census Council (EBCC, 2016 update), the Hawfinch population is classified as **Moderate Increase** (1980–2014) in the long-term trend at both pan-European[32] and EU[33] levels. It should be noted that EBCC data pertaining to the short-term trends is only available at pan-European level. EBCC replaced the short-term (1990) trend by a rolling "Ten-year trend" (2005–2014). At pan-European level, the Hawfinch increased by 670% since 1980 and by 31% during the current 10-year period. When compared with the previous (2015) EBCC update the percentage change was **+281%** in the long-term trend and **-18%** in the short-term trend (Table 38).

Table 38	Hawfinch long-term and short term percentage change at pan-European level						
EBCC update	**Species**	**Long-term Trend (%)**	**Long-term Slope**		**10-Year Trend (%)**	**10-Year Slope**	**Habitat**
2012	*Coccothraustes coccothraustes*	+474%	1.0166		-31%	0.9898	for
2013	*Coccothraustes coccothraustes*	+282%	1.0117		-30%	0.9892	for
2014	*Coccothraustes coccothraustes*	+343%	1.0112		+18%	1.0165	for
2015	*Coccothraustes coccothraustes*	+389%	1.0111		+49%	1.0289	for
2016	*Coccothraustes coccothraustes*	+670%	1.0143		+31%	1.0286	for
	Overall % change (2015–2016)	+281%			-18%		
Data sources: EBCC (2012–2016 updates). Available at: http://www.ebcc.info/index.php?ID=612							

[31] http://bd.eionet.europa.eu/article12/summary/datasheet/?period=1&subject=A373

[32] http://www.ebcc.info/index.php?ID=612

[33] http://www.ebcc.info/index.php?ID=613

Figure 26 is an extract from the EBCC 2016 update, which confirms that the long-term trend classification for *Coccothraustes coccothraustes* is **Moderate Increase**, namely: "significant increase, but not significantly more than 5% per year".

Hawfinch (*Coccothraustes coccothraustes*)

Population index (%) 1980 - 2014, Europe.
Trend classification: *Moderate increase* (explanation)
Note: Index for early period may be unrepresentative due to limited geographical coverage and needs to be treated with caution.

List of Countries

Source of the data: EBCC/RSPB/BirdLife/Statistics Netherlands

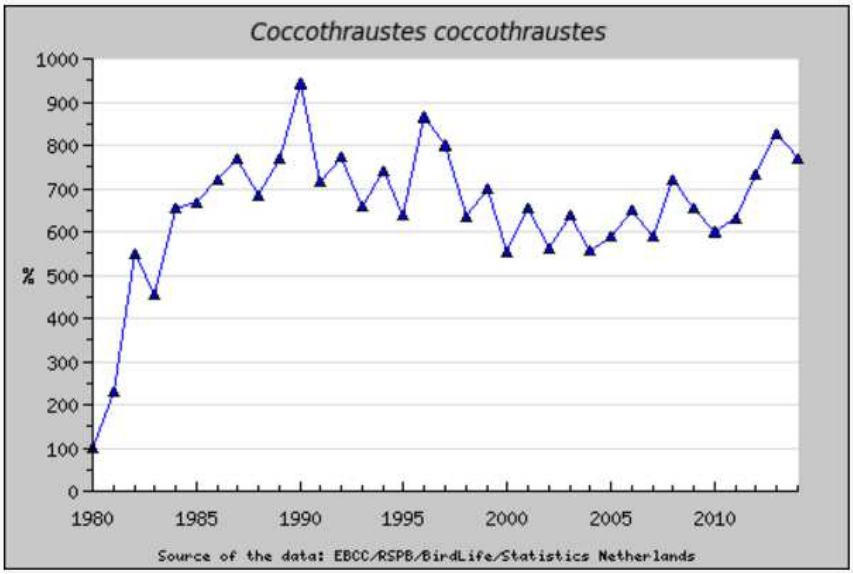


Fig. 26: Long-term trend classification for *Coccothraustes coccothraustes*.

"List of Countries":

Austria	1998 - 2013	Latvia	2005 - 2013
Belgium-Wallonia	1990 - 2013	Lithuania	2011 - 2013
Bulgaria	2005 - 2013	Netherlands	1984 - 2013
Czech Republic	1982 - 2013	Poland	2000 - 2013
Denmark	1976 - 2012	Portugal	2004 - 2013
Estonia	1983 - 2013	Slovakia	2005 - 2013
France	1989 - 2013	Slovenia	2007 - 2013
Germany East	1991 - 2013	Spain	1998 - 2013
Germany West	1989 - 2013	Sweden	1977 - 2013
Hungary	1999 - 2013	Switzerland	1999 - 2013
Italy	2000 - 2013		

Source: EBCC (2016 update), available at: http://www.ebcc.info/index.php?ID=612.

Ring recoveries in Italy

Since there are no known ring recoveries of this species in Malta (Raine, 2007), the reference population is based on ring recoveries in Italy (Spina and Volpini, 2008) since there is a high confidence level that birds migrating towards Italy may utilise the same Central European flyway. This subsection illustrates the distribution pattern of the species in Central Europe, with an emphasis on ring recoveries in Italy. The majority of foreign-ringed Hawfinches recovered in Italy originate from

Germany (34%, n=187) followed by Czech. Republic (26%, n=142), Hungary (19%, n=101), Slovakia (5%, n=29) and Switzerland (3%), as illustrated in Figs. 27 and 28.

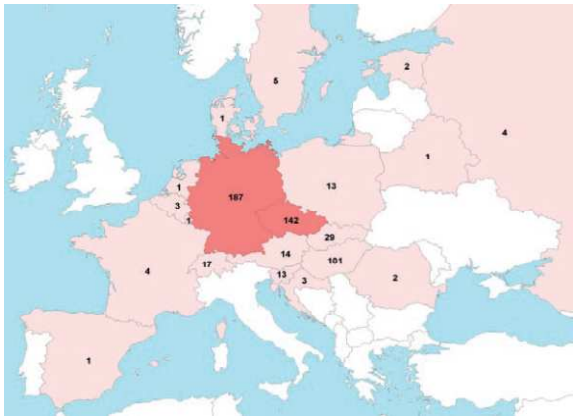


Fig. 27: Foreign-ring recoveries of Hawfinches in Italy.

Source: Spina and Volpini (2008)

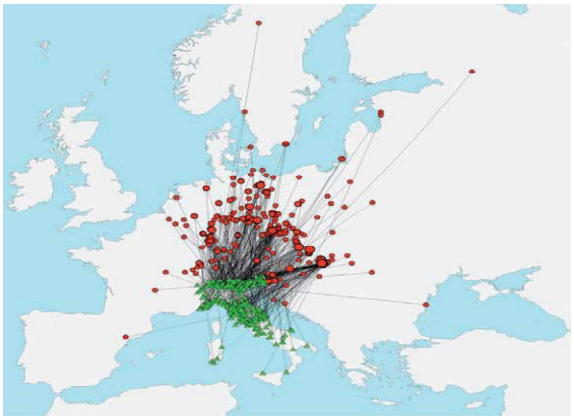


Fig. 28: Foreign-ringed Hawfinches recovered in Italy during the autumn migration period (n = 544).

Source: Spina and Volpini (2008)

Tables 39 and 40 provide data on the ring recoveries of this species in Italy, the respective number of breeding pairs, together with the overall direction of the population trend. The reference population (ring recoveries in Italy) is **Stable** in both the short-term and long-term trends. Figs. 29 and 30 illustrate the long-term trend at EU and reference population levels whereas Figs. 31 and 32 illustrate the respective short-term trends.

Table 39 **Hawfinch ring recoveries in Italy from other EU Member States and corresponding long-term trend**

EU Member State	EU Ring Recoveries in Italy (n=522) ∫	Breeding Pairs (2014) (Min - Max)		Long-term Trend (1980–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)	Max % Change (Geomean)
Germany	35.8%	200,000	365,000	Decreasing	36	69	-138,000	-251,850	-194,925
Czech Rep.	27.2%	140,000	280,000	Decreasing	29	81	-113,400	-226,800	-170,100
Hungary	19.0%	112,000	163,000	Unknown	?	?	-	-	-
Slovakia	5.6%	110,000	220,000	Stable	0	0	-	-	-
Austria	2.7%	20,000	35,000	Unknown	?	?	-	-	-
Poland	2.5%	270,000	390,000	Unknown	?	?	-	-	-
Slovenia	2.5%	25,000	35,000	Stable	0	0	-	-	-
Sweden	1.0%	10,000	24,000	Increasing	25	75	4,286	10,286	7,286
France	0.8%	23,000	40,000	Increasing	118	118	12,450	21,651	17,050
Belgium	0.6%	12,000	17,000	Increasing	71	305	9,037	12,802	10,920
Croatia*	0.6%	200,000	300,000	Increasing	80	80	88,889	133,333	111,111
Estonia	0.4%	20,000	40,000	Stable	0	0	-	-	-
Romania	0.4%	500,000	1,000,000	Unknown	?	?	-	-	-
Denmark	0.2%	9,500	9,500	Increasing	25	50	3,167	3,167	3,167
Luxembourg	0.2%	3,000	4,000	Unknown	?	?	-	-	-
Netherlands	0.2%	9,875	12,344	Increasing	60	196	6,539	8,174	7,356
Spain	0.2%	92,000	272,500	Stable	0	0	-	-	-
Italy	N/A	5,000	15,000	Unknown	?	?	-	-	-
Total	100%	1,761,375	3,222,344			Total change	-127,033	-289,237	-208,135
						Percentage change	-6.73%	-8.24%	-7.71%
						Long-term Trend (Ring recoveries)	Stable	Stable	Stable

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Spina and Volpini (2008)

Percentages verified using The Percentages Calculator, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

Table 40 **Hawfinch ring recoveries in Italy from other EU Member States and corresponding short-term trend**

EU Member State	EU Ring Recoveries in Italy (n=522) ∫	Breeding Pairs (EEA, 2014) (Min - Max)		Short-term Trend (~2001–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)	Max % Change (Geomean)
Italy	N/A	5,000	15,000	Unknown	?	?	-	-	-
Germany	35.8%	200,000	365,000	Decreasing	12	57	-114,000	-208,050	-161,025
Czech Rep.	27.2%	140,000	280,000	Stable	0	0	-	-	-
Hungary	19.0%	112,000	163,000	Increasing	159	159	68,757	100,066	84,411
Slovakia	5.6%	110,000	220,000	Stable	0	0	-	-	-
Austria	2.7%	20,000	35,000	Fluctuating	-	-	-	-	-
Poland	2.5%	270,000	390,000	Decreasing	20	20	-54,000	-78,000	-66,000
Slovenia	2.5%	25,000	35,000	Stable	0	0	-	-	-
Sweden	1.0%	10,000	24,000	Stable	0	0	-	-	-
France	0.8%	23,000	40,000	Increasing	37	37	6,212	10,803	8,507
Belgium	0.6%	12,000	17,000	Increasing	19	70	4,941	7,000	5,971
Croatia*	0.6%	200,000	300,000	Increasing	80	80	88,889	133,333	111,111
Estonia	0.4%	20,000	40,000	Stable	0	0	-	-	-
Romania	0.4%	500,000	1,000,000	Fluctuating	-	-	-	-	-
Denmark	0.2%	9,500	9,500	Decreasing	33	50	-4,750	-4,750	-4,750
Luxembourg	0.2%	3,000	4,000	Unknown	?	?	-	-	-
Netherlands	0.2%	9,875	12,344	Increasing	30	76	4,264	5,330	4,797
Spain	0.2%	92,000	272,500	Stable	0	0	-	-	-
Total	100%	1,761,375	3,222,344	**Total change**			**313**	**-34,268**	**-16,978**
				Percentage change			**0.02%**	**-0.94%**	**-0.60%**
				Short-term Trend (Ring recoveries)			**Stable**	**Stable**	**Stable**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Spina and Volpini (2008)
Percentages verified using The Percentages Calculator, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

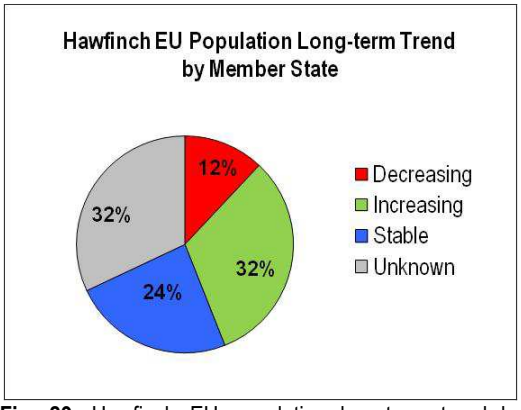


Fig. 29: Hawfinch EU population long-term trend by Member State

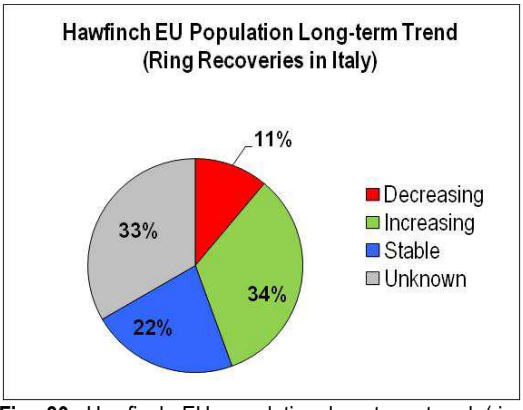


Fig. 30: Hawfinch EU population long-term trend (ring recoveries in Italy)

Data sources: EEA (2014); Spina and Volpini (2008)

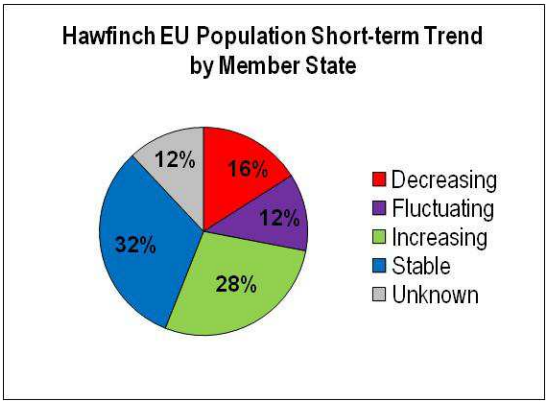


Fig. 31: Hawfinch EU population short-term trend by Member State

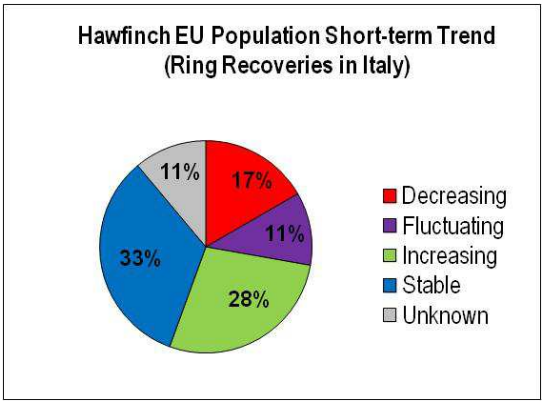


Fig. 32: Hawfinch EU population short-term trend (ring recoveries in Malta)

Data sources: EEA (2014); Raine (2007)

Hawfinch conservation status update – comparison between different data sources

The following table provides a general overview of the latest conservation status from various sources for direct comparison.

Species	EU Population						Ring Recoveries					
	Short-term Trend			Long-term Trend			Short-term Trend			Long-term Trend		
	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean
Hawfinch	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨

Species	Short-term Trend			Long-term Trend			
	EBCC 2016 (pan-European)	Article 12 (2008–2012) [EU Geomean]	Article 12 (2008–2012) [Ring Recoveries Geomean]	EBCC 2016 (pan-European)	EBCC 2016 (EU)	Article 12 (2008–2012) [EU Geomean]	Article 12 (2008–2012) [Ring Recoveries Geomean]
Hawfinch	⇧	⇨	⇨	⇧	⇧	⇨	⇨

Data Sources: EBCC (2016); European Environment Agency (2014)

The reference population

Table 41 Hawfinch (*Coccothraustes coccothraustes*) breeding population estimates (reference population)

Country [Ring recoveries in Italy]	**Hawfinch minimum breeding population size (pairs)** [Reference population]	**Short-term Trend (~2001–2012)**	**Long-term Trend (1980–2012)**
Germany	200,000	Decreasing	Decreasing
Czech Rep.	140,000	Stable	Decreasing
Hungary	112,000	Increasing	Unknown
Slovakia	110,000	Stable	Stable
Austria	20,000	Fluctuating	Unknown
Poland	270,000	Decreasing	Unknown
Slovenia	25,000	Stable	Stable
Sweden	10,000	Stable	Increasing
France	23,000	Increasing	Increasing

Belgium	12,000	Increasing	Increasing
Croatia*	200,000	Increasing	Increasing
Estonia	20,000	Stable	Stable
Romania	500,000	Fluctuating	Unknown
Denmark	9,500	Decreasing	Increasing
Luxembourg	3,000	Unknown	Unknown
Netherlands	9,875	Increasing	Increasing
Spain	92,000	Stable	Stable
Italy	5,000	Unknown	Unknown
Reference Population Size (Minimum breeding pairs)	**1,761,375**	**Stable (+0.02%)**	**Stable (-6.73%)**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); Spina and Volpini (2008)

Carnet de Chasse data (2002–2008)

According to the *Carnet de Chasse* data available from the Environment Protection Directorate of the Malta Environment and Planning Authority, the following Hawfinches were captured alive in Malta during the years indicated (Table 42).

Table 42 *Carnet de Chasse* live-capturing data[34] for Hawfinch (2002–2008)

Species	2002	2003	2004	2005	2006	2007	2008	Total	Average
Hawfinch	530	207	94	1,885	612	553	347	4,228	604

Source: *Carnet de Chasse* data, Environment Protection Directorate (Malta Environment and Planning Authority). Available at: http://www.mepa.org.mt/biodiversity-reporting.

Minimum breeding population

In the case of the European breeding population, Table 43 shows the minimum number of breeding pairs of Hawfinches that correspond with ring recoveries in Italy (the reference population), together with other relevant information required for the calculation of "small numbers".

Table 43 Minimum breeding population and mortality rate

	Hawfinch (*Coccothraustes coccothraustes*)	Source
Minimum breeding population – pairs	1,761,375	BirdLife International (2014); EEA (2014); Spina and Volpini (2008)
Mortality rate – juveniles	34%	Bauer (2005): *Das Kompendium der Vögel Mitteleuropas* (KVM) / Cramp & Perrins (1994): Birds of the Western Palearctic / Robinson (2005): British Trust for Ornithology
Mortality rate – adults	51%	Bauer (2005) and Robinson (2005)
Breeding rate (young per pair)	4–5	Cramp & Perrins (1994: 844) and Robinson (2005)
Breeding success	3.4	Cramp & Perrins (1994: 844)

[34] The *Carnet de Chasse* data for the period 2002–2007 covers the months January–May and September–December, whereas the *Carnet de Chasse* data for 2008 covers the months of January and October–December.

For the purpose of calculating the <1% mortality rate and "small numbers", the reference population is based solely on ring recoveries of this species in Italy from EU Member States (given that there are no ring recoveries of this species in Malta). This equates to a reference population of **1,761,375 minimum breeding pairs**.

Calculation of <1% annual mortality and "small numbers"

Hawfinch (*Coccothraustes coccothraustes*)
Minimum breeding success: 3.4 fledglings per pair (**1,761,375** x 3.4) = 5,988,675
Mortality rate of 1st year birds (5,988,675 x 34%) = 2,036,150
Mortality rate of adults (3,522,750 x 51%) = 1,796,603
Total annual mortality (2,036,150 + 1,796,603) = 3,832,753
1% of total annual mortality (3,832,753 x 1%) = 38,328

Total potential Hawfinch harvest figure is: 38,744 = **12,776 (figure divided by three to account for the fact that only a fraction of the bird reference population actually migrates towards the Maltese Islands through the Central Flyway).**

Partitioning with other Member States (Austria: 12,776 × 50%) = 6,388

Autumn seasonal bags in relation to "small numbers"

Based on the <1% mortality rate (which is further divided by three), the "small numbers" calculation with respect to the Autumn 2014 seasonal bag limit of the Hawfinch is as follows:

- **Hawfinch** – maximum national bag limit of 6,388 individuals (one-third of the reference population partitioned with Austria)

Notwithstanding that the partitioned maximum bag limit arising out of the above calculations is 6,388 Hawfinches, given that the average bag limit over a seven-year period (2002–2008) is 604 birds, this analysis recommends that, should a derogation for the live-capturing of the seven finch species be considered in autumn 2017, the national bag limit should be substantially reduced further to not more than 500 as established in the July 2014 Framework for Allowing a Derogation Opening an Autumn Live-Capturing Season for Finches Regulations (S.L. 549.93)[35]. This calculation is based on the formula discussed previously, which returns a figure that is not only considerably lower than the <1% threshold but also lower than the average number of birds caught over a seven-year period (2002–2008). Thus:

- **Hawfinch** – national bag limit of **500** birds.

[35] http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12211&l=1

6. Conservation status of the European Serin (*Serinus serinus*)

European Red List Status: Least Concern (European & EU27 levels)	**Status at EU27: Secure**

Distribution and conservation status

The geographical distribution of this species in Europe (Fig. 33) is as follows:

Breeding Estonia (a few), Latvia, Lithuania, Czech Republic, United Kingdom (a few), Germany, Netherlands, Spain, Portugal, France, Belgium, Austria, Ukraine Luxembourg, Slovenia, Italy, Greece, Cyprus, Bulgaria, Croatia, Hungary, Romania, Turkey, Sicily, Corsica, Sardinia, Russia (a few).

Wintering Italy, Cyprus, Greece, Germany Luxembourg, Sicily, Corsica, and Sardinia, Malta, Spain, Portugal, West France, Croatia.

Sedentary and migratory Breeding birds from the northern parts of the range move south to winter within southern Europe, around the Mediterranean (including coastal North Africa), the Balkans (including the Hungarian Plain), Cyprus, Lebanon, Israel, southern Iraq, Libya and northern Egypt (Clement *et al*. 1993: 173).

Conservation status	
Extinct / Threatened / Least Concern: EX EW CR EN VU NT LC	
Least Concern (IUCN 3.1)[1]	
Order:	Passeriformes
Family:	Fringillidae
Genus:	*Serinus*
Species:	***European Serin***
Binomial name	
Serinus serinus (Linnaeus, 1766)	

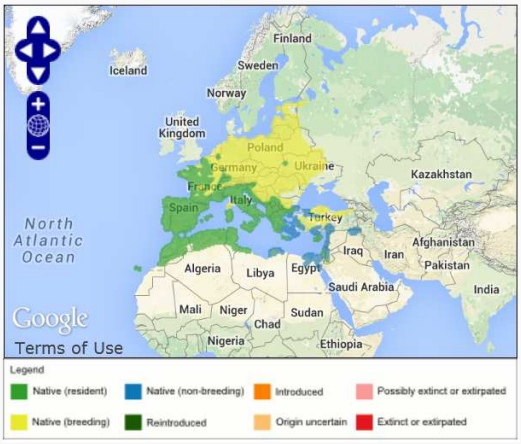


Fig. 33: Distribution and conservation status of the European Serin (*Serinus serinus*)

Source: http://en.wikipedia.org/wiki/European Serin [Accessed 19 April 2017]. Distribution map downloaded from http://www.birdlife.org on 19 April 2017 [BirdLife International (2017) IUCN Red List for birds].

Justification of Red List Category

According to BirdLife International (2017)[36] the European Serin 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.

Population size

In Europe, the breeding population is estimated to number 20,900,000–31,500,000 pairs, which equates to 41,900,000–63,000,000 mature individuals (BirdLife International 2015). Europe forms c.90% of the global range, so a very preliminary estimate of the global population size is 46,500,000–70,000,000 mature individuals, although further validation of this estimate is needed (BirdLife International, 2017).

Based on the EU Member States' Article 12 reports for the 2008–2012 reporting period, the EU27 breeding population amounts to 18,096,464–26,173,127 pairs. Within the territory of the European Union (EU 28), both the minimum and maximum breeding pairs are **Stable** in the long-term trend (1980–2012), with a change in the minimum number of pairs of -0.67% and a change of -1.20% in the maximum number of pairs, equating to a geomean change of –0.99% (Table 44). **According to BirdLife International (2004), this equates to a long-term Stable classification for the minimum, maximum and geomean number of breeding pairs (a change not more than 20% is considered to be Stable for the period 1980–2012)**. Table 44 also lists population counts and long-term trend for each Member State within the territory of the European Union.

Table 44 **European Serin EU28 breeding population (long-term trend) and ring recoveries** (bold = ring recoveries in Malta)

EU Member State	EU Ring Recoveries in Malta (n=16) ∫	Breeding Pairs (2014) (Min - Max)		Long-term Trend (1980–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)	Max % Change (Geomean)
Austria		50,000	80,000	Unknown	?	?	-	-	-
Belgium		500	800	Decreasing	35	80	-400	-640	-520
Bulgaria		25,000	50,000	Stable	0	0	-	-	-
Croatia*	**4%**	**150,000**	**200,000**	**Increasing**	**0**	**19**	**23,950**	**31,933**	**27,941**
Cyprus		2,500	10,000	Increasing	25	50	833	3,333	2,083
Czech Rep.	**58%**	**225,000**	**450,000**	**Decreasing**	**98**	**99**	**-222,750**	**-445,500**	**-334,125**
Denmark		20	20	Unknown	?	?	-	-	-
Estonia		100	300	Increasing	20	50	33	100	67
Finland		0	3	Fluctuating	-	-	-	-	-
France		225,000	400,000	Decreasing	42	42	-94,500	-168,000	-131,250
Germany		110,000	220,000	Decreasing	44	63	-69,300	-138,600	-103,950
Greece		80,000	110,000	Unknown	?	?	-	-	-
Hungary		142,000	200,000	Unknown	?	?	-	-	-
Italy		1,000,000	1,500,000	Increasing	5	25	200,000	300,000	250,000
Latvia		129	308	Increasing	?	516	108	258	183
Lithuania		15,000	25,000	Increasing	2,900	4,900	14,700	24,500	19,600
Luxembourg		1,000	2,000	Decreasing	?	30	-300	-600	-450
Netherlands		100	140	Decreasing	43	75	-75	-105	-90
Poland		540,000	690,000	Unknown	?	?	-	-	-

[36] BirdLife International (2017) Species factsheet: *Serinus serinus*. Downloaded from http://www.birdlife.org on 19/04/2017

Portugal		1,000,000	5,000,000	Unknown	?	?	-	-	-
Romania		60,000	120,000	Unknown	?	?	-	-	-
Slovakia		50,000	100,000	Stable	0	0	-	-	-
Slovenia	**38%**	**65,000**	**115,000**	**Unknown**	**?**	**?**	-	-	-
Spain		16,390,000	19,440,000	Stable	?	?	-	-	-
Sweden		30	60	Stable	0	0	-	-	-
Total	100%	20,131,379	28,713,631						
						Total change	-147,701	-393,321	-270,511
						Percentage change	-0.67%	-1.20%	-0.99%
						Long-term Trend (EU Population)	**Stable**	**Stable**	**Stable**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using The Percentages Calculator, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

With reference to the short-term trend of the European Serin within the territory of the European Union (EU 28), there is change in the minimum number of breeding pairs of -8.50% and a change of -9.79% in the maximum number of pairs, equating to a geomean change of -9.28% (Table 45). **According to BirdLife International (2004), this equates to a Stable classification for the minimum and maximum number of breeding pairs and their geomean (a change not more than 10% is considered to be Stable for the short-term trend)**. Table 45 also lists population counts and short-term trend for each Member State within the territory of the European Union.

Table 45 European Serin EU28 breeding population (short-term trend) and ring recoveries (bold = ring recoveries in Malta)

EU Member State	EU Ring Recoveries in Malta (n=16) ∫	Breeding Pairs (EEA, 2014) (Min - Max)		Short-term Trend (~2001–2012)	Mag. % (Min - Max)		Breeding Pairs (2004) (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)	Max % Change (Geomean)
Austria		50,000	80,000	Decreasing	50	60	100,000	200,000	-30,000	-48,000	-39,000
Belgium		500	800	Decreasing	45	66	909	2,353	-330	-528	-429
Bulgaria		25,000	50,000	Stable	0	0	50,000	150,000	-	-	-
Croatia*	**4%**	**150,000**	**200,000**	**Increasing**	**0**	**19**	**150,000**	**168,067**	**23,950**	**31,933**	**27,941**
Cyprus		2,500	10,000	Increasing	50	75	1,667	5,714	1,071	4,286	2,679
Czech Rep.	**58%**	**225,000**	**450,000**	**Decreasing**	**50**	**83**	**2,058,750**	**4,117,500**	**-186,750**	**-373,500**	**-280,125**
Denmark		20	20	Unknown	?	?	1	11	-	-	-
Estonia		100	300	Stable	0	0	50	100	-	-	-
Finland		0	3	Unknown	?	?	0	3	-	-	-
France		225,000	400,000	Decreasing	22	22	288,462	512,821	-49,500	-88,000	-68,750
Germany		110,000	220,000	Decreasing	40	54	183,333	478,261	-59,400	-118,800	-89,100
Greece		80,000	110,000	Stable	-	-	80,000	110,000	-	-	-
Hungary		142,000	200,000	Decreasing	31	31	205,797	289,855	-44,020	-62,000	-53,010
Italy		1,000,000	1,500,000	Stable	0	0	500,000	1,000,000	-	-	-
Latvia		129	308	Unknown	?	?	50	300	-	-	-
Lithuania		15,000	25,000	Increasing	650	1,150	2,000	2,000	13,800	23,000	18,400
Luxembourg		1,000	2,000	Decreasing	10	20	1,111	2,500	-200	-400	-300
Netherlands		100	140	Decreasing	74	89	385	1,273	-89	-125	-107
Poland		540,000	690,000	Increasing	30	70	415,385	405,882	222,353	284,118	253,235
Portugal		1,000,000	5,000,000	Decreasing	15	25	1,176,471	6,666,667	-250,000	-1,250,000	-750,000
Romania		60,000	120,000	Unknown	?	?	245,000	650,000	-	-	-
Slovakia		50,000	100,000	Stable	0	0	50,000	100,000	-	-	-
Slovenia	**38%**	**65,000**	**115,000**	**Decreasing**	**30**	**40**	**92,857**	**191,667**	**-26,000**	**-46,000**	**-36,000**
Spain		16,390,000	19,440,000	Decreasing	10	10	18,211,111	21,600,000	-1,639,000	-1,944,000	-1,791,500
Sweden		30	60	Stable	0	0	1	15	-	-	-

Total	100%	20,131,379	28,713,631				23,813,339	36,654,988			
								Total change	-2,024,115	-3,588,016	-2,806,066
								Percentage change	-8.50%	-9.79%	-9.28%
								Short-term Trend (EU Population)	Stable	Stable	Stable

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using The Percentages Calculator, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

Conservation status at EU27 level

The European Serin has a breeding population size of 19,900,000–28,600,000 pairs and a breeding range size of 2,410,000 square kilometres in the EU27. The breeding population trend in the EU27 is **Decreasing** in the short term and **Decreasing** in the long term. The EU population status of *Serinus serinus* was assessed as **Secure**, because the species does not meet any of the IUCN Red List criteria for threatened or Near Threatened, or the criteria for Depleted or Declining (the EU27 population or range has not declined by 20% or more since 1980) [Source: EEA, 2014, *Serinus serinus*, Article 12 2008–2012 (Data Sheet Info[37])].

European Bird Census Council: Long-term trend and ten-year (short-term) trends

According to the European Bird Census Council (EBCC, 2016 update), the European Serin population is classified as **Moderate Decline** (1980–2014) in the long-term trend at both pan-European[38] and EU[39] levels. It should be noted that EBCC data pertaining to the short-term trends is only available at pan-European level. EBCC replaced the short-term (1990) trend by a rolling "Ten-year trend" (2005–2014). At pan-European level, **the European Serin decreased by 48% since 1980 and by 13% during the current 10-year period**. When compared with the previous (2015) EBCC update the percentage change was **-1%** in the long-term trend and **+8%** in the short-term trend (Table 46).

Table 46	European Serin long-term and short-term percentage change at pan-European level						
EBCC update	**Species**	**Long-term Trend (%)**	**Long-term Slope**		**10-Year Trend (%)**	**10-Year Slope**	**Habitat**
2012	*Serinus serinus*	-31%	0.9733		-23%	0.9788	farm
2013	*Serinus serinus*	-39%	0.9726		-34%	0.9773	farm
2014	*Serinus serinus*	-42%	0.9731		-17%	0.9853	farm
2015	*Serinus serinus*	-47%	0.9721		-21%	0.9869	farm
2016	*Serinus serinus*	-48%	0.9724		-13%	0.9919	farm
	Overall % change (2015–2016)	-1%			+8%		
Data sources: EBCC (2012–2016 updates). Available at: http://www.ebcc.info/index.php?ID=612							

[37] http://bd.eionet.europa.eu/article12/summary/datasheet/?period=1&subject=A361

[38] http://www.ebcc.info/index.php?ID=612

[39] http://www.ebcc.info/index.php?ID=613

Figure 34 is an extract from the EBCC 2016 update, which confirms that the long-term trend classification for *Serinus serinus* is **Moderate Decline**, namely: "significant decline, but not significantly more than 5% per year".

European Serin (*Serinus serinus*)

Population index (%) 1982 - 2014, Europe.
Trend classification: *Moderate decline* (explanation)
Note: Index for early period may be unrepresentative due to limited geographical coverage and needs to be treated with caution.

List of Countries

Source of the data: EBCC/RSPB/BirdLife/Statistics Netherlands

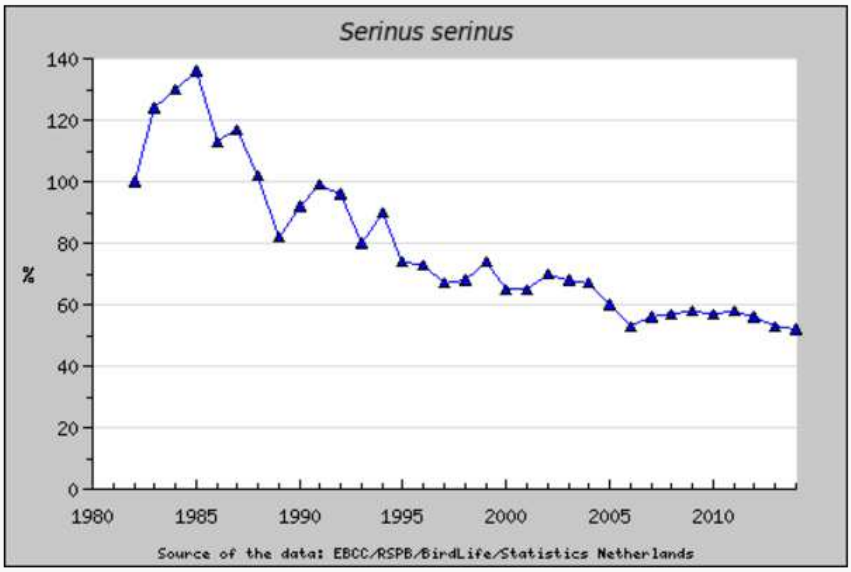


Fig. 34: Long-term trend classification for *Serinus serinus*.

"List of Countries":

Austria	1998 - 2013
Czech Republic	1982 - 2013
France	1989 - 2013
Germany East	1991 - 2013
Germany West	1989 - 2013
Greece	2007 - 2013
Hungary	1999 - 2013
Italy	2000 - 2013
Poland	2000 - 2013
Portugal	2004 - 2013
Slovakia	2005 - 2013
Slovenia	2007 - 2013
Spain	1998 - 2013
Switzerland	1999 - 2013

Source: EBCC (2016 update), available at: http://www.ebcc.info/index.php?ID=612.

Ring recoveries in Malta

Tables 47 and 48 provide data on the ring recoveries of this species in Malta, the respective number of breeding pairs, together with the overall direction of the population trend. The reference population (ring recoveries in Malta) is **Stable** in both the short-term and long-term trends. Figs. 35 and 36 illustrate the long-term trend at EU and reference population levels whereas Figs. 37 and 38 illustrate the respective short-term trends.

Table 47 **European Serin ring recoveries in Malta from other EU Member States and corresponding long-term trend**

Country	EU Ring Recoveries in Malta (n=16) ∫	Breeding Pairs (Min - Max)		Long-term Trend (1980–2012)	Mag. % (Max - Min)		Max % Change (Min Pairs)	Max % Change (Max Pairs)
Czech Rep.	58%	225,000	450,000	Decreasing	98	99	-222,750	-445,500
Slovenia	38%	65,000	115,000	Unknown	?	?	-	-
Croatia*	4%	150,000	200,000	Increasing	0	19	23,950	31,933
Total	100%	440,000	765,000			Total change	-198,800	-413,567
						Percentage change	-8.02%	-8.57%
				Long-term Trend (Ring Recoveries)			Stable	Stable

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using *The Percentages Calculator*, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

Table 48 **European Serin ring recoveries in Malta from other EU Member States and corresponding short-term trend**

EU Member State	EU Ring Recoveries in Malta (n=16) ∫	Breeding Pairs (EEA, 2014) (Min - Max)		Short-term Trend (~2001–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)
Czech Rep.	58%	225,000	450,000	Decreasing	50	83	-186,750	-373,500
Slovenia	38%	65,000	115,000	Decreasing	30	40	-26,000	-46,000
Croatia*	4%	150,000	200,000	Increasing	0	19	23,950	31,933
Total	100%	440,000	765,000			Total change	-188,800	-387,567
						Percentage change	-8.21%	-8.72%
				Short-term Trend (Ring Recoveries)			Stable	Stable

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using *The Percentages Calculator*, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

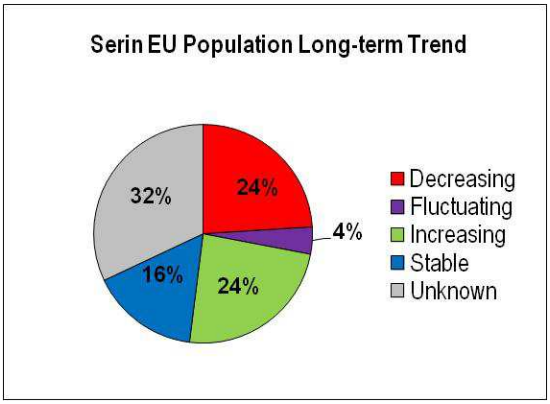


Fig. 35: European Serin EU population long-term trend by Member State

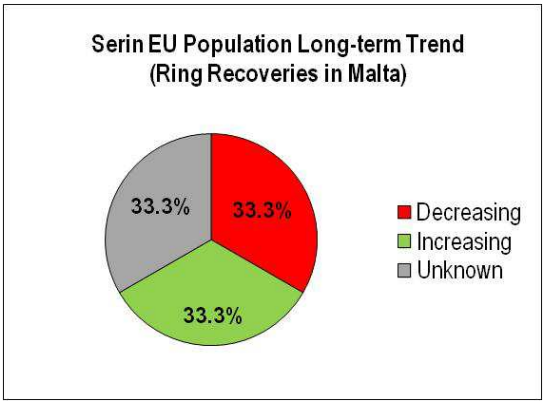


Fig. 36: European Serin EU population long-term trend (ring recoveries in Malta)

Data sources: EEA (2014); Raine (2007)

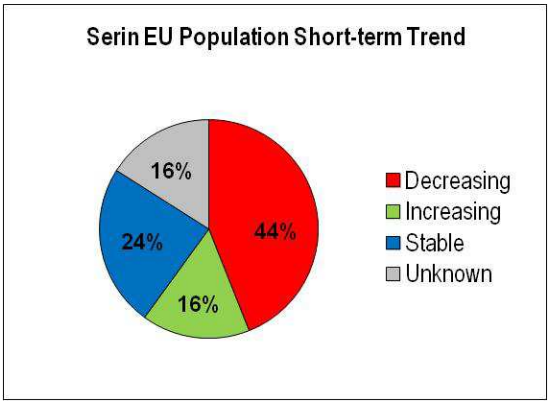


Fig. 37: European Serin EU population short-term trend by Member State

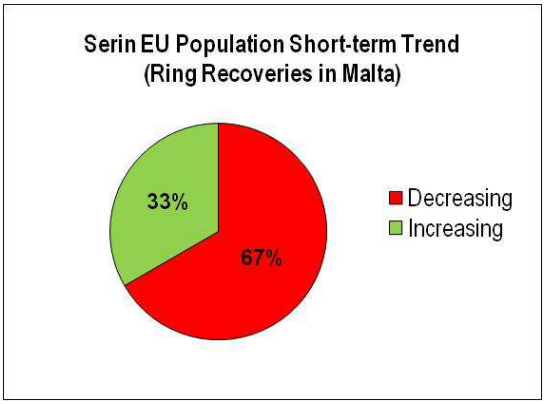


Fig. 38: European Serin EU population short-term trend (ring recoveries in Malta)

Data sources: EEA (2014); Raine (2007)

European Serin conservation status update – comparison between different data sources

The following table provides a general overview of the latest conservation status from various sources for direct comparison.

Species	EU Population						Ring Recoveries					
	Short-term Trend			Long-term Trend			Short-term Trend			Long-term Trend		
	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean
Serin	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨

Species	Short-term Trend			Long-term Trend			
	EBCC 2016 (pan-European)	Article 12 (2008–2012) [EU Geomean]	Article 12 (2008–2012) [Ring Recoveries Geomean]	EBCC 2016 (pan-European)	EBCC 2016 (EU)	Article 12 (2008–2012) [EU Geomean]	Article 12 (2008–2012) [Ring Recoveries Geomean]
Serin	⇩	⇨	⇨	⇩	⇩	⇨	⇨

Data Sources: EBCC (2016); European Environment Agency (2014)

The reference population

Table 49 European Serin (*Serinus serinus*) breeding population estimates (reference population)

Country [Ring recoveries in Malta]	**European Serin minimum breeding population size (pairs)** [Reference population]	**Short-term Trend (~2001–2012)**	**Long-term Trend (1980–2012)**
Czech Rep.	225,000	Decreasing	Decreasing
Slovenia	65,000	Decreasing	Unknown
Croatia*	150,000	Increasing	Increasing
Reference Population Size (Minimum breeding pairs)	**440,000**	**Stable (-8.21%)**	**Stable (-8.02%)**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); Raine (2007)

Carnet de Chasse data (2002–2008)

According to the *Carnet de Chasse* data available from the Environment Protection Directorate of the Malta Environment and Planning Authority, the following European Serins were captured alive in Malta during the years indicated (Table 50).

Table 50 *Carnet de Chasse* live-capturing data[40] for European Serin (2002–2008)

Species	2002	2003	2004	2005	2006	2007	2008	Total	Average
European Serin	4,918	4,525	1,599	1,814	2,509	3,800	3,139	22,304	3,186

Source: *Carnet de Chasse* data, Environment Protection Directorate (Malta Environment and Planning Authority). Available at: http://www.mepa.org.mt/biodiversity-reporting.

Minimum breeding population

In the case of the European breeding population, Table 51 shows the minimum number of breeding pairs of European Serins that correspond with ring recoveries in Malta (the reference population), together with other relevant information required for the calculation of "small numbers".

Table 51 Minimum breeding population and mortality rate

	European Serin (*Serinus serinus*)	Source
Minimum breeding population – pairs	440,000	BirdLife International (2014); EEA (2014); Raine (2007)
Mortality rate – juveniles	44%	Bauer (2005): *Das Kompendium der Vögel Mitteleuropas* (KVM) / Cramp & Perrins (1994): Birds of the Western Palearctic / Robinson (2005): British Trust for Ornithology
Mortality rate – adults	40%	Bauer (2005) and Robinson (2005)
Breeding rate (young per pair)	3–4	Cramp & Perrins (1994: 518) and Robinson (2005)
Breeding success	4	Cramp & Perrins (1994: 518)

For the purpose of calculating the <1% mortality rate and "small numbers", the reference population is based solely on ring recoveries of this species in Malta from EU Member States. This equates to a reference population of **665,000 minimum breeding pairs**.

Calculation of <1% annual mortality and "small numbers"

European Serin (*Serinus serinus*)
Minimum breeding success: 3 fledglings per pair (**440,000** x 3) = 1,320,000
Mortality rate of 1st year birds (1,320,000 x 44%) = 580,800
Mortality rate of adults (880,000 x 40%) = 352,000
Total annual mortality (580,800 + 352,000) = 932,800
1% of total annual mortality (932,800 x 1%) = 9,328

Total potential European Serin harvest figure is 9,328.
Partitioning with other Member States (Spain: 9,328 × 50%) = 4,664

[40] The *Carnet de Chasse* data for the period 2002–2007 covers the months January–May and September–December, whereas the *Carnet de Chasse* data for 2008 covers the months of January and October–December.

Autumn seasonal bags in relation to "small numbers"

Based on the <1% mortality rate of the reference population, the "small numbers" calculation with respect to the potential national bag limit of the European Serin is as follows:

- **European Serin** – potential maximum bag limit of 4,664 birds (partitioned with Spain).

Notwithstanding that the partitioned maximum bag limit arising out of the above calculations is 4,664 European Serins, given that the average bag limit over a seven-year period (2002–2008) is 3,186 birds, this analysis recommends that, should a derogation for the live-capturing of the seven finch species be considered in autumn 2017, the national bag limit should be substantially reduced further to not more than 2,350 as established in the July 2014 Framework for Allowing a Derogation Opening an Autumn Live-Capturing Season for Finches Regulations (S.L. 549.93)[41]. This calculation is based on the formula discussed previously, which returns a figure that is not only considerably lower than the <1% threshold but also lower than the average number of birds caught over a seven-year period (2002–2008). Thus:

- **European Serin** – national bag limit of **2,350** birds

[41] http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12211&l=1

7. Conservation status of the Eurasian Siskin (*Spinus spinus*)

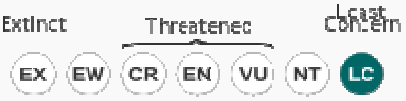
European Red List Status: Least Concern (European & EU27 levels)	**Status at EU27: Secure**

Distribution and conservation status

The geographical distribution of this species in Europe (Fig. 39) is as follows:

Breeding	Estonia (a few), Latvia, Lithuania, Czech Republic, United Kingdom, Germany, Netherlands, Spain, Portugal, France, Belgium, Austria ,Ukraine Luxembourg, Slovenia, Italy, Greece, Cyprus, Bulgaria, Croatia, Hungary, Romania, Turkey, Russia.
Wintering	Italy, Cyprus, Greece, Germany, Luxembourg, Sicily, Corsica, and Sardinia, Spain, Portugal, France, Croatia.
Sedentary and migratory	In the west of the range, those breeding in the northern regions move south and southwest to winter within and south of the breeding range to southern Spain, Balearic Islands, throughout France and the British Isles, Italy, the Balkans to Greece, Cyprus, Turkey, central Iran and southern Central Asia; also occurs irregularly or rarely in Iceland, Faroe Isles, Sicily (has bred), Malta, Lebanon, Israel, Jordan, Tunisia, Libya (Tripoli), northern Egypt, Iraq, southern Iran, United Arab Emirates, Bahrain and Kuwait. Individuals do not necessarily winter in the same area in successive years. (Clement *et al*. 1993: 221).

Conservation status



Least Concern (IUCN 3.1)[1]

Order:	Passeriformes
Family:	Fringillidae
Genus:	*Carduelis*
Species:	***Spinus***

Binomial name

Spinus spinus
(Linnaeus, 1758)

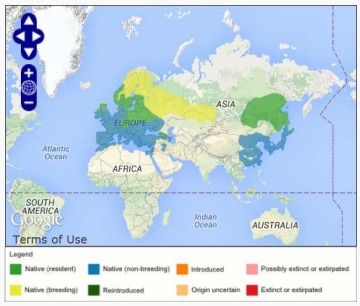


Fig. 39: Distribution and conservation status of the Eurasian Siskin (*Spinus spinus*)

Source: http://en.wikipedia.org/wiki/Eurasian_Siskin [Accessed 19 April 2017]. Distribution map downloaded from http://www.birdlife.org on 19 April 2017 [BirdLife International (2017) IUCN Red List for birds].

Justification and Red List Category

According to BirdLife International (2017)[42] the Eurasian Siskin 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). The population trend appears to be decreasing but it is not thought to be decreasing significantly rapidly 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.

Population size

In Europe, the breeding population is estimated to number 13,600,000–21,100,000 pairs, which equates to 27,200,000–42,100,000 mature individuals (BirdLife International 2015). Europe forms c.55% of the global range, so a very preliminary estimate of the global population size is 49,000,000–77,000,000 mature individuals, although further validation of this estimate is needed (BirdLife International, 2017).

Based on the EU Member States' Article 12 reports for the 2008–2012 reporting period, the EU27 breeding population amounts to 3,381,935–5,238,873 pairs. Within the territory of the European Union (EU 28), the minimum breeding pairs is **Increasing**, whereas the maximum number of pairs and geomean are **Stable** in the long-term trend (1980–2012), with a change in the minimum number of pairs of +26.15% and a change of +13.97% in the maximum number of pairs, equating to a geomean change of +18.43% (Table 52). **According to BirdLife International (2004), this equates to a long-term Moderate Increase classification for the minimum pairs and Stable for the maximum number of breeding pairs and geomean (a change not more than 20% is considered to be Stable for the period 1980–2012)**. Table 52 also lists population counts and long-term trend for each Member State within the territory of the European Union.

Table 52 **Eurasian Siskin EU28 breeding population (long-term trend) and ring recoveries** (bold = ring recoveries in Malta)

EU Member State	EU Ring Recoveries in Malta (n=9) ∫	Breeding Pairs (2014) (Min - Max)		Long-term Trend (1980–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)	Max % Change (Geomean)
Austria		25,000	50,000	Unknown	?	?	-	-	-
Belgium		100	550	Decreasing	28	87	-87	-479	-283
Bulgaria		2,000	4,000	Fluctuating	-	-	-	-	-
Croatia*		5,000	10,000	Decreasing	30	49	-2,450	-4,900	-3,675
Czech Rep.	**18%**	**201,600**	**403,200**	**Decreasing**	**31**	**99**	**-199,584**	**-399,168**	**-299,376**
Denmark		200	200	Fluctuating	-	-	-	-	-
Estonia		100,000	150,000	Stable	0	0	-	-	-
Finland		1,700,000	2,300,000	Increasing	10	33	421,805	570,677	496,241
France		500	1,500	Unknown	?	?	-	-	-
Germany		21,000	51,000	Stable	0	0	-	-	-
Greece		500	2,000	Unknown	?	?	-	-	-
Hungary		200	300	Unknown	?	?	-	-	-
Ireland		99,999	99,999	Increasing	733	733	87,994	87,994	87,994
Italy	**18%**	**500**	**1,500**	**Fluctuating**	**-**	**-**	**-**	**-**	**-**
Latvia	**10%**	**343,425**	**621,964**	**Increasing**	**142**	**1371**	**320,079**	**579,682**	**449,880**
Lithuania		40,000	100,000	Stable	0	0	-	-	-
Luxembourg		0	2	Fluctuating	-	-	-	-	-
Netherlands	**18%**	**247**	**594**	**Stable**	**0**	**0**	**-**	**-**	**-**
Poland		18,000	62,000	Unknown	?	?	-	-	-
Romania		1,000	10,000	Unknown	?	?	-	-	-

[42] BirdLife International (2017) Species factsheet: *Spinus spinus*. Downloaded from http://www.birdlife.org on 19/04/2017

Slovakia		15,000	30,000	Decreasing	20	30	-4,500	-9,000	-6,750
Slovenia	**18%**	**6,000**	**9,000**	**Stable**	**0**	**0**	**-**	**-**	**-**
Spain		264	264	Unknown	?	?	-	-	-
Sweden		493,000	1,134,000	Decreasing	20	40	-197,200	-453,600	-325,400
UK	**18%**	**420,000**	**420,000**	**Increasing**	**245**	**245**	**298,204**	**298,204**	**298,204**
Total	100%	3,493,535	5,462,073						
					Total change		**724,261**	**669,411**	**696,836**
				Percentage change			**26.15%**	**13.97%**	**18.43%**
			Long-term Trend (EU Population)				**Increasing**	**Stable**	**Stable**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using The Percentages Calculator, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

With reference to the short-term trend of the Eurasian Siskin within the territory of the European Union (EU 28), there is change in the minimum number of breeding pairs of -5.85% and a change of -8.42% in the maximum number of pairs, equating to a geomean change of -7.55% (Table 53). **According to BirdLife International (2004), this equates to a Stable classification for the minimum and maximum number of breeding pairs and their geomean (a change not more than 10% is considered to be Stable for the short-term trend)**. Table 53 also lists population counts and short-term trend for each Member State within the territory of the European Union.

Table 53 Eurasian Siskin EU28 breeding population (short-term trend) and ring recoveries (bold = ring recoveries in Malta)

EU Member State	EU Ring Recoveries in Malta (n=9) ∫	Breeding Pairs (EEA, 2014) (Min - Max)		Short-term Trend (~2001–2012)	Mag. % (Min - Max)		Breeding Pairs (2004) (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)	Max % Change (Geomean)
Austria		25,000	50,000	Fluctuating	-	-	30,000	140,000	-	-	-
Belgium		100	550	Decreasing	4	82	104	3,056	-82	-451	-267
Bulgaria		2,000	4,000	Fluctuating	-	-	2,000	4,000	-	-	-
Croatia*		5,000	10,000	Decreasing	30	49	7,143	19,608	-2,450	-4,900	-3,675
Czech Rep.	**18%**	**201,600**	**403,200**	**Increasing**	**76**	**99**	**114,545**	**202,613**	**199,584**	**200,587**	**200,085**
Denmark		200	200	Fluctuating	-	-	200	2,000	-	-	-
Estonia		100,000	150,000	Decreasing	20	50	125,000	300,000	-50,000	-75,000	-62,500
Finland		1,700,000	2,300,000	Decreasing	8	24	1,847,826	3,026,316	-408,000	-552,000	-480,000
France		500	1,500	Unknown	?	?	500	2,500	-	-	-
Germany		21,000	51,000	Stable	0	0	25,000	100,000	-	-	-
Greece		500	2,000	Fluctuating	-	-	500	2,000	-	-	-
Hungary		200	300	Unknown	?	?	200	300	-	-	-
Ireland		99,999	99,999	Increasing	67	67	59,880	59,880	66,999	40,119	53,559
Italy	**18%**	**500**	**1,500**	**Fluctuating**	**-**	**-**	**4,000**	**15,000**	**-**	**-**	**-**
Latvia	**10%**	**343,425**	**621,964**	**Decreasing**	**4**	**53**	**357,734**	**1,323,328**	**-182,015**	**-329,641**	**-255,828**
Lithuania		40,000	100,000	Stable	0	0	100,000	300,000	-	-	-
Luxembourg		0	2	Fluctuating	-	-	1	10	-	-	-
Netherlands	**18%**	**247**	**594**	**Increasing**	**1**	**175**	**245**	**216**	**432**	**378**	**405**
Poland		18,000	62,000	Increasing	50	120	12,000	28,182	21,600	33,818	27,709
Romania		1,000	10,000	Unknown	?	?	24,000	65,000	-	-	-
Slovakia		15,000	30,000	Decreasing	20	30	18,750	42,857	-4,500	-9,000	-6,750
Slovenia	**18%**	**6,000**	**9,000**	**Stable**	**0**	**0**	**2,000**	**3,000**	**-**	**-**	**-**
Spain		264	264	Stable	0	0	500	1,100	-	-	-
Sweden		493,000	1,134,000	Stable	0	0	500,000	1,000,000	-	-	-
UK	**18%**	**420,000**	**420,000**	**Increasing**	**36**	**36**	308,824	308,824	**151,200**	**111,176**	**131,188**

Total	100%	3,493,535	5,462,073				3,540,952	6,949,788			
								Total change	-207,232	-584,913	-396,072
								Percentage change	-5.85%	-8.42%	-7.55%
								Short-term Trend (EU Population)	Stable	Stable	Stable

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using The Percentages Calculator, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

Conservation status at EU27 level

The Eurasian Siskin has a breeding population size of 3,480,000–5,460,000 pairs and a breeding range size of 1,750,000 square kilometres in the EU27. The breeding population trend in the EU27 is **Decreasing** in the short term and **Increasing** in the long term. The EU population status of *Spinus spinus* was assessed as **Secure**, because the species does not meet any of the IUCN Red List criteria for threatened or Near Threatened, or the criteria for Depleted or Declining (the EU27 population or range has not declined by 20% or more since 1980) [Source: EEA, 2014, *Spinus spinus*, Article 12 2008–2012 (Data Sheet Info[43])].

European Bird Census Council: Long-term trend and ten-year (short-term) trends

According to the European Bird Census Council (EBCC, 2016 update), the Eurasian Siskin population is classified as **Moderate Decline** (1980–2014) in the long-term trend at both pan-European[44] and EU[45] levels. It should be noted that EBCC data pertaining to the short-term trends is only available at pan-European level. EBCC replaced the short-term (1990) trend by a rolling "Ten-year trend" (2005–2014). At pan-European level, the Eurasian Siskin **decreased by 7% since 1980 and by 6% during the current 10-year period**. When compared with the previous (2015) EBCC update the percentage change was **+1%** in the long-term trend and **+13%** in the short-term trend (Table 54).

Table 54	Eurasian Siskin long-term and short-term percentage change at pan-European level						
EBCC update	**Species**	**Long-term Trend (%)**	**Long-term Slope**		**10-Year Trend (%)**	**10-Year Slope**	**Habitat**
2012	*Spinus spinus*	+6%	0.9903		-6%	0.9823	for
2013	*Spinus spinus*	+11%	0.9904		-3%	0.9831	for
2014	*Spinus spinus*	+32%	0.992		+32%	1.0201	for
2015	*Spinus spinus*	-8%	0.9908		-19%	1.0136	for
2016	*Spinus spinus*	-7%	0.9903		-6%	1.0109	for
	Overall % change (2015–2016)	+1%			+13%		

Data sources: EBCC (2012–2016 updates). Available at: http://www.ebcc.info/index.php?ID=612

[43] http://bd.eionet.europa.eu/article12/summary/datasheet/?period=1&subject=A365

[44] http://www.ebcc.info/index.php?ID=612

[45] http://www.ebcc.info/index.php?ID=613

Figure 40 is an extract from the EBCC 2016 update, which confirms that the long-term trend classification for *Spinus spinus* is **Moderate Increase**, namely: "significant increase, but not significantly more than 5% per year".

Eurasian Siskin (*Carduelis spinus*)

Population index (%) 1980 - 2014, Europe.
Trend classification: *Moderate decline* (explanation)

List of Countries

Source of the data: EBCC/RSPB/BirdLife/Statistics Netherlands

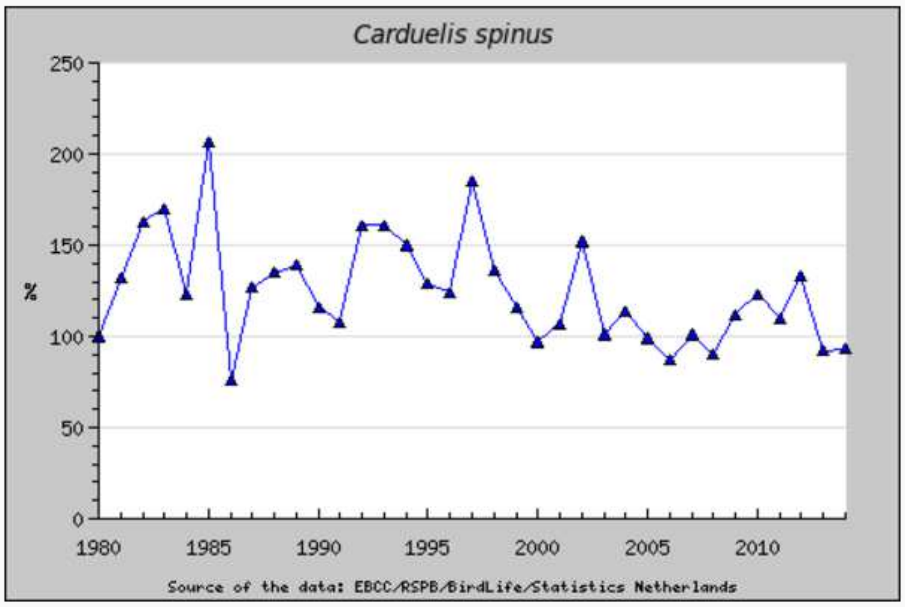


Fig. 40: Long-term trend classification for *Spinus spinus*.

"List of Countries":

Austria	1998 - 2013
Czech Republic	1982 - 2013
Denmark	1976 - 2012
Estonia	1983 - 2013
Finland	1976 - 2013
Germany East	1991 - 2013
Germany West	1989 - 2013
Italy	2000 - 2013
Latvia	2005 - 2013
Netherlands	1986 - 2013
Norway	1996 - 2013
Poland	2000 - 2013
Slovakia	2005 - 2013
Sweden	1975 - 2013
Switzerland	1999 - 2013
United Kingdom	1994 - 2013

Source: EBCC (2016 update), available at: http://www.ebcc.info/index.php?ID=612.

Ring recoveries in Malta

Tables 55 and 56 provide data on the ring recoveries of this species in Malta, the respective number of breeding pairs, together with the overall direction of the population trend. The reference population (ring recoveries in Malta) is **Increasing** in both the short-term and long-term trends, with a Stable short-term trend in maximum number of breeding pairs and geomean. Figs. 41 and 42 illustrate the long-term trend at EU and reference population levels whereas Figs. 43 and 44 illustrate the respective short-term trends.

Table 55 **Eurasian Siskin ring recoveries in Malta from other EU Member States and corresponding long-term trend**

Country	EU Ring Recoveries in Malta (n=9) ∫	Reference Population Breeding Pairs (Min - Max)		Long-term Trend (1980–2012)	Mag. % (Max - Min)		Max % Change (Min Pairs)	Max % Change (Max Pairs)
Czech Rep.	18%	201,600	403,200	Decreasing	31	99	-199,584	-399,168
Italy	18%	500	1,500	Fluctuating	-	-	-	-
Netherlands	18%	247	594	Stable	0	0	-	-
Slovenia	18%	6,000	9,000	Stable	0	0	-	-
UK	18%	420,000	420,000	Increasing	245	245	298,204	298,204
Latvia	10%	343,425	621,964	Increasing	142	1371	320,079	579,682
Total	100%	971,772	1,456,258			**Total change**	**418,699**	**877,886**
						Percentage change	**+75.70%**	**+48.97%**
						Long-term Trend (Ring Recoveries)	**Increasing**	**Increasing**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using *The Percentages Calculator*, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

Table 56 **Eurasian Siskin ring recoveries in Malta from other EU Member States and corresponding short-term trend**

EU Member State	EU Ring Recoveries in Malta (n=11) ∫	Breeding Pairs (EEA, 2014) (Min - Max)		Short-term Trend (~2001–2012)	Mag. % (Min - Max)		Max % Change (Min Pairs)	Max % Change (Max Pairs)
Czech Rep.	18%	201,600	403,200	Increasing	76	99	199,584	200,587
Italy	18%	500	1,500	Fluctuating	-	-	-	-
Netherlands	18%	247	594	Increasing	1	175	432	378
Slovenia	18%	6,000	9,000	Stable	0	0	-	-
UK	18%	420,000	420,000	Increasing	36	36	151,200	111,176
Latvia	10%	343,425	621,964	Decreasing	4	53	-182,015	-329,641
Total	100%	971,772	1,456,258			**Total change**	**169,201**	**-17,500**
						Percentage change	**+22.18%**	**-0.96%**
						Long-term Trend (Ring Recoveries)	**Increasing**	**Stable**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); ∫ Raine (2007)

Percentages verified using *The Percentages Calculator*, available at: http://www.cleavebooks.co.uk/scol/calpcent.htm

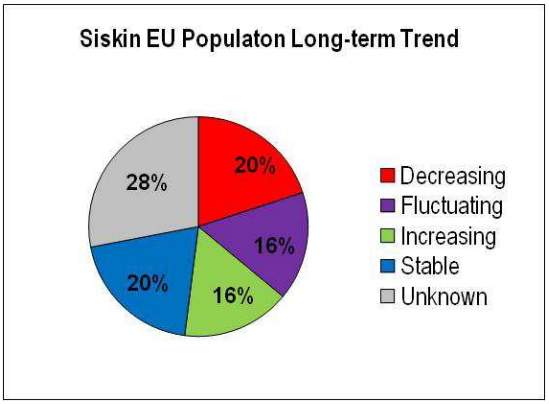


Fig. 41: Eurasian Siskin EU population long-term trend by Member State

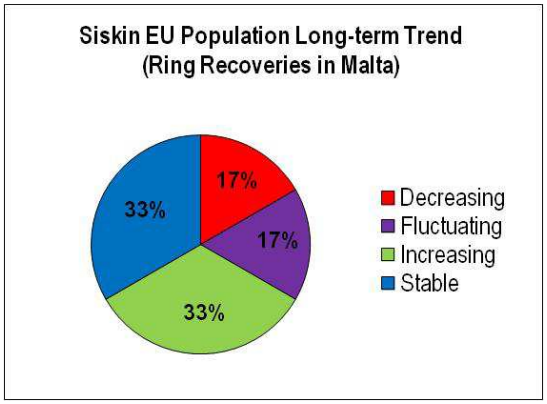


Fig. 42: Eurasian Siskin EU population long-term trend (ring recoveries in Malta)

Data sources: EEA (2004); Raine (2007)

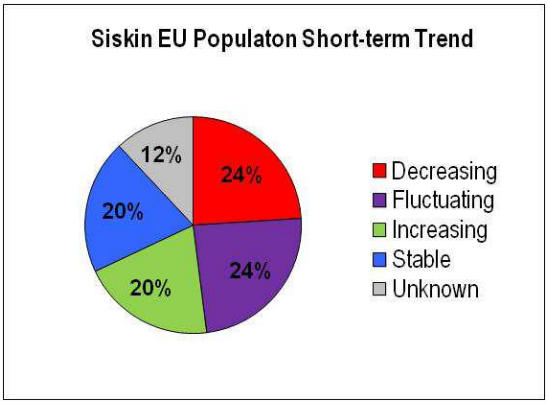


Fig. 43: Eurasian Siskin EU population short-term trend by Member State

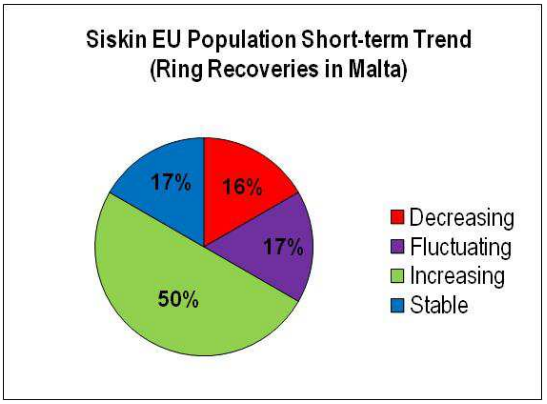


Fig. 44: Eurasian Siskin EU population short-term trend (ring recoveries in Malta)

Data sources: EEA (2014); Raine (2007)

Eurasian Siskin conservation status update – comparison between different data sources

The following table provides a general overview of the latest conservation status from various sources for direct comparison.

Species	EU Population						Ring Recoveries					
	Short-term Trend			Long-term Trend			Short-term Trend			Long-term Trend		
	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean
Siskin	⇨	⇨	⇨	⇧	⇨	⇨	⇧	⇧	⇧	⇧	⇨	⇨

Species	Short-term Trend			Long-term Trend			
	EBCC 2016 (pan-European)	Article 12 (2008–2012) [EU Geomean]	Article 12 (2008–2012) [Ring Recoveries Geomean]	EBCC 2016 (pan-European)	EBCC 2016 (EU)	Article 12 (2008–2012) [EU Geomean]	Article 12 (2008–2012) [Ring Recoveries Geomean]
Siskin	⇨	⇨	⇨	⇩	⇩	⇧	⇧

Data Sources: EBCC (2016); European Environment Agency (2014)

The reference population

Table 57 Eurasian Siskin (*Spinus spinus*) breeding population estimates (reference population)

Country [Ring recoveries in Malta]	Eurasian Siskin minimum breeding population size (pairs) [Reference population]	Short-term Trend (~2001–2012)	Long-term Trend (1980–2012)
Czech Rep.	201,600	Increasing	Decreasing
Italy	500	Fluctuating	Fluctuating
Netherlands	247	Increasing	Stable
Slovenia	6,000	Stable	Stable
UK	420,000	Increasing	Increasing
Latvia	343,425	Decreasing	Increasing
Reference Population Size (Minimum breeding pairs)	**971,772**	**Increasing (+22.18%)**	**Increasing (+75.70%)**

Data Sources: *BirdLife International (2004); European Environment Agency (2014); Raine (2007)

Carnet de Chasse data (2002–2008)

According to the *Carnet de Chasse* data available from the Environment Protection Directorate of the Malta Environment and Planning Authority, the following Eurasian Siskins were captured alive in Malta during the years indicated (Table 58).

Table 58 *Carnet de Chasse* live-capturing data[46] for Eurasian Siskin (2002–2008)

Species	2002	2003	2004	2005	2006	2007	2008	Total	Average
Eurasian Siskin	670	380	296	7,877	1,449	10,120	1,503	22,295	3,185

Source: *Carnet de Chasse* data, Environment Protection Directorate (Malta Environment and Planning Authority). Available at: http://www.mepa.org.mt/biodiversity-reporting.

Minimum breeding population

In the case of the European breeding population, Table 59 shows the minimum number of breeding pairs of Eurasian Siskins that correspond with ring recoveries in Malta (the reference population), together with other relevant information required for the calculation of "small numbers".

Table 59 Minimum breeding population and mortality rate

	Eurasian Siskin (*Spinus spinus*)	Source
Minimum breeding population – pairs	971,772	BirdLife International (2014); EEA (2014); Raine (2007)
Mortality rate – juveniles	55%	Bauer (2005): *Das Kompendium der Vögel Mitteleuropas* (KVM) / Cramp & Perrins (1994): Birds of the Western Palearctic / Robinson (2005): British Trust for Ornithology
Mortality rate – adults	54%	Bauer (2005) and Robinson (2005)
Breeding rate (young per pair)	3–5	Cramp & Perrins (1994) and Robinson (2005)
Breeding success	3	Cramp & Perrins (1994)

[46] The *Carnet de Chasse* data for the period 2002–2007 covers the months January–May and September–December, whereas the *Carnet de Chasse* data for 2008 covers the months of January and October–December.

For the purpose of calculating the <1% mortality rate and "small numbers", the reference population is based solely on ring recoveries of this species in Malta from EU Member States. This equates to a reference population of **860,172 minimum breeding pairs**.

Calculation of <1% annual mortality and "small numbers"

Eurasian Siskin (*Spinus spinus*)
Minimum breeding success: 3 fledglings per pair (971,772 x 3) = 2,915,316
Mortality rate of 1st year birds (2,915,316 x 55%) = 1,603,423
Mortality rate of adults (1,943,544 x 54%) = 1,049,513
Total annual mortality (1,603,423 + 1,049,513) = 2,652,936
1% of total annual mortality (2,652,936 x 1%) = 26,529

Total potential Eurasian Siskin harvest figure is 26,529.
Partitioning with other Member States (Austria and Spain: 26,529 × 33%) = 8,843

Autumn seasonal bags in relation to "small numbers"

Based on the <1% mortality rate of the reference population, the "small numbers" calculation with respect to the potential national bag limit of the Eurasian Siskin is as follows:

- **Eurasian Siskin** – potential maximum bag limit of 8,843 birds (partitioned with Austria and Spain).

Notwithstanding that the partitioned maximum bag limit arising out of the above calculations is 8,843 Eurasian Siskins, given that the average bag limit over a seven-year period (2002–2008) is 3,185 birds, this analysis recommends that, should a derogation for the live-capturing of the seven finch species be considered in autumn 2017, the national bag limit should be substantially reduced further to not more than 2,350 as established in the July 2014 Framework for Allowing a Derogation Opening an Autumn Live-Capturing Season for Finches Regulations (S.L. 549.93)[47]. This calculation is based on the formula discussed previously, which returns a figure that is not only considerably lower than the <1% threshold but also lower than the average number of birds caught over a seven-year period (2002–2008). Thus:

- **Eurasian Siskin** – national bag limit of **2,350** birds

[47] http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12211&l=1

Conclusions regarding conservation status and "small numbers"

The previous sections provided an update on the conservation status of the seven finch species together with calculations of the <1% annual mortality of the reference populations. This section provides a general summary of the main conclusions. This update focused on the changes in the short-term and long-term trends of the seven finch species on the basis of Article 12 reports, including surrogate data for Czech Republic and Greece, as published by the European Environment Agency (EEA, 2014) for the 2008–2012 reporting period and the latest EBCC (2016) update. It has been shown that in the Article 12 reports, although a number of Member States have reported a decrease in some of the finch populations, such magnitude change is not actually reflected in the number of breeding pairs that was reported ten years earlier in Birds in Europe II (BirdLife International, 2004). On the contrary, despite a reported decline, the number of breeding pairs as reported in Article 12 reports is higher than those reported ten years earlier. This was also the case in terms of reported increases, since the corresponding number of pairs in Birds in Europe II was either exactly the same or indeed higher than those in Article 12 reports. The **values for the number of breeding pairs in 2004 was thus revised** using an online percentages calculator to provide a more realistic number of breeding pairs **based on the percentage changes as reported by each Member State in the current Article 12 reports**.

The final analysis showed that in the **short-term trend**, the **EU28 populations** of Common Chaffinch, Common Linnet, European Goldfinch, Hawfinch, European Serin and Eurasian Siskin are classified as **Stable**, whereas the European Greenfinch population is classified as **Moderate Increase** at all levels of the population (minimum and maximum pairs and their geomean). **In terms of long-term trend, all seven finch species have been shown to be Stable at all three levels of their population (min/max/geomean)**, the Eurasian Siskin being the only exception since it **increased** in the number of minimum pairs.

At EU level, the current EBCC update (2016) has shown that the long-term trend of the Common Chaffinch, European Goldfinch and Hawfinch is classified as **Moderate Increase**, the European Greenfinch as **Stable** whereas the Common Linnet, European Serin and Eurasian Siskin as **Moderate Decline**. This report has shown that when compared with the previous (2015) EBCC update, the Common Linnet increased by 5% in the long-term trend and increased by 8% in the short-term trend, the European Serin decreased by 1% in the long-term trend and increased by 8% in the short-term trend, whereas the Eurasian Siskin increased by 1% in the long-term trend and increased by 13% in the short-term trend.

The same methodology discussed above (review of the 2004 baseline population) was used to determine the trend classifications at **reference population level**. It was shown that the short-term and long-term trends of the European Goldfinch and the short-term trend of the Eurasian Siskin are classified as **Moderate Increase**. Furthermore, the long-term trend of the Eurasian Siskin and the short-term and long-term trends of the Common Chaffinch, Common Linnet, European Greenfinch, Hawfinch and European Serin are **Stable**.

The table below illustrates an overall update on the conservation status using a three-arrow set to differentiate between decreasing, stable and increasing trends. The upper table compares the trends at EU level with those at ring recoveries level whereas the lower part of the table compares the trends reported by EBCC (2016) at pan-European as well as at EU level with those reported by Member States in their Article 12 reports.

Species	EU Population						Ring Recoveries					
	Short-term Trend			Long-term Trend			Short-term Trend			Long-term Trend		
	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean	Min Pairs	Max Pairs	Geomean
Chaffinch	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨
Linnet	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨
Goldfinch	⇨	⇨	⇨	⇨	⇨	⇨	⇧	⇧	⇧	⇧	⇧	⇧
Greenfinch	⇧	⇧	⇧	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨
Hawfinch	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨
Serin	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨	⇨
Siskin	⇨	⇨	⇨	⇧	⇨	⇨	⇧	⇧	⇧	⇧	⇨	⇨

	Short-term Trend			Long-term Trend			
Species	EBCC 2016 (pan-European)	Article 12 (2008–2012) [EU Geomean]	Article 12 (2008–2012) [Ring Recoveries Geomean]	EBCC 2016 (pan-European)	EBCC 2016 (EU)	Article 12 (2008–2012) [EU Geomean]	Article 12 (2008–2012) [Ring Recoveries Geomean]
Chaffinch	⇨	⇨	⇨	⇧	⇧	⇨	⇨
Linnet	⇨	⇨	⇨	⇩	⇩	⇨	⇨
Goldfinch	⇨	⇨	⇧	⇧	⇧	⇨	⇧
Greenfinch	⇩	⇧	⇨	⇨	⇨	⇨	⇨
Hawfinch	⇧	⇨	⇨	⇧	⇧	⇨	⇨
Serin	⇩	⇨	⇨	⇩	⇩	⇨	⇨
Siskin	⇨	⇨	⇨	⇩	⇩	⇧	⇧

Data Sources: EBCC (2016); European Environment Agency (2014)

For each of the seven finch species considered in this analysis, the "small numbers" calculation is considerably below the 1% threshold for non-huntable species as specified in paragraph 3.5.34 of the Guidance Document on Sustainable Hunting. The <1% figure is based on a much smaller subset of the total breeding population of the respective species within the territory of the European Union, since only those European countries (Member States) from which there are ring recoveries in Malta form part of the reference population, with the exception of the Hawfinch. In the absence of ring recoveries pertaining to the latter species, the reference population of the Hawfinch is based on ring recoveries in Italy from other Member States.

The national bag limits are considerably **much lower than <1% of the total annual mortality** of the EU reference population of each finch species as they also take into account the average bag limits over a seven-year period (2002–2008), which in turn are all considerably below the <1% threshold (Table 60). The bag limits have been partitioned restrictively with those Member States that in 2008 had applied derogations for live-finch capturing or hunting of these finch species (EC, 2011), namely Austria (Common Linnet, European Goldfinch, Eurasian Siskin, Common Chaffinch and Hawfinch), Spain (Common Linnet, European Goldfinch, Eurasian Siskin, Common Chaffinch, European Serin and European Greenfinch) and Italy (Common Chaffinch). Table 60 also provides a direct comparison between the <1% mortality (calculated on the basis of the minimum EU breeding population size and lowest recruitment rate), the harvest record (average of *Carnet de Chasse* data over a seven-year period: 2002–2008) and the national bag limit for each of the seven species. The last column lists the national bag limit as a percentage of the bag limit partitioned with other EU Member States.

Table 60 **Consideration of the <1% mortality of the reference population and harvest records**

Species	*Total Annual Mortality of Reference Population (Ring Recoveries)	Maximum Bag Limit from Reference Population (<1%)	Partitioned Maximum Bag Limit (<1%)	Average Annual Harvest (2002–2008)	National Bag Limit (SL 549.93)	National Bag Limit as a percentage of the Partitioned Bag Limit (<1%)
Common Chaffinch	20,257,860	202,579	**50,645**	6,075	**5,000**	**9.87%**
Common Linnet	5,868,018	58,680	**19,364**	17,950	**12,000**	**61.97%**
European Goldfinch	4,663,440	46,634	**15,389**	1,025	**800**	**5.20%**
European Greenfinch	9,303,840	93,038	**46,519**	5,598	**4,500**	**9.67%**
Hawfinch	3,832,753	38,328	**6,388**	604	**500**	**7.83%**
European Serin	932,800	9,328	**4,664**	3,186	**2,350**	**50.39%**
Eurasian Siskin	2,652,936	26,529	**8,843**	3,185	**2,350**	**26.57%**
Total			**151,812**		**27,500**	**18.11%**

* Data sources: Cramp and Perrins (1994); Bauer (2005); Robinson (2005), based on the minimum EU population (breeding pairs) as reported in Article 12 reports for the period 2008–2012 (EEA, 2014).

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